

NATIONAL CLASSIFICATION OF OCCUPATIONS-2015

(Occupational Description)



Vol II - A

Government of India
Ministry of Labour & Employment
Directorate General of Employment

www.ncs.gov.in

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FOREWORD

National Classification of Occupation (NCO) plays a very vital role in maintaining standards of occupation in the country and is regularly used in the network of employment exchanges that constitute the Public Employment Service for Classification of Occupations, job postings and job search. This classification is used in all types of censuses and sample surveys conducted in India especially in data collection, processing, analysis and presentation of survey results besides its wide range of applications in policy formulation and policy analysis. The Directorate General of Employment, Ministry of Labour & Employment, Government of India is responsible for maintaining and updating the National Classification of Occupation in India aligned with the corresponding International Standard Classification of Occupations (ISCO) of ILO. The first classification was NCO-1946 followed by NCO-1958, NCO-1968, NCO-2004 and now the current series NCO-2015. The National Classification of Occupations-2015 (NCO-2015) is aligned with International Standard Classification of Occupations-2008 (ISCO-2008).

2. NCO is a classification of occupations which describes and assigns codes to the various occupations in the country and aligns it with the ISCO. These codes are reviewed and updated periodically to reflect developments in the labour market, particularly with the emergence of new occupations, as well as to align with changes in the international standard. These codes also help in promoting international comparability of statistical data relating to occupations. These occupational standards follow a scientific and hierarchical approach having major, minor and unit groups of classification which has evolved over the years to capture the structural changes in the employment market and current work practices and work environment.

3. The NCO-2015 is a compendium for occupational information available in the Indian economy. The document gives an insight into the occupational framework, nature of duties involved and the level of skill requirement to perform the activities in a real time work situation. The users of NCO may make use of the information for vocational guidance, career counselling and various surveys and studies undertaken by user agencies. The NCO-2015 has also been mapped with the National Industrial Classification (NIC) and Qualification Packs-National Occupational Standards (QP-NOS) to cater to the structural changes in the labour market. Furthermore, NCO-2015 framework is dynamic enough to capture and reflect the newly emerging occupations in the industry.

4. The current volume of NCO details out the job description of 3600 civilian occupations covering 52 sectors, as compared to the earlier series of NCO i.e. NCO-2004, which contained the job descriptions for 2945 occupations. The NCO-2015 has 8 digit coding structure which was mapped and aligned to ISCO-2008 with the addition of 2 digits. There is one to one correspondence between ISCO-2008 and the NCO-2015 with the first digit representing the Division (Major Group), second digit representing Sub-Division (Sub-Major Group), third digit representing the Group (Minor Group) and the fourth digit representing the Family (Unit Group), a decimal is introduced after the first four digits in order to create a distinction between the Families and individual Occupations. The NCO-2015 is in two Volumes viz. Vol I & II (A& B) where Vol I gives the abstract of Occupations along with their concordance to the earlier NCO-2004. Vol II gives the detailed descriptions of the occupations.

5. The Ministry is implementing the National Career Service (NCS) Project as a Mission Mode Project for modernising and transforming the network of employment exchanges and Model Career Centres are being set up in collaboration with States. The NCS Portal is operational at www.ncs.gov.in and aims to link job seekers with employment opportunities along with rich career content. The NCO Codes are integrally enmeshed in the NCS initiative and facilitates efficient job matching. The NCO Codes may be used by varied stakeholders in making information in the employment market more transparent and objective. Soft copies of the publication is available on the NCS portal.

6. The NCO-2015 series has been evolved along with career content to contribute to the knowledge repository of career options. More details on the classification, as well as the principles, scope and structure of the classification are available on the National Career Service (www.ncs.gov.in) platform. This knowledge repository provides career related information for use by career counsellors and job aspirants across the country and aims at supporting policy makers, students, job seekers, persons returning to the labour force, investors and employers in making better labour market decisions.

7. I am confident that the publication will prove useful in classifying occupations for official work, survey and research work, international comparisons on the demand and supply of workforce and many more such areas. I place on record my appreciation for all the stakeholders who have contributed their valuable inputs in the publication. I also take this opportunity to extend my thanks to the members of the Expert Group on the career content who have examined and vetted the contents of this publication/documents. I also extend my thanks to the officers of the Directorate lead by Mr. Pravin Srivastava, Deputy Director General (Employment) for timely coordination with all the stakeholders involved in this initiative.



(P.P. Mitra)
Principal Labour & Employment Advisor
and Director General Employment



शंकर अग्रवाल, आई०ए०एस०

भारत सरकार के सचिव

SHANKAR AGGARWAL, I.A.S.

Secretary to Govt. of India

MINISTRY OF LABOUR & EMPLOYMENT
SHRAM SHAKTI BHAVAN
NEW DELHI - 110001

श्रम एवं रोजगार मंत्रालय

श्रम शक्ति भवन

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D.O. No. DGE-11/01/2016-VG/OI

Dated: 17/5/2016

Subject: Release of the National Classification of Occupation (NCO), 2015 series.

Dear Secretary,

The Directorate General of Employment (DGE) is responsible for revising and maintaining the National Classification of Occupations (NCO) on the lines of International Standard Classification of Occupations (ISCO) of the ILO. The codes are used for classification of occupations by the employment exchanges and census/survey organisations of the Central and State government. These codes are revised from time to time to capture the changes in occupational patterns and structural changes in the economy. The codes also help in promoting International comparability of statistical data relating to occupations. The first set of occupation standards (ISCO) was brought out by the International Labour Organisation (ILO) in 1958 and revised from time to time, the latest being the 2008 series. The corresponding series in the Indian National Classification of Occupation (NCO) were 1958, 1967 and 2004. These occupational standards follow a scientific and hierarchical approach having major, minor and unit groups of classification which has evolved over the years to capture the structural changes in the employment market. The NCO codes are extensively used by the employment exchanges and other data/survey collection agencies like the Ministry of Statistics & PI (NSSO, CSO), Census Commissioner & RGI, NITI Aayog, IAMR, State Governments, Academic Institutions etc.

2. The current national series (NCO-2004) was based on the ISCO-1988 series and required updation to capture information on the new occupations that have emerged, especially on account of liberalisation and globalisation. In the meanwhile, the Ministry began implementing the National Career Service as a Mission Mode Project for modernising and transforming the network of employment exchanges and 100 Model Career Centres are being set up in collaboration with States. The NCS Portal is operational at www.ncs.gov.in and aims to link job seekers with employment opportunities along with rich career content.

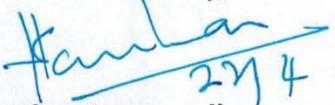
The NCO Codes are integrally enmeshed in the NCS initiative and facilitates efficient job matching. The NCO - 2015 code is in 2 volumes, the first giving the abstract occupations along with their concordance to the earlier NCO-2004 series and the second volume giving the detailed occupational description. A hard copy of the first volume is enclosed for ready reference. It is requested that the NCO Codes may be used by all stakeholders in making information in the employment market more transparent and objective. Soft copies of these publications are available on the attached CD and also on the NCS portal.

3. I request that information about the publication be circulated to the various Departments and other users and its usage may be ensured by sending various statistical returns using these revised codes. We look forward to suggestions for improvement in the NCO codes and these may kindly be sent at feedback.dget@nic.in.

With regards

Encl: As above.

Yours sincerely,


(Shankar Aggarwal)

To,

All Secretary, GOI Ministries and Departments
(As per list attached)



शंकर अग्रवाल, आई०ए०एस०

भारत सरकार के सचिव

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D.O. No. DGE-11/01/2016-VG/OI

Dated: 17/5/2016

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With regards

Encl: As above.

Yours sincerely,



Shankar Aggarwal
2014

To,

All Secretary, GOI Ministries and Departments
(As per list attached)

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Managers

Managers plan, direct, co-ordinate and evaluate the overall activities of enterprises, governments and other organizations, or of organizational units within them, and formulate and review their policies, laws, rules and regulations. Tasks performed by managers usually include: formulating and advising on the policy, budgets, laws and regulations of enterprises, governments and other organizational units; establishing objectives and standards and formulating and evaluating programmes and policies and procedures for their implementation; ensuring appropriate systems and procedures are developed and implemented to provide budgetary control; authorising material, human and financial resources to implement policies and programmes. Monitoring and evaluating performance of the organization or enterprise and of its staff; selecting, or approving the selection of staff; ensuring compliance with health and safety requirements; planning and directing daily operations; representing and negotiating on behalf of the government, enterprise or organizational unit managed in meetings and other forums.

Occupations in this Division are classified into the following Sub Divisions:

11	Chief Executives, Senior Officials and Legislators
12	Administrative and Commercial Managers

13	Production and Specialized Services Managers
14	Hospitality, Retail and Other Services Managers

Sub Division 11

Chief Executives, Senior Officials and Legislators

Chief Executives, Senior Officials and Legislators formulate and review the policies and plan, direct, co-ordinate and evaluate the overall activities of enterprises, governments and other organizations with the support of other managers.

Tasks performed usually include: presiding over or participating in the proceedings of legislative bodies, board of directors and committees; formulating and advising on the policy budgets, laws and regulations of enterprises, governments and other organizations; establishing objectives for enterprises, government departments or agencies and other organizations; formulating or approving and evaluating programmes and policies and procedures for their implementation; ensuring appropriate systems and procedures are developed and implemented to provide budgetary control; authorising material, human and financial resources to implement policies and programmes; monitoring and evaluating performance of the organization or enterprise; selecting, or approving the selection of senior staff; performing ceremonial duties and representing the enterprise, government, organization or community at official occasions and in meetings, negotiations, conventions and public hearings.

Occupations in this Sub Division are classified into the following Groups:

111	Legislators and Senior Officials
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112	Managing Directors and Chief Executives
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Group 111

Legislators and Senior Officials

Legislators and senior officials determine, formulate, advise on and direct the implementation of policies of national, state, regional or local governments or communities, and of special interest organizations. They make, ratify, amend or repeal laws, public rules and regulations and plan, organize, direct, control and evaluate the overall activities of government departments and agencies, traditional communities and special interest organizations

Occupations in this Group are classified into the following Families:

1111	Legislators
1112	Senior Government Officials
1113	Traditional Chiefs and Heads of Villages
1114	Senior Officials of Special-interest Organizations

Family 1111

Legislators

Legislators determine, formulate, and direct policies of national, state, regional or local governments and international governmental agencies. They make, ratify, amend or repeal laws, public rules and regulations. They include elected and non-elected members of parliament, councils and governments.

1111.0100

Elected Official, Union Government

Elected Official, Union Government serves in various capacities in legislative and executive branches of Union Government. Performs administrative, executive or advisory functions, which include serving as head of the Indian Union; presiding over deliberations of Houses of Parliament; leading council of ministers of Union Government; shaping, determining and defining government policies and directing their application and execution through departmental heads; representing interests of voters in Parliament, on committees and commissions; and taking part in making, amending or repealing laws. Is designated according to work performed or post held, such as:

PRESIDENT OF INDIA; RASHTRAPATI. VICE PRESIDENT OF INDIA; UP-RASHTRAPATI. SPEAKER, LOK SABHA. CHAIRMAN, RAJYA SABHA. PRIME MINISTER OF INDIA. MINISTER, UNION GOVERNMENT. MEMBER OF PARLIAMENT.

ISCO 08 Unit Group Details:

Code	1111
Title	Legislators

1111.0200

Elected Official, State Government

Elected Official, State Government serves in various capacities in legislative and executive branches of State Government. Performs, administrative, executive or advisory functions, which include leading council of ministers of State Government; shaping, determining and defining government policies, and directing application and execution of government policies through departmental heads; presiding over deliberations of Houses of State Legislatures; committees and

commissions; and taking part in making, amending or repealing laws. Is designated according to work performed or post held, such as: CHIEF MINISTER. MINISTER, STATE GOVERNMENT. CHAIRMAN, LEGISLATIVE COUNCIL. SPEAKER, LEGISLATIVE ASSEMBLY. MEMBER, LEGISLATIVE ASSEMBLY.

ISCO 08 Unit Group Details:

Code	1111
Title	Legislators

1111.0300

Elected Official, Local Bodies

Elected Official, Local Bodies serves in various capacities in policy making and executive branches of local bodies. Performs administrative, executive or advisory functions in matters entrusted to local bodies e.g. public health, sanitation, primary education, building and road construction, drainage, street-lighting, raising and collection of admissible local taxes and their proper administration, and all other connected matters for the benefit of local people, including enforcement of local laws and emergency measures as necessary. Is designated according to work performed or post held such as: MAYOR, MUNICIPAL CORPORATION. COUNCILLOR, CITY MUNICIPAL CORPORATION. CHAIRMAN, CITY MUNICIPAL CORPORATION. CHAIRMAN, MUNICIPALITY. MEMBER MUNICIPALITY. CHAIRMAN, DISTRICT BOARD. MEMBER, DISTRICT BOARD. CHAIRMAN, CANTONMENT BOARD. MEMBER, CANTONMENT BOARD. CHAIRMAN, TOWN AREA COMMITTEE. MEMBER, TOWN AREA COMMITTEE. CHAIRMAN, BLOCK SAMITI. SARPANCH, PANCHAYAT. MEMBER, PANCHAYAT.

ISCO 08 Unit Group Details:

Code	1111
Title	Legislators

1111.9900

Legislators, Other

Elected Officials, Other include all other Elected Officials performing administrative, executive or advisory functions in educational, religious, social, political and community welfare organizations and such other permanent or ad-hoc private bodies, not else-where classified.

ISCO 08 Unit Group Details:

Code	1111
Title	Legislators

Family 1112

Senior Government Officials

Senior government officials advise governments on policy matters, oversee the interpretation and implementation of government policies and legislation by government departments and agencies, represent their country abroad and act on its behalf, or carry out similar tasks in intergovernmental organizations. They plan, organize, direct, control and evaluate the overall activities of municipal or local, regional and national government departments, boards, agencies or commissions in accordance with legislation and policies established by government and legislative bodies.

1112.0100

Administrative Official, Union Government

Administrative Official, Union Government serves in various capacities under Union Government. Performs

administrative and advisory functions, which include advising minister on all matters of policy and administration within his sphere of responsibility; organizing and directing work of ministries and departments; taking policy decisions to extent authorized; supervising execution and implementation of policies and decisions by field or subordinate offices etc. Is designated according to work performed or post held, such as: MEMBER, OF UNION PUBLIC SERVICE COMMISSION. MEMBER, CENTRAL BOARD OF REVENUE. MEMBER, RAILWAY BOARD. MEMBER PLANNING COMMISSION. SECRETARY TO THE GOVERNMENT OF INDIA JOINT SECRETARY TO THE GOVERNMENT OF INDIA. DEPUTY SECRETARY TO THE GOVERNMENT OF INDIA. UNDER SECRETARY TO THE GOVERNMENT OF INDIA. DIRECTOR-GENERAL, CIVIL AVIATION. DIRECTOR GENERAL, ALL INDIA RADIO DIRECTOR-GENERAL, POSTS AND TELEGRAPHS. DIRECTOR-GENERAL, SUPPLIES AND DISPOSALS. DIRECTOR-GENERAL SHIPPING. DIRECTOR-GENERAL OF EMPLOYMENT AND TRAINING. CONTROLLER AND AUDITOR GENERAL. CONTROLLER, IRON AND STEEL. COMMISSIONER, TEXTILE. CUSTODIAN GENERAL. CHIEF CONTROLLER OF IMPORTS AND EXPORTS. CHIEF COMMISSIONER, ELECTION. CHIEF COMMISSIONER, LABOUR. COMMISSIONER, SALT. REGISTRAR-GENERAL, CENSUS.

ISCO 08 Unit Group Details:

Code 1112
Title Senior Government
Officials

1112.0200 **Diplomat**

Diplomat represents Union of India in other countries or at international organizations, meetings and conferences. Interprets policies of Indian Government in foreign countries and advises his Government on matters of foreign relations, trade, commerce, etc. Negotiates and enters into agreements with other countries and nations. Issues visas to foreigners for visit to India and looks after welfare of Indians abroad, and generally promotes interest of his country. Is designated according to rank held or work performed, such as: AMBASSADOR HIGH COMMISSIONER ENVOY MINISTER (DIPLOMAT) PERMANENT REPRESENTATIVE COUNSEL GENERAL CHARGE D AFFAIRS TRADE COMMISSIONER.

ISCO 08 Unit Group Details:

Code 1112
Title Senior Government
Officials

1112.0300 **Executive Officials, Union Government**

Executive Official, Union Government serves in various executive capacities in Union Government, giving effect to policies and decisions of Government. Performs or supervises performance of other executives and field duties such as assessing and collecting revenues; issuing passports, licenses and other authorizations; supervising elections; reconciling parties in trade disputes; inspecting offices and establishments; enforcing and implementing various rules, regulations and provisions of law. Is designated according to work performed or post held, such as: COMMISSIONER, DEVELOPMENT COMMISSIONER, INCOME-TAX CUSTODIAN, EVACUEE

PROPERTY DIRECTOR OF INSPECTION, CUSTOMS DIRECTOR, MARKETING DIRECTOR OF TRAINING, DIRECTOR OF EMPLOYMENT EXCHANGES, REGIONAL LABOUR COMMISSIONER, COLLECTOR, CENTRAL EXCISE, SUPERINTENDENT, CUSTOMS, INCOME-TAX OFFICER, SUPERINTENDENT, CENTRAL EXCISE, PASSPORT OFFICER, SETTLEMENT OFFICER, CONCILIATION OFFICER (CENTRAL).

ISCO 08 Unit Group Details:

Code 1112

Title Senior Government Officials

1112.0400

Administrative Official, State Government

Administrative Official, State Government serves in various capacities in State Government. Performs administrative and advisory functions which include serving as Head of State; advising ministers, on all matters of policy and administration within his sphere of responsibility; organizing and directing work of departments; taking policy decisions to the extent authorised; supervising execution and implementation of policies and decisions by field or subordinate officers. Is designated according to work performed or post held, such as: GOVERNOR; RAJYAPAL; LIEUTENANT GOVERNOR MEMBER, STATE PUBLIC SERVICE COMMISSION, MEMBER, BOARD OF REVENUE, CHIEF SECRETARY TO GOVERNMENT (STATE), SECRETARY TO GOVERNMENT (STATE), DEPUTY SECRETARY TO GOVERNMENT (STATE), UNDER SECRETARY TO GOVERNMENT (STATE), CHIEF COMMISSIONER DEVELOPMENT, COMMISSIONER OF DIVISION, DIRECTOR OF EDUCATION, DIRECTOR OF INDUSTRIES.

ISCO 08 Unit Group Details:

Code 1112

Title Senior Government Officials

1112.0500

Executive Official, State Government

Executive Official, State Government serves in various capacities in State Government giving effect to policies and decisions of Government. Performs or supervises performance of executive and field duties which include maintenance of law and order; assessing and collecting taxes, duties, land revenues, etc.; issuing licenses; executing development schemes; reconciling parties in trade disputes; inspecting schools, factories, shops, offices and establishments; and enforcing various rules, regulations and provisions of law. Is designated according to work performed or post held, such as: COLLECTOR; DEPUTY COLLECTOR; SUB-DEPUTY COLLECTOR; DEPUTY COMMISSIONER. DISTRICT OFFICER; SUB-DIVISIONAL OFFICER; LAND RECORD OFFICER; TEHSILDAR; SUPERINTENDENT OF POLICE CIRCLE OFFICE; SALES-TAX OFFICER; SUPERINTENDENT, JAIL; JAILOR, SUPERINTENDENT OF INDUSTRIES DISTRICT INDUSTRIES OFFICER MARKETING OFFICER. RATIONING OFFICER. SUPPLY OFFICER. RENT CONTROL AND EVICTION OFFICER, REGIONAL TRANSPORT OFFICER, DISTRICT PLANNING OFFICER, CO-OPERATIVE OFFICER, CONCILIATION OFFICER (STATE), PANCHAYAT RAJ OFFICER.

ISCO 08 Unit Group Details:

Code 1112

Title Senior Government Officials

1112.0600**Administrative and Executive Officials, Quasi Government (Central)**

Administrative and Executive Official, Quasi Government (Central) plans, organizes, co-ordinates and controls within authority delegated, activities of quasi-government organizations, establishment, etc. or one or more of its departments/branches or sections; and includes officials such as: CHAIRMAN, UNIVERSITY GRANTS COMMISSION CHAIRMAN, COAL MINES WELFARE COMMISSION, SECRETARY, INDIAN RED CROSS SOCIETY, SECRETARY, MICA MINES LABOUR WELFARE FUND ADVISORY COMMITTEE, SECRETARY, RAILWAY RATES TRIBUNAL, CONTROLLER OF EMIGRANT LABOUR, DIRECTOR-GENERAL, EMPLOYEES STATE INSURANCE CORPORATION.

ISCO 08 Unit Group Details:

Code 1112
Title Senior Government
Officials

1112.0700**Administrative & Executive Officials, Quasi Government (State)**

Administrative and Executive Official, Quasi Government (State) plans, organizes, co-ordinates and controls within authority delegated, activities of quasi-government organizations, establishments, etc. or one or more of its departments/branches or sections; and includes officials such as: VICE CHANCELLOR, STATE UNIVERSITIES, DEAN, STATE AUTONOMOUS EDUCATIONAL INSTITUTES, CHAIRMAN, STATE CORPORATIONS/BOARDS, CHAIRMAN,

HARYANA URBAN DEVELOPMENT AUTHORITY, SECRETARY, GHAZIABAD DEVELOPMENT AUTHORITY.

ISCO 08 Unit Group Details:

Code 1112
Title Senior Government
Officials

1112.0800**Administrative and Executive Officials, Local Bodies**

Administrative and Executive Official, Local Bodies plans, organizes, co-ordinates and controls functions of the city corporation, improvement trust, municipality, district board, cantonment board, notified area committee or other local bodies, and executes and implements or supervises execution and implementation of decisions, rules and regulations and by-laws of local bodies and also assesses and collects local taxes. Is designated according to work performed or post held, such as: COMMISSIONER, CITY CORPORATION, EXECUTIVE OFFICER, IMPROVEMENT TRUST; EXECUTIVE OFFICER, CANTONMENT, BOARD; EXECUTIVE OFFICER; MUNICIPAL BOARD, SECRETARY, DISTRICT BOARD TAX SUPERINTENDENT, OCTROI SUPERINTENDENT

ISCO 08 Unit Group Details:

Code 1112
Title Senior Government
Officials

1112.9900**Senior Government Officials, Other**

Administrative and Executive Officials, Government and Local Bodies, Other
Include all other administrative and

executive officials of government, quasi-government or local body, engaged in taking policy decisions and their implementation, general management and supervision of its one or more branches, sections and departments, not elsewhere classified.

ISCO 08 Unit Group Details:

Code 1112
 Title Senior Government
 Officials

Family 1113

Traditional Chiefs and Heads of Villages

Traditional Chiefs and Heads of Villages perform a variety of legislative, administrative and ceremonial tasks and duties, determined by ancient traditions, as well as by the division of rights and responsibilities between village chiefs and the local, regional and national authorities.

Family 1114

Senior Officials of Special-interest Organizations

Senior Officials of Special-interest Organizations determine, formulate and direct the implementation of policies of special-interest organizations, such as political-party organizations, trade unions, employers' organizations, trade and industry associations, humanitarian or charity organizations, or sports associations, and represent their organizations and act on their behalf.

1114.0100

Political Worker

Political Worker takes part in various activities of the political party to which he belongs. Contacts people for propagating ideology of his party and to enquire about their difficulties. Acts as link between people and legislators. Organizes activities of the party in his area. May act as President or Secretary of his party. May also function as President of Panchayat or Panchayat Samiti of his area.

ISCO 08 Unit Group Details:

Code 1114
 Title Senior Officials of Special-interest
 Organizations

1114.0200

Senior Officials of Employers, Workers and Other Economic Interest Organizations

Senior Officials of Employers', workers' and other economic-interest organizations determine and formulate policies, rules and regulations of their respective organizations, direct their application, represents these organizations and act on their behalf.

ISCO 08 Unit Group Details:

Code 1114
 Title Senior Officials of Special-interest
 Organizations

1114.0300

Director, Disaster Management Services

Director, Disaster Management Services directs and co-ordinates regional programme activities of various agency to provide specialized human services, such as water safety programmes, disaster relief, and emergency transportation: Consults with co-operating agencies, such

as police, firefighters and emergency ambulance services to co-ordinate efforts and define areas of jurisdiction. Participates in programme activities to serve clients of agency. Prepares budgets to control costs and to allocate funds in accordance with provisions and agency charter. May instruct agency staff and volunteers in skills required to provide services. May forward requisitions and arrange for maintenance of equipment, such as two way radios and agency vehicles. May co-ordinate services to disaster victims and safety programmes, such as water safety and emergency first aid, and also co-ordinates transportation of agency clients, blood and medical supplies and equipment.

ISCO 08 Unit Group Details:

Code 1114

Title Senior Officials of Special-interest Organizations

1114.9900

Senior Officials of Special-interest Organizations, Other

Senior Officials of Humanitarian and other Special-interest Organizations, Other include senior officials of humanitarian and other special-interest organizations who determine and formulate policies, rules and regulations of humanitarian organizations, sports associations or other special-interest organizations. Directs their application, represents these organizations and acts on their behalf.

ISCO 08 Unit Group Details:

Code 1114

Title Senior Officials of Special-interest Organizations

Group 112

Managing Directors and Chief Executives

Managing Directors and Chief Executives formulate and review the policies, plan, direct, co-ordinate and evaluate the overall activities of enterprises or organizations (except special interest organizations and government departments) with the support of other managers, usually within guidelines established by a Board of Directors or a governing body to whom they are answerable for the operations undertaken and their result.

Occupations in this Group are classified into the following Families:

1120 Managing Directors and Chief Executives

Family 1120

Managing Directors and Chief Executives

Managing Directors and Chief Executives formulate and review the policies and plan, direct co-ordinate and evaluate the overall activities of enterprises or organizations (except special interest organizations and government departments). They work with the support of other managers, usually within guidelines established by a Board of Directors or a governing body to whom they are answerable for the operations undertaken and their result.

1120.0100

Working Proprietor, Electricity

Working Proprietor, Electricity plans, organizes and controls in broad outline, within authority delegated, activities of private or public organizations or

establishments or one or more of its branches, departments, etc. engaged in generation, transmission and distribution of electricity to domestic and industrial consumers. Is designated according to work performed or powers exercised.

ISCO 08 Unit Group Details:

Code 1120

Title Managing Directors and Chief Executives

1120.0200

Working Proprietor, Gas

Working Proprietor, Gas plans, organizes and controls, within authority delegated activities of public or private organizations or enterprises, or one or more of its departments, sections or branches, engaged in manufacture of gas, distribution and supply of gas to consumers and production and supply of steam for heat and power. Is designated according to work performed or powers exercised.

ISCO 08 Unit Group Details:

Code 1120

Title Managing Directors and Chief Executives

1120.0300

Working Proprietor, Water Supply

Working Proprietor, Water Supply plans, organizes and co-ordinates, within authority delegated, activities of public or private organizations engaged in storage, filtration, purification and supply of water.

ISCO 08 Unit Group Details:

Code 1120

Title Managing Directors and Chief Executives

1120.0400

Director, Electricity

Director, Electricity heads the organization and is supported by more than one manager. Determines, plans, organizes and controls in broad outline, within authority delegated, activities of private or public organizations or establishments or one or more of its branches, departments, etc. engaged in generation, transmission and distribution of electricity to domestic and industrial consumers. Is designated according to work performed or powers exercised.

ISCO 08 Unit Group Details:

Code 1120

Title Managing Directors and Chief Executives

1120.0500

Director, Gas

Director, Gas heads the organization and is supported by more than one manager. Determines, plans, organizes and controls, within authority delegated activities of public or private organizations or enterprises, or one or more of its departments, sections or branches, engaged in manufacture of gas, distribution and supply of gas to consumers and production and supply of steam for heat and power. Is designated according to work performed or powers exercised.

ISCO 08 Unit Group Details:

Code 1120

Title Managing Directors and Chief Executives

1120.0600

Director, Water Supply

Director, Water Supply heads the organization and is supported by more than one manager. Determines, plans, organizes and co-ordinates, within authority delegated, activities of public or private organizations engaged in storage, filtration, purification and supply of water.

ISCO 08 Unit Group Details:

Code 1120
Title Managing Directors and Chief Executives

1120.0700

Director, Bank

Director, Bank sets broad policies and plans and supervises in general way, within authority delegated, efficient operation of private or public bank or major segment of it. May be designated according to authority delegated or work performed such as: GOVERNOR (BANK), CHAIRMAN (BANK), MANAGING DIRECTOR (BANK).

ISCO 08 Unit Group Details:

Code 1120
Title Managing Directors and Chief Executives

1120.0800

Director, Insurance

Director, Insurance sets broad policies, plans and co-ordinates within authority delegated, activities of private or public organization, or major segment of it, dealing in life, fire, accident, marine and other general insurance business. Is designated according to work performed or authority exercised, such as: CHAIRMAN, LIFE INSURANCE CORPORATION, MANAGING DIRECTOR, (INSURANCE), DIRECTOR, INVESTMENTS (INSURANCE).

ISCO 08 Unit Group Details:

Code 1120
Title Managing Directors and Chief Executives

1120.0900

Working Proprietor, Mines/Proprietor, Mines

Working Proprietor, Mines plans, organizes, directs and controls the enterprise wholly or partially and is engaged in economic activities related to extraction of coal, ore, mica, precious stones and other minerals from underground mines or open pits, and treatment of minerals for use by consumers. Is designated according to mineral extracted such as: WORKING PROPRIETOR, GOLD MINE, WORKING PROPRIETOR, DIAMOND MINE, WORKING PROPRIETOR, COAL MINE, WORKING PROPRIETOR, IRON MINE, WORKING PROPRIETOR, MANGANESE, MINE WORKING PROPRIETOR, COPPER MINE WORKING PROPRIETOR, MICA MINE.

ISCO 08 Unit Group Details:

Code 1120
Title Managing Directors and Chief Executives

1120.1000

Working Proprietor, Quarry/Proprietor, Quarry

Working Proprietor, Quarry plans, organizes, directs and controls the enterprise, wholly or partially and is engaged in economic activities related to extraction of stone, slate, sand and clay from earth. Is designated according to the material quarried such as:
WORKING PROPRIETOR, STONE QUARRY,
WORKING PROPRIETOR, SLATE QUARRY.

ISCO 08 Unit Group Details:

Code 1120

Title Managing Directors and Chief Executives

1120.1100**Working Proprietor, Well Drilling/Proprietor, Well Drilling**

Working Proprietor, Well Drilling plans, organizes, directs and controls the enterprise wholly or partially and is engaged in economic activities related to drilling and sinking of deep wells, and operating wells for extraction of crude petroleum, natural gas, water and other liquids and semi-liquids from deep below earth's surface.

Is designated according to the type of well such as:

WORKING PROPRIETOR, OIL WELL.

WORKING PROPRIETOR, GAS WELL.

WORKING PROPRIETOR, WATER WELL.

ISCO 08 Unit Group Details:

Code 1120

Title Managing Directors and Chief Executives

1120.1200**Working Proprietor, Construction/Proprietor, Construction**

Working Proprietor, Construction formulates policies, plans, organizes and controls activities of the organization or enterprise, wholly or partially., Is engaged in construction, maintenance and repair of buildings, roads, bridges, railway tracks, aerodromes, canals, dams, etc. Is designated as:

CONTRACTOR, BUILDING CONSTRUCTION.
CONTRACTOR, CANAL CONSTRUCTION,
etc.

ISCO 08 Unit Group Details:

Code 1120

Title Managing Directors and Chief Executives

1120.1300**Director, Construction**

Director, Construction plans, co-ordinates and controls, within powers delegated, activities of public or private organizations or one or more of its branches or departments engaged in construction, maintenance and repairs of buildings, roads, bridges, railway tracks, aerodromes, canals, dams, etc. Is designated according to work performed or authority exercised such as: MANAGING DIRECTOR(CONSTRUCTION). PROJECT DIRECTOR(CONSTRUCTION).

ISCO 08 Unit Group Details:

Code 1120

Title Managing Directors and Chief Executives

1120.1400**Director, Mines**

Director, Mine plans, directs and co-ordinates, within powers delegated activities of public or private organizations engaged in extracting coal, ores, mica, precious stones and other solid minerals from underground mines or open pits and in treating and dressing ore or minerals at mine site. Is designated according to work performed or powers delegated such as: MANAGING DIRECTOR (MINES). DIRECTOR, SALES (MINES).

ISCO 08 Unit Group Details:

Code 1120

Title Managing Directors and Chief Executives

1120.1500

Director, Quarry

Director, Quarry plans, directs and co-ordinates, within powers delegated, activities of public or private organization engaged in excavating stone, slate, clay and sand from earth. Is designated according to work performed or powers exercised such as: MANAGING DIRECTOR, QUARRY, DIRECTOR, STONE QUARRY. DIRECTOR, MARBLE QUARRY. DIRECTOR, LIMESTONE QUARRY.

ISCO 08 Unit Group Details:

Code 1120
Title Managing Directors and Chief Executives

1120.1600

Director, Well Drilling

Director, Well Drilling plans, directs and co-ordinates, within powers delegated, activities of public or private organization engaged in drilling and sinking deep wells and operating wells for extraction of mineral oil, natural gas, etc. Is designated according to work performed or economic activity directed, such as: MANAGING DIRECTOR, OIL WELL, MANAGING DIRECTOR, GAS WELL, DIRECTOR, OIL WELL, DIRECTOR, GAS WELL.

ISCO 08 Unit Group Details:

Code 1120
Title Managing Directors and Chief Executives

1120.1700

Working Proprietor, Manufacturing/Proprietor, Manufacturing

Working Proprietor, Manufacturing plans organizes, co-ordinates and controls activities of enterprises wholly or partially and is engaged in producing, maintaining or repairing capital and consumer goods excluding crops, minerals, electricity and natural gas. Is designated according to the industry owned and controlled, such as: WORKING PROPRIETOR, TEXTILE MILLS, WORKING PROPRIETOR, ENGINEERING WORKSHOP. WORKING PROPRIETOR, SHOE FACTORY, WORKING PROPRIETOR, GLASS FACTORY. WORKING PROPRIETOR, STEEL ROLLING MILLS WORKING PROPRIETOR PRINTING PRESS, WORKING PROPRIETOR, TANNERY, WORKING PROPRIETOR, BAKERY.

ISCO 08 Unit Group Details:

Code 1120
Title Managing Directors and Chief Executives

1120.1800

Director Manufacturing

Director, Manufacturing plans, organizes, co-ordinates and controls within authority delegated, activities of private or public organizations, or one or more of its departments or branches, engaged in producing, maintaining or repairing capital or consumer goods, excluding crops, minerals, electricity and natural gas. Is designated according to work performed, authority exercised or economic activity directed such as: MANAGING DIRECTOR, (MANUFACTURING). DIRECTOR, PRODUCTION(MANUFACTURING). DIRECTOR, WORKS(MANUFACTURING). DIRECTOR, STEEL PLANT. DIRECTOR, TANNERY. DIRECTOR, BAKERY. DIRECTOR, SADDLERY.

ISCO 08 Unit Group Details:

Code 1120

Title Managing Directors and Chief Executives

1120.1900**Working Proprietor, Wholesale Trade/Proprietor, Wholesale Trade**

Working Proprietor, Wholesale Trade purchases goods in bulk and sells them to retailers or other large consumers for profit. Lays down and controls business policies to ensure profits, keeping in view price line, market trend and demand and supply position. Appoints Directors, Managers and Representatives and delegates financial and operational powers to them, if necessary. Runs wholesale trade on monopoly or zonal basis in specific commodities either by importing them from outside or manufacturing them in his own or other concern. May require a licence or permit from public authorities for wholesale trade. May undertake export business.

ISCO 08 Unit Group Details:

Code 1120

Title Managing Directors and Chief Executives

1120.2000**Working Proprietor, Retail Trade/Proprietor, Retail Trade**

Working Proprietor, Retail Trade conducts business in retail trade on own account, buying merchandise from manufacturers or wholesalers according to public demand and sells them to customers for profit. Lays down business policies regarding margin of profit and compliance with prescribed rules and regulations. May appoint Directors and Managers and

may delegate financial and operational powers to them. May obtain licence or permit from public authorities for retail trade.

ISCO 08 Unit Group Details:

Code 1120

Title Managing Directors and Chief Executives

1120.2100**Director, Wholesale Trade**

Director, Wholesale Trade lays down policies within powers ,delegated, and plans, controls and directs operation of private or public enterprise or segment of its activities engaged in buying and selling of goods in wholesale. Is designated according to work performed, such as: MANAGING DIRECTOR (Wholesale Trade), CHAIRMAN, BOARD OF DIRECTORS (Wholesale Trade).

ISCO 08 Unit Group Details:

Code 1120

Title Managing Directors and Chief Executives

1120.2200**Director, Retail Trade**

Director, Retail Trade lays down policies within powers delegated and plans, controls and directs operation of private or public enterprises or a segment of its activities, engaged in buying and selling goods in retail. Is designated according to work performed such as: MANAGING DIRECTOR (Retail Trade), CHAIRMAN, BOARD OF DIRECTORS (Retail Trade) DIRECTOR-IN-CHARGE (Retail Trade).

ISCO 08 Unit Group Details:

Code 1120

Title Managing Directors and Chief Executives

SUPERINTENDENT(RAILWAYS).
COMMERCIAL
SUPERINTENDENT(RAILWAYS).

1120.2300

Working Proprietor, Transport

Working Proprietor, Transport plans, organizes, co-ordinates and controls activities of the organization or establishment wholly or partly owned by him, is engaged in transporting passengers and freight by buses, trucks, taxis, rickshaws, tongas, and other means of road transport; by boats, launches, ships, etc. plying on inland or coastal waters or on high seas; by aircraft for providing transport and other services, incidental to transport.

ISCO 08 Unit Group Details:

Code 1120

Title Managing Directors and Chief Executives

1120.2400

Director, Transport

Director, Transport plans organizes, co-ordinates and controls, within authority delegated, activities of private or public organizations or one or more of its departments, branches or sections, engaged in transporting passengers and freight by railways, tramways, buses, trucks, taxis, rickshaws, animal transport and other means of road transport; by boats, launches and ships plying on rivers, coastal waters, and high seas; by aircrafts; and operating services incidental to transport. Is designated according to work performed, powers exercised of service controlled, such as: MANAGING DIRECTOR (TRANSPORT).

DIRECTOR, TRAFFIC GENERAL, MANAGER, RAILWAYS, DIRECTOR, ROADWAYS, CHIEF OPERATING

ISCO 08 Unit Group Details:

Code 1120

Title Managing Directors and Chief Executives

1120.2500

Director, Communication

Director, Communication plans, organizes, co-ordinates and controls, within authority delegated, activities of public or private organization or one or more of its departments or branches, engaged in providing postal, telephone, telegraph, wireless and other communication services. Is designated according to powers exercised or type of communication service directed such as: DIRECTOR, POSTAL SERVICES, POST MASTER GENERAL, DIRECTOR, OVERSEAS COMMUNICATION SERVICES, DIRECTOR OF TELEPHONES, DIRECTOR OF RAILWAY MAIL SERVICE.

ISCO 08 Unit Group Details:

Code 1120

Title Managing Directors and Chief Executives

1120.2600

Director, Airport

Director, Airport plans, directs, and co-ordinates, through subordinate personnel, activities concerned with construction and maintenance of airport facilities and operation of airport in accordance with governmental agencies or commission policies and regulations. Consults with commission members, governmental officials, or representatives of airlines to discuss and plan matters, such as design and development of airport facilities,

formulation of operating rules, regulations, and procedures, and aircraft landing, taxiing, and take-off patterns for various types of aircrafts. Negotiates with representatives of airlines, utility companies, or individuals for acquisition of property for development of airports, lease of airport buildings and facilities, or use of rights-of-way over private property. Formulates procedures for use in event of aircraft accidents, fires, or other emergencies. Inspects airport facilities, such as runways, buildings, beacons and lighting, and automotive or construction equipment, or reviews inspection reports, to determine repairs, replacement, or improvements required. Co-ordinates activities of personnel involved in repair and maintenance of airport facilities, buildings, and equipment to minimize interruption of airport operations and improve efficiency. Directs personnel in investigating violations of aerial or ground traffic regulations, reviews investigation reports, and initiates actions to be taken against violators. Directs studies on noise abatement resulting from complaints of excessive noise from low flying aircraft or other operations. Reviews reports of expenditures for previous fiscal year, proposes improvements to facilitate, estimated increase in volume of traffic, in order to prepare budget estimates for upcoming fiscal year. Represents airport before civic or other organizational groups, courts, boards, and commissions.

ISCO 08 Unit Group Details:

Code 1120

Title Managing Directors and Chief Executives

1120.2700

Working Proprietor, Storage and Warehousing

Working Proprietor, Storage and Warehousing plans and organizes storage warehousing and freight handling services to public and private organizations by land, sea or air and arranges allied transport and communication facilities to parties concerned. Obtains license from Government where necessary, and lays down business policies. Appoints Directors, Agents and Managers and delegates required financial and other powers to them to ensure smooth running of business, desired margin of profit and compliance with business terms and Government rules and regulations.

ISCO 08 Unit Group Details:

Code 1120

Title Managing Directors and Chief Executives

1120.2800

Director, Storage and Warehousing

Director, Storage and Warehousing plans, organizes, co-ordinates and controls, within authority delegated, activities of public or private organizations, or one or more of its branches, engaged in providing storage and warehouse facilities on prescribed terms and conditions to Government and private parties. May arrange facilities of transport and communication as required.

May specialize in any particular type of item or commodity such as machinery and engineering items, explosives, perishable goods, etc. and be designated accordingly.

ISCO 08 Unit Group Details:

Code 1120

Title Managing Directors and Chief Executives

1120.2900**Working Proprietor, Lodging and Catering Services**

Working Proprietor, Lodging and Catering Services plans, organizes, co-ordinates and controls operations of the organization or establishment wholly or partly owned by him and is engaged in serving food, drinks and beverages and providing lodging and camping facilities to public. Included are: WORKING PROPRIETOR, HOTEL. WORKING PROPRIETOR, RESTAURANT. WORKING PROPRIETOR, CAFE WORKING PROPRIETOR, COFFEE HOUSE.

ISCO 08 Unit Group Details:

Code 1120

Title Managing Directors and Chief Executives

1120.3000**Director, Lodging and Catering Services/Director Food and Beverage Service**

Director, Lodging and Catering Services plans, organizes and controls, within authority delegated, activities of public or private organizations or establishments or one or more of its branches, engaged in preparing and serving food, drinks and beverages and providing lodging, and camping facilities to public. Included are: DIRECTOR, HOTEL. DIRECTOR, RESTAURANT. DIRECTOR, COFFEE HOUSE.

ISCO 08 Unit Group Details:

Code 1120

Title Managing Directors and Chief Executives

1120.3100**Executive Chef**

Executive Chef co-ordinates activities and directs indoctrination and training of CHEFS, COOKS; and other kitchen workers engaged in preparing and cooking food in hotels or restaurants to ensure an efficient and profitable food service. Plans or participates in planning menus and utilisation of food surpluses and leftovers, taking into account probable number of guests, marketing conditions, popularity of various dishes, and decency of menu. Estimates food consumption and purchase or requisition of foodstuff and kitchen supplies. Reviews menus, analyses recipes, determines food, labour, and overhead costs, and assigns price to menu items. Directs food apportionment policy to control costs. Supervises cooking and other kitchen personnel and co-ordinates their assignments to ensure economical and timely food production. Observes methods of food preparation and cooking, size of portions, and garnishing of food to ensure food is prepared in prescribed manner. Tests cooked food by tasting and smelling them. Devises special dishes and develops recipes. Hires and discharges employees. Familiarizes newly hired CHEFS and COOKS with practices of the restaurant kitchen and oversees training of COOK APPRENTICES. Maintains time and payroll records. Establishes and enforces nutrition and sanitation standards for the restaurant. May supervise or co-operate with STEWARD/STEWARDESS in matters pertaining to kitchen, pantry, and storeroom.

ISCO 08 Unit Group Details:

Code 1120

Title Managing Directors and Chief Executives

1120.3200**Working Proprietor, Recreation and Entertainment**

Working Proprietor, Recreation and Entertainment plans, organizes, coordinates and controls operations of the organization or establishment wholly or partly owned by him and is engaged in producing, distributing and exhibiting motion pictures; producing and presenting stage and circus shows; operating carnivals and amusement parks; organizing games, sports, hunting, fishing, excursion, competitions, etc., and providing other entertainment and recreation services. Included are: WORKING PROPRIETOR, FILM STUDIO. PRODUCER, MOTION PICTURES, FILM DISTRIBUTOR, WORKING PROPRIETOR, THEATRE, WORKING PROPRIETOR, CARNIVAL, WORKING PROPRIETOR, AMUSEMENT PARK. WORKING PROPRIETOR, GYMNASIUM, WORKING PROPRIETOR, SWIMMING POOL, WORKING PROPRIETOR, DANCE HALL, WORKING PROPRIETOR, CINEMA, WORKING PROPRIETOR, CIRCUS.

ISCO 08 Unit Group Details:

Code 1120

Title Managing Directors and Chief Executives

1120.3300**Director, Recreation and Entertainment**

Director, Recreation and Entertainment plans, organizes and controls, within authority delegated, activities of public or private organizations or establishments or one or more of its branches or departments, engaged in producing, distributing and exhibiting motion pictures; producing and presenting stage

and circus shows; organizing and presenting radio and television programmes; operating carnivals and amusement parks; organizing games, sports, hunting, fishing, excursion, competitions, etc., and providing other entertainment and recreation services. Included are;

DIRECTOR, MOTION PICTURE. DIRECTOR, STAGE. DIRECTOR, STUDIO. DIRECTOR, STADIUM. DIRECTOR, RADIO STATION.

ISCO 08 Unit Group Details:

Code 1120

Title Managing Directors and Chief Executives

1120.3400**Station Director, Radio/TV**

Station Director, Radio/TV directs and coordinates activities of radio or television station, or of cable television franchise. Supervises directly, or through subordinates, personnel engaged in departments, such as sales, programme or engineering.

Observes activities to ensure compliance with government regulations. Discusses plans with the marketing personnel to promote sales of programmes and time periods to advertisers and their agencies. Confers with owners or company senior management to discuss station policies and administrative procedures. May prepare operational budget and monitor expenses for station or franchise. May negotiate with motion picture companies for purchase of independent film programmes.

May negotiate cable franchise contract with local issuing authority. May develop strategies to promote sales of new cable television service or upgraded service to customers within the franchise area. May contact prospective buyers of station time

to promote sale of station services. May manage stations engaged in transmitting broadcasts to foreign countries and be known as Director, International Broadcasting (radio-television broadcast). May perform different duties and responsibilities, according to station size and network affiliation.

ISCO 08 Unit Group Details:

Code 1120
Title Managing Directors and Chief Executives

1120.3401 Account Director (Advertising Agency)

Account Director (Advertising Agency) is responsible for managing the clients' advertisement portfolio.

Qualification Pack Details:

QP NOS Reference	MES/Q0207
QP NOS Name	Account Director (Advertising Agency)
NSQF Level	8

ISCO 08 Unit Group Details:

Code 1120
Title Managing Directors and Chief Executives

1120.3402 Sales Director (Media Org)

Sales Director (Media Org) is responsible for leading the sales efforts of a media and entertainment company.

Qualification Pack Details:

QP NOS Reference	MES/Q0201
QP NOS Name	Sales Director (Media Org)

NSQF Level 8

ISCO 08 Unit Group Details:

Code 1120
Title Managing Directors and Chief Executives

1120.3500

Working Proprietor, Other Services

Working Proprietor, Other Services plans, organizes, co-ordinates and controls activities of the organization, wholly or partly owned by him, and is engaged in running and managing educational institutions; rendering medical and other health services, sanitation, washing and cleaning households, garments, etc. and providing other services.

ISCO 08 Unit Group Details:

Code 1120
Title Managing Directors and Chief Executives

1120.3600

Director, Other Services

Director, Other Services plans, organizes and controls, within authority delegated, activities of public or private organizations or establishments, or one or more of its departments or branches, engaged in running educational institutions; rendering medical sanitation and other health services. Organizing and providing religious services, promoting welfare of workers or community, giving charity assistance or aid to infirm or orphans. Organizing and managing trade and labour organizations and other civic and social associations, washing and cleaning garments etc., undertaking and cremating; and performing other services. Included are: DIRECTOR OF EDUCATIONAL INSTITUTIONS. DIRECTOR OF CHARITABLE

INSTITUTIONS, DIRECTOR, ORPHANAGE
DIRECTOR, Y.M.C.A, DIRECTOR, Y.W.C.A.

ISCO 08 Unit Group Details:

Code 1120

Title Managing Directors and Chief Executives

1120.3700

Director, Museum/Zoo

Director, Museum/Zoo administers affairs of museum, zoo, or similar establishments. Confers with the institution's board of Directors to formulate policies and plan overall operations. Directs acquisition, education, research, public service, and developmental activities of the institution, consulting with curatorial, administrative, and maintenance staff members to implement policies and initiate programmes. Works with members of curatorial and administrative staffs to acquire additions to collections. Confers with administrative staff members to determine budget requirements, plans fund raising drives, prepares applications for grants from government agencies or private foundations, and solicits financial support for institutions. Establishes and maintains contact with administrators of other institutions to exchange information concerning operations and plan, coordinate, or consolidate community service and education programmes. Represents the institution at professional and civic social events, conventions, and other gatherings to strengthen relationships with cultural and civic leaders, present lectures or participate in seminars, or explain institution's functions and seek financial support for projects. Reviews materials prepared by staff members, such as articles for journals, requests for grants and reports on

institutional programmes, and approves materials or suggests changes. Instructs classes in institution's education programme or as guest lecturer at the university. Writes articles for technical journals or other publications.

ISCO 08 Unit Group Details:

Code 1120

Title Managing Directors and Chief Executives

1120.3800

Chief Librarian

Chief Librarian plans and administers programme of library services: Submits recommendations on library policies and services to the governing body, such as board of Directors or board of Trustees, and implements policy decisions. Analyses, selects, and executes recommendations of personnel, such as department chiefs or branch supervisors. Co-ordinates activities of the branch or departmental libraries. Analyses and co-ordinates departmental budget estimates and controls expenditures to administer approved budget. Reviews and evaluates orders for books and audio-visual materials. Examines trade publications and materials, interviews publishers' representatives, and consults with others to select materials. Administers personnel regulations, interviews and appoints job applicants and promotes and discharges employees. Plans and conducts staff meetings and participates in community and professional meetings to discuss and act on library problems. Delivers book reviews and lectures to publicise library activities and services. Provides library public relation services. May examine and select materials to be discarded, repaired, or replaced.

ISCO 08 Unit Group Details:

Code 1120

Title Managing Directors and Chief Executives

1120.3900**Principal, College**

Principal College directs and co-ordinates educational, administrative, and counselling activities of college. Develops and evaluates educational programmes to ensure conformance to state and university standards. Develops and co-ordinates educational programmes through meetings with staff, review of teachers' activities, and issuance of directives.

Confers with teachers, students, and parents concerning educational and behavioural problems in the college. Establishes and maintains relationships with colleges, community organizations, and other colleges to co-ordinate educational, sports and cultural services. Forwards requisitions and allocates supplies, equipment, and instructional material as needed. Directs preparation of class schedules, cumulative records, and attendance reports. Observes and evaluates teacher's performance. Interviews and hires teachers. Walks around the college building and property to monitor safety and security. Plans and monitors college budget and financial matters. May plan and direct building maintenance. May develop and administer educational programmes for students with mental or physical handicaps.

ISCO 08 Unit Group Details:

Code 1120

Title Managing Directors and Chief Executives

1120.9900**Managing Directors and Chief Executives, Others**

Working Proprietors and Directors, Other Workers plan, organize, control, co-ordinate and supervise activities of public or private organizations, wholly or partially owned by them or on behalf of others, engaged in generating, transmitting and distributing electricity; producing and supplying gas, purifying and supplying water and providing related services not elsewhere classified.

ISCO 08 Unit Group Details:

Code 1120

Title Managing Directors and Chief Executives

Sub Division 12**Administrative and Commercial Managers**

Administrative and Commercial Managers plan, organize, direct, control and co-ordinate the financial, administrative, human resource, policy, planning, research and development, advertising, public relations, and sales and marketing activities of enterprises and organizations, or of enterprises that provide such services to other enterprises and organizations.

Tasks performed by workers in this sub-major group usually include: formulating and administering policy advice, strategic and financial planning; establishing and directing operational and administrative procedures; implementing, monitoring and evaluating strategies and policies; providing advice to Senior Managers; directing the development of initiatives

for new products, marketing, public relations and advertising campaigns; determining and directing sales activities, product mix, customer service standards; setting prices and credit arrangements; ensuring compliance with relevant legislation, regulations and standards; controlling selection, training and performance of staff; preparing budgets and overseeing financial operations; consulting with the chief executive and with managers of other departments or sections; controlling expenditure and ensuring the efficient use of resources; representing the enterprise or organization in negotiations, and at conventions, seminars, public hearings and forums.

Occupations in this Sub Division are classified into the following Groups:

121 Business Services and Administration Managers
122 Sales, Marketing and Development Managers

Group 121

Business Services and Administration Managers

Business Services and Administration Managers plan, organize, direct, control and co-ordinate the financial, administrative, human resource, policy, planning, activities of organizations, or of enterprises that provide such services to other enterprises and organizations.

Occupations in this Group are classified into the following Families:

1211 Finance Managers
1212 Human Resource Managers

1213 Policy and Planning Managers
1219 Business Services and Administration Managers Not Elsewhere Classified

Family 1211

Finance Managers

Finance Managers plan, direct and co-ordinate the financial operations of an enterprise or organization, in consultation with Senior Managers and with Managers of other departments or sections.

1211.0100

General Manager, Bank

General Manager, Bank organizes, controls and supervises, within authority delegated, activities of a private or public bank or one or more of its departments or branches. Is designated according to authority delegated or work performed such as: AGENT (BANK) SUB-AGENT (BANK)

ISCO 08 Unit Group Details:

Code 1211
Title Finance Managers

1211.0200

General Manager, Insurance

General Manager, Insurance organizes, controls and supervises, within authority delegated, activities of a private or public organization or one or more of its departments or branches, engaged in life, fire, accident, marine and other general insurance business.

ISCO 08 Unit Group Details:

Code 1211
Title Finance Managers

1211.0300 Purser, Ship

Purser, Ship deals with correspondence and accounts relating to a ship. Keeps charge of all accounts and pay of the ship's personnel. Checks reports of Clerks and pays of crew and maintains their pay rolls. Prepares portage bills and ship's 30 articles (contracts). Collects mail and distributes to passengers, officers and crew. May supervise stowing or removal of luggage from holds in conjunction with Chief Officer, Ship or Officer on Watch. May collect valuables of passengers for safe custody in passenger ships. May arrange parties and other entertainment for passengers and generally acts as a host.

ISCO 08 Unit Group Details:

Code	1211
Title	Finance Managers

1211.9900

Finance and Administration Managers, Others

Finance and Administration Department Managers, Others include Managers engaged in finance and administration and related services, not elsewhere classified.

ISCO 08 Unit Group Details:

Code	1211
Title	Finance Managers

Family 1212 Human Resource Managers

Human Resource Managers, plan, direct and co-ordinate policies concerning the personnel, industrial relations and occupational health and safety activities of an enterprise or organization, or of enterprises that provide human resource services to other enterprises and organizations.

1212.0100 Personnel Manager

Personnel Manager; Personnel Officer; Industrial Relation Officer formulates and executes policies relating to recruitment, training, review of terms and conditions of employment of personnel, implementation of statutory and other welfare schemes and effective utilization and discharge of personnel employed in any undertaking. Advises and assists in development of managerial power, prescribes recruitment methods, organizes training schemes, supervises administration of welfare programmes, distributes personnel for their effective utilization in organization and resolves problems of remuneration, discipline and industrial disputes in accordance with established laws. Investigates into specific problems of indiscipline and inefficiency to evolve and suggest ameliorative measures to management. Establishes channels of consultation between labour and employers to minimize misunderstanding, promote cordial relations and consults with labour representatives on behalf of employers to remove causes of petty grievances. May specialize in a particular function, such as employment and placement, training, welfare, or industrial relations and be designated accordingly.

ISCO 08 Unit Group Details:

Code	1212
Title	Human Resource Managers

1212.9900

Personnel and Industrial Relations Managers, Other

Personnel and Industrial Relation Managers, Other include managers engaged in personnel and industrial relations and related services, not elsewhere classified.

ISCO 08 Unit Group Details:

Code 1212
Title Human Resource Managers

Family 1213

Policy and Planning Managers

Policy and Planning Managers plan, organize, direct and co-ordinate policy advice and strategic planning activities within government or for non-government organizations and private sector agencies, or manage the activities of enterprises that provide policy and strategic planning services.

1213.0100

Manager, Automotive Service

Manager, Automotive Services directs and co-ordinates activities concerned with acquisition of automotive equipment and operation and maintenance of automotive fleet repair and storage facilities for public utility, transportation, commercial, or industrial companies. Co-ordinates activities of staff personnel conducting research and testing programme on automotive equipment considered for acquisition for such factors as operational performance, operational and maintenance costs, safety of operation, and compliance with environmental laws and regulations. Reviews and submits staff proposals for modifications to vendor or manufacturer. Directs procurement of all types of company-owned-and-operated automotive equipment, materials, supplies, and parts

required to maintain automotive equipment, garages, and storage facilities. Co-ordinates automotive repair and maintenance services to obtain maximum utilisation of automotive equipment and prevent operational delays in other departments.

ISCO 08 Unit Group Details:

Code 1213
Title Policy and Planning Managers

1213.0101

Quality Assurance Standards In Charge

Quality Assurance Standards In Charge is responsible for selecting, maintaining and monitoring the measuring systems to be used for the inspection of manufactured products in order to assure quality products to customers.

Qualification Pack Details:

QP NOS Reference	ASC/Q6305
QP NOS Name	Quality Assurance Standards In Charge-Level 5
NSQF Level	5

ISCO 08 Unit Group Details:

Code 1213
Title Policy and Planning Managers

1213.0102

Manager-Customer Quality

Manager-Customer Quality is responsible for the quality inspection, performance and improvement of final products delivered to customers.

Qualification Pack Details:

QP NOS Reference ASC/Q6304

QP NOS Name	Manager-Customer Quality Level 6
NSQF Level	6

ISCO 08 Unit Group Details:

Code 1213
Title Policy and Planning Managers

1213.0200 **Manager, Automotive Service Station**

Manager, Automotive Service Station manages automobile service stations. Plans, develops, and implements policies for operating station, such as hours of operation, workers required and duties, scope of operations, and prices for products and services. Hires and trains workers, prepares work schedules, and assigns workers to specific duties, such as customer service, automobile maintenance, or repair work. Directs, coordinates, and participates in performing customer service activities, such as pumping petroleum fuel, checking engine oil, tires, battery, and washing windows and windshield. Notifies customers when oil is dirty or low, tires are worn, hoses or fan-belts are defective, or evidence indicates battery defects. Promotes sale of products and services, such as oil change and lubrication, tires, battery, or other automotive accessories. Reconciles cash with petrol pump meter readings, sales slips, and credit card charges. Orders, receives, and inventories petroleum fuel, oil, automotive accessories and parts. May perform automotive maintenance and repair work, such as adjusting or relining brakes, motor tune-ups, valve grinding, and changing and repairing tires.

ISCO 08 Unit Group Details:

Code 1213

Title Policy and Planning Managers

1213.0201 **Area Service Manager**

Area Service Manager is responsible for supervising and handling overall services network of the assigned area. The individual generally monitors services network at dealerships and reviews and supervises processes.

Qualification Pack Details:

QP NOS Reference	ASC/Q0603
QP NOS Name	Area Service Manager
NSQF Level	6

ISCO 08 Unit Group Details:

Code 1213
Title Policy and Planning Managers

1213.0202 **Territory Service Manager**

Territory Service Manager is responsible for managing the service function in the assigned territory. The individual supervises service functions at the dealership network of the assigned territory and helps in increasing profitability.

Qualification Pack Details:

QP NOS Reference	ASC/Q0602
QP NOS Name	Territory Service Manager
NSQF Level	5

ISCO 08 Unit Group Details:

Code 1213
Title Policy and Planning Managers

1213.9900 **Managers, Other Services**

Managers, Other Services include Department Managers not elsewhere classified.

ISCO 08 Unit Group Details:

Code 1213

Title Policy and Planning Managers

Family 1219

Business Services and Administration Managers Not Elsewhere Classified

This unit group covers Business Services and Administration Managers not classified elsewhere in group 121, Business services and Administration Managers. For instance, the group includes occupations such as Facilities Manager, Cleaning Services Manager, Administrative Services Manager.

1219.0100

Manager, Import and Export

Manager, Import and Export co-ordinates activities of international traffic division of import-export agencies and negotiates settlements between foreign and domestic shippers: Plans and directs flow of air and surface traffic moving to overseas destinations. Supervises workers engaged in receiving and shipping freight, documentation, way billing, assessing charges, and collecting fees for shipments. Negotiates with domestic customers, as intermediary for foreign customers, to resolve problems and arrives at mutual agreements. Negotiates with foreign shipping interests to contract for reciprocal freight-handling agreements. May examine invoices and shipping manifests for conformity to tariff and customs regulations. May contact customs officials to effect release of

incoming freight and resolve customs delays. May prepare reports of transactions to facilitate billing of shippers and foreign carriers.

ISCO 08 Unit Group Details:

Code 1219

Title Business Services and Administration Managers Not Elsewhere Classified

1219.0101

Export Manager

Export Manager is responsible for leading and managing the entire process of international shipment of goods. Their work includes analysis of the foreign trade logistics, management and supervision of all shipment related documents and ensuring shipping compliance.

Qualification Pack Details:

QP NOS Reference AMH/Q1603

QP NOS Name Export Manager

NSQF Level 5

ISCO 08 Unit Group Details:

Code 1219

Title Business Services and Administration Managers Not Elsewhere Classified

1219.0200

Manager, Health Club/Manager, Fitness Club/Centre/Gym

Manager, Health Club supervises and co-ordinates activities of workers engaged in planning, selling, and instructing fitness plans for clients of health clubs: Assigns and adjusts work schedules to meet customer demand. Interviews, hires, and trains new employees. Observes workers in their performance of duties and gives

remedial training to correct worker deficiencies and ensures courteous service to patrons. Plans and sells figure-controlling programmes to prospective patrons. Assists subordinates in interviewing, measuring, and evaluating patrons' physical condition to determine appropriate fitness programmes. Prepares contract forms, obtains signatures, collects deposits, and issues membership cards to patrons accepting plans. Demonstrates operation and explains purpose of equipment, such as treadmill exerciser and stationary bicycle, and instructs patrons in their use. Monitors patron's exercise programme to ensure adherence to specified techniques.

ISCO 08 Unit Group Details:

Code 1219
 Title Business Services and Administration Managers Not Elsewhere Classified

Group 122

Sales, Marketing and Development Managers

Sales, Marketing and Development Managers plan, organize, direct, control and co-ordinate the advertising, public relations, research and development, and sales and marketing activities of enterprises and organizations, or of enterprises that provide such services to other enterprises and organizations.

Occupations in this Group are classified into the following Families:

1221 Sales and Marketing Managers
1222 Advertising and Public Relation Managers
1223 Research and Development Managers

Family 1221

Sales and Marketing Managers

Sales and Marketing Managers plan, direct and co-ordinate the sales and marketing activities of an enterprise or organization, or of enterprises that provide sales and marketing services to other enterprises and organizations.

1221.0100

Sales Manager (Wholesale Trade)

Sales Manager (Wholesale Trade) organizes and manages wholesale trade organizations, or one or more if its branches or departments engaged in buying goods and selling them for profits to retailers or industrial and commercial consumers.

Qualification Pack Details:

QP NOS Reference
 QP NOS Name
 NSQF Level

ISCO 08 Unit Group Details:

Code 1221
 Title Sales and Marketing Managers

1221.0200

Sales Manager (Retail Trade)

Sales Manager (Retail Trade) organizes and manages retail trade organization, or one or more of its branches or departments, engaged in buying goods and merchandise and selling them for profit to customers.

ISCO 08 Unit Group Details:

Code 1221
 Title Sales and Marketing Managers

1221.0301

Home Delivery Manager

Home Delivery Manager is responsible for delivering vehicles to the customers and explaining all service related activities to the customer, while delivering the vehicle. They also ensure proper pickup and delivery of vehicles as per the customers' service schedule.

Qualification Pack Details:

QP NOS Reference	ASC/Q1006
QP NOS Name	Home Delivery Manager
NSQF Level	6

ISCO 08 Unit Group Details:

Code	1221
Title	Sales and Marketing Managers

1221.0401

Territory Sales Manager (Broadband)

Territory Sales Manager (Broadband) manages and supervises DSAs activities and achievement of sales targets, in the assigned territory. Enhances Average Revenue Per User (ARPU) and customer base, channel development and process compliance.

Qualification Pack Details:

QP NOS Reference	TEL/Q0204
QP NOS Name	Territory Sales Manager (Broadband)
NSQF Level	7

ISCO 08 Unit Group Details:

Code	1221
Title	Sales and Marketing Managers

1221.0501

Territory Sales Manager (Prepaid)

Territory Sales Manager (Prepaid) is responsible for distribution expansion and co-ordination with urban distributors, i.e. multi brand distributors, to achieve sales targets in the assigned territory achieving revenue targets people development channel management retailer education range selling increasing customer base and process compliance. (Rural Distributor)-Individual at this job is responsible for similar activities but with rural i.e. company specific distributors

Qualification Pack Details:

QP NOS Reference	TEL/Q0203
QP NOS Name	Territory Sales Manager (Prepaid)
NSQF Level	7

ISCO 08 Unit Group Details:

Code	1221
Title	Sales and Marketing Managers

1221.0601

Sales Co-ordinator (Media Org)

Sales Co-ordinator (Media Org) is responsible for back-end sales activities

Qualification Pack Details:

QP NOS Reference	MES/Q0204
QP NOS Name	Sales Co-ordinator (Media Org)
NSQF Level	4

ISCO 08 Unit Group Details:

Code	1221
Title	Sales and Marketing Managers

1221.0602

Sales Manager (Media Org)

Sales Manager (Media Org) is responsible to lead sales activities within the designated area of responsibility

Qualification Pack Details:

QP NOS Reference	MES/Q0202
QP NOS Name	Sales Manager (Media Org)
NSQF Level	7

ISCO 08 Unit Group Details:

Code 1221
Title Sales and Marketing Managers

1221.9900**Sales and Marketing Managers, Other**

Sales and Marketing Managers, Other include managers engaged in sales and marketing and related services, not elsewhere classified.

ISCO 08 Unit Group Details:

Code 1221
Title Sales and Marketing Managers

Family 1222**Advertising and Public Relation Managers**

Advertising and Public Relation Managers plan, direct and co-ordinate the advertising, public relations and public information activities of enterprises and organizations or of enterprises that provide related services to other enterprises and organizations.

1222.0100**Manager, Advertising and Promotion**

Manager, Advertising and Promotion plan and direct advertising policies and programmes or produce collateral materials, such as posters, contests,

coupons, or give-aways, to create extra interest in the purchase of a product or service for a department, an entire organization, or on an account basis. Confer with clients to provide marketing or technical advice. Confer with department heads and/or staff to discuss topics such as contracts, selection of advertising media, or product to be advertised. Co-ordinate activities of departments, such as sales, graphic arts, media, finance, and research. Co-ordinate with the media to disseminate advertising. Formulate plans to extend business with established accounts and to transact business as agent for advertising accounts. Gather and organize information to plan advertising campaigns. Identify and develop contacts for promotional campaigns and industry programmes that meet identified buyer targets such as dealers, distributors, or consumers. Inspect layouts and advertising copy and edit scripts, audio and video tapes, and other promotional material for adherence to specifications. Monitor and analyse sales promotion results to determine cost effectiveness of promotional campaigns. Plan and execute advertising policies and strategies for organizations.

ISCO 08 Unit Group Details:

Code 1222
Title Advertising and Public Relation Managers

1222.0102**Advertising Operations Co-ordinator (Digital)**

Advertising Operations Co-ordinator (Digital) is responsible for implementing online advertisement campaigns

Qualification Pack Details:

QP NOS Reference	MES/Q0206
QP NOS Name	Advertising Operations Co-ordinator (Digital)
NSQF Level	7

Advertising and Public Relations Department Managers, Other include managers engaged in advertising and public relations and related services, not elsewhere classified.

ISCO 08 Unit Group Details:

Code	1222
Title	Advertising and Public Relation Managers

1222.0200

Manager, Fashion/Fashion Manager

Manager, Fashion promotes new fashions and co-ordinates promotional activities, such as fashion shows, to induce consumer acceptance: Studies fashion and trade journals, travels to garment centres, attends fashion shows, and visits manufacturers and merchandise markets to obtain information on fashion trends. Consults with buying personnel to gain advice regarding type of fashion. Advises publicity and display departments of merchandise to be publicized. Selects garments and accessories to be displayed at fashion shows. Provides information on current fashion, style trends, and use of accessories. May contract with models, musicians, caterers, and other personnel to manage staging of shows. May conduct teenage fashion shows and direct activities of store-sponsored club for teenaged girls.

ISCO 08 Unit Group Details:

Code	1222
Title	Advertising and Public Relation Managers

1222.9900

Advertising and Public Relations Department Managers, Others

ISCO 08 Unit Group Details:

Code	1222
Title	Advertising and Public Relation Managers

Family 1223 Research and Development Managers

Research and Development Managers plan, direct and co-ordinate the research and development activities of an enterprise or organization or of enterprises that provide related services to other enterprises and organizations.

1223.0101

Manager Testing Facility

Manager Testing Facility needs to manage requirements identification, development and installation of testing facilities in R&D for validating the specifications of the product.

Qualification Pack Details:

QP NOS Reference	ASC/Q6503
QP NOS Name	Manager Testing Facility Level 6
NSQF Level	6

ISCO 08 Unit Group Details:

Code	1223
Title	Research and Development Managers

1223.0102

Manager Material Testing

Manager Material Testing needs to administer metallurgical testing, chemical testing and failure analysis of materials for fabrication of parts and other components that finally go into manufacturing of different products.

Qualification Pack Details:

QP NOS Reference	ASC/Q6502
QP NOS Name	Manager Material Testing
NSQF Level	5

ISCO 08 Unit Group Details:

Code	1223
Title	Research and Development Managers

1223.0201

Research Associate

Research Associate is responsible for supporting research activities in a particular scientific field based on the requirement of the organization. The job also involves going through many reports, analysing and interpreting data, creating research reports and documents

Qualification Pack Details:

QP NOS Reference	SSC/Q5301
QP NOS Name	Research Associate
NSQF Level	8

ISCO 08 Unit Group Details:

Code	1223
Title	Research and Development Managers

Sub Division 13

Production and Specialized Services Managers

Production and Specialized Services managers plan direct and co-ordinate the production of the goods and the provision

of the specialized professional and technical services provided by an enterprise or organization. They are responsible for manufacturing, mining, construction, logistics, information and communications technology operations, for large scale agricultural, forestry and fisheries operations, and for the provision of health, education, social welfare, banking, insurance and other professional and technical services.

Tasks performed by workers in this sub-major group usually include: planning details of activities in terms of output, services provided, quality, quantity, cost, timeliness and labour requirements; setting standards and objectives; controlling the operation of plant and of procedures; assuring quality of the goods produced and services provided; preparing tenders and contract bids; establishing and managing budgets, monitoring costs, and adjusting activities, procedures and resources to minimize costs; overseeing the acquisition and installation of new plant and equipment; co-ordinating the implementation of health and safety requirements; planning and directing daily operations; overseeing the selection, training and performance of staff; preparing, or arranging for the preparation of, reports, budgets and forecasts; representing the enterprise or organization in negotiations with other agencies, and at conventions, seminars, public hearings and forums.

Occupations in this Sub Division are classified into the following Groups:

131	Production Managers in Agriculture, Forestry and Fisheries
132	Manufacturing, Mining, Construction and Distribution Managers

133	Information and Communications Technology Services Manager
134	Professional Services Manager

Group 131**Production Managers in Agriculture, Forestry and Fisheries**

Production Managers in Agriculture, Forestry and Fisheries plan, direct, and co-ordinate production in large scale agricultural, horticultural, forestry aquaculture and fishery operations such as plantations, large ranches, collective farms and co-operatives to grow and harvest crops, breed and raise livestock, fish and shellfish and to catch and harvest fish and other forms of aquatic life.

Occupations in this Group are classified into the following Families:

1311	Agricultural and Forestry Production Managers
1312	Aquaculture and Fisheries Production Managers

Family 1311
Agricultural and Forestry Production Managers

Agricultural and Forestry Production Managers plan, direct, and co-ordinate production in large scale agricultural, horticultural and forestry operations such as plantations, large ranches, collective farms and agricultural co-operatives to grow and harvest crops, and breed and raise livestock.

1311.0100
General Manager, Plantation

General Manager, Plantation manages plantation on behalf of employer. Examines soil, climatic conditions, scope for marketing, etc. to determine type of crop such as tea, coffee, rubber etc. to be grown. Selects, purchases and stores seeds, fertilisers, agricultural implements, etc. as required. Organizes operation of ploughing, manuring, planting etc. Supervises operations of manure preparation, weeding, spraying insecticides and other measures to protect crops from wild animals and plant diseases. Organizes and supervises processes like tapping, threshing, plucking, withering, rolling, shifting, drying, cutting, sorting and storing of harvested produce. Undertakes publicity measures to publicise and to find out market for products and arranges for their transport. Organizes and supervises construction of buildings, quarters, roads, tanks, installation of electric and telephone lines, etc. Supervises and co-ordinates work of field and office staff. Recruits staff and teaches them modern methods of plantation and allocates work. Keeps equipment, fences, building, etc. in order. Maintains muster roll of labour and looks after office correspondence. Looks after welfare of labour and ensures that provisions of Plantation Act, Labour Act, etc. are observed. Ensures proper payment to labour. Pays various taxes to Government and fulfils other obligations, if any. Maintains production and cost statements and submits periodical reports to proprietor.

May specialize in growing particular type of plantation such as rubber, tea, coffee, etc. May conduct research and organize demonstration.

May arrange preservation of produce. May partially process produce prior to marketing.

ISCO 08 Unit Group Details:

Code 6112

Title Tree and Shrub Crop Grower

1311.0200

General Manager, Horticulture

General Manager, Horticulture organizes and supervises planting, maintenance and growth of fruit plants and arranges for marketing of produce. Determines types of fruits or nuts to be grown depending on nature of soil and climate, irrigation and market facilities. Selects and purchases plants, fertilisers and agricultural implements. Organizes operations of ploughing, manuring, sowing or planting and watering. Devises ways and means to supply regular flow of water for irrigation. Supervises agricultural operations such as weeding, spraying insecticides, manuring and harvesting. Selects best market for produce and arranges its transport. Supervises and controls field and office staff. Trains field workers in latest methods of grafting and planting of trees. Attends to office correspondence and keeps cost and production account. Keeps equipment and building, etc. in good order. Pays various taxes and dues and fulfils other obligations. May specialize in growing particular types of fruits. May conduct research and organize field demonstration. May arrange preservation of fruits by canning or in cold storage. May develop variety of fruit trees by grafting and budding.

ISCO 08 Unit Group Details:

Code 6113

Title Gardeners, Horticultural and Nursery Growers

1311.0300

General Manager, Agricultural Farm

General Manager, Agricultural Farm plans, organizes and controls, co-ordinates operations and staff employed in 33 growing agricultural produce on small-scale farm on behalf of Government or other employers. Determines crops to be grown after examining soil, irrigational facilities, climatic conditions and scope for marketing. Selects, purchases and stores seeds, fertilisers and agricultural implements. Organizes ploughing, manuring, sowing and watering. Devises ways and means to irrigate cultivation from well, tank, reservoir or other source of water supply. Supervises operations of manure preparation, weeding, spraying insecticides and other measures protecting crops from wild animals, harvesting, threshing winnowing, bagging, storing etc. Finds out market for cultivated products and arranges transport. Recruits staff and allocate work to them. Supervises and co-ordinates work of field and office staff. Keeps equipment, building, etc., in order. Maintains muster roll of labour and looks after office correspondence and keeps production and cost accounts. Pays various taxes and dues and fulfils other obligations. May specialize in growing certain types of crops. May conduct research and organize field demonstrations. May arrange preservation of crop.

ISCO 08 Unit Group Details:

Code 6114

Title Mixed Crop Growers

1311.0400

General Manager, Livestock Farm

General Manager, Livestock Farm manages livestock farm on behalf of the employer for breeding and raising different kinds of livestock. Arranges

equipment and supplies for housing and feeding animals in consultation with employer. Selects and buys animals. Supervises preparation of feed, grazing arrangements and proper medical aid to keep animals in good health. Looks after pairing of animals on basis of pedigree for breeding. Supervises artificial insemination for developing good breed. Takes care of animals during birth of young and upbringing of young stock. Selects and sells animals for breeding and fieldwork. Disposes off unproductive and unprofitable animals to avoid wastage. Watches expenditure and receipts to ensure economic running of farm. Controls office and field staff and co-ordinates work. Maintains accounts and records details of feed consumed, milk and other items produced, purchase and sale of animals and other accounts relating to live-stock farm. May raise and exhibit show of animals. May supervise cultivation and raising of feed for animals. May specialize in any particular branch of livestock farming. May supervise work of Stockman.

ISCO 08 Unit Group Details:

Code 6121

Title Livestock and Dairy Producers

1311.0500

General Manager, Dairy Farm

General Manager, Dairy Farm manages dairy farm on behalf of employer for production of milk, butter, ghee, etc. Supervises selection and purchase of animals, in consultation with employer. Makes proper arrangements for housing, feeding and treatment of milking animals. Pairs animals for breeding on basis of pedigree. Arranges artificial insemination for developing good breed. Takes proper care of animals during birth of young and

takes necessary precautions during upbringing of young animals. Ensures that hygienic methods are used in cleaning udder of animals, washing of hands of Milkman, milk containers, etc. before milking. Supervises milking, preparation of butter, ghee, etc. and arranges their transportation and marketing. Selects and sells unprofitable animals. Controls office and field staff and co-ordinates their work.

ISCO 08 Unit Group Details:

Code 6121

Title Livestock and Dairy Producers

1311.0600

General Manager, Poultry

General Manager, Poultry manages poultry farm on behalf of employer to raise poultry for eggs and table use and arranges sale of produce. Determines varieties of poultry to be raised in consultation with employer. Purchases feed, eggs, chicken, incubators and other equipment required for poultry farm. Supervises arrangements for feeding, breeding, hatching and construction of foster-mother pan, and brooder houses for housing newly born chicks and adult birds. Makes provision for proper sanitation and medical facilities and gets them vaccinated at proper age. Adopts labour saving devices, co-ordinates work of various sections and controls office staff. Implements plan carefully to achieve fixed target of production and yields profit. Takes preventive measures against diseases of birds. Isolates and treats or disposes off ailing birds and takes measures against spread of epidemics. Determines selling price for eggs of different grades and stock of different ages and pedigree. Keeps breeding record. Studies improved methods in poultry

development. Arranges preservation of eggs during summer and disposal of poultry by-products. Undertakes measures to publicise products. Pays taxes and prepares profit and loss statements. Maintains all accounts and correspondence relating to the farm. May raise selected poultry and sell quality eggs for hatching. May arrange demonstration of various kinds of hatchery plants to develop hatching of eggs. May raise and exhibit show of stock.

ISCO 08 Unit Group Details:

Code 6122

Title Poultry Producers

1311.0700

Manager, Agricultural Farm

Manager, Agriculture Farm; Superintendent, Agricultural Farm organizes and controls operations and staff employed in growing agricultural produce on large scale farm on behalf of Government or other employers. Determines crops to be grown after examining soil, irrigational facilities, climatic conditions and scope for marketing. Selects, purchases and stores seeds, fertilisers and agricultural implements. Organizes ploughing, manuring, sowing and watering. Devises ways and means to irrigate cultivation from well, tank, reservoir or other sources of water supply. Supervises operations of manure preparation, weeding, spraying insecticides and other measures to protect crops from wild animals, harvesting, threshing winnowing, bagging, storing etc. identifies markets for cultivated products and arranges transport. Recruits staff and allocates work to them. Supervises and co-ordinates work of field and office staff. Keeps equipment, building, etc., in order.

Maintains muster roll of labour and looks after office correspondence and maintains production and cost accounts. Pays various taxes and dues and fulfils other obligations. May specialize in growing certain types of crops. May conduct research and organize field demonstrations. May arrange preservation of crop.

ISCO 08 Unit Group Details:

Code 1311

Title Agricultural and Forestry Production Managers

1311.0800

Manager, Plantation

Manager, Plantation manages plantation on behalf of employer. Examines soil, climatic conditions, scope for marketing, etc. to determine type of crop such as tea, coffee, rubber etc. to be grown. Selects, purchases and stores seeds, fertilisers, agricultural implements, etc., as required. Organizes operation of ploughing, manuring, planting etc. Supervises operations of manure preparation, weeding, spraying insecticides and other measures to protect crops from wild animals and plant diseases. Organizes and supervises processes like tapping, threshing, plucking, withering, rolling, shifting, drying, cutting, sorting and storing of harvested produce. Undertakes publicity measures to publicise and to find out market for products and arranges for their transportation. Organizes and supervises construction of buildings, quarters, roads, tanks, installation of electric and telephone lines, etc. Supervises and co-ordinates work of field and office staff. Recruits staff and teaches them modern methods of plantation and allocates work. Keeps equipment, fences, building, etc. in order. Maintains muster

roll of labour and looks after office correspondence. Looks after welfare of labour and ensures that provision of Plantation Act, Labour Act, etc. are maintained. Ensures proper payment to labour. Pays various taxes to Government and fulfils other obligations, if any. Maintains production and cost statements and submits periodical reports to proprietor. May specialize in growing particular types of plantation such as rubber, tea, coffee, etc. May conduct research and organize demonstration. May arrange preservation of produce. May partially process produce prior to marketing.

ISCO 08 Unit Group Details:

Code 1311
Title Agricultural and Forestry Production Managers

1311.0900 Manager, Nursery

Manager, Nursery manages nursery to grow horticultural plants, such as trees, shrubs, flowers, ornamental plants, or vegetables for sale to trade or retail customers: Determines type and quantity of horticultural plants to be grown, considering such factors as whether plants will be grown under controlled conditions in hothouse or greenhouse or under natural weather conditions in field, and market demand or conditions, utilizing knowledge of plant germination, growing habits of plants, soil conditions, plant nutrients, and disease control requirements. Selects and purchases seed, plant nutrients, and disease control chemicals according to type of horticultural plants and conditions under which plants will be grown. Tours work areas to observe quality and quantity of work being done, to inspect crops and to

evaluate horticultural conditions, such as plant disease and soil conditions. Directs and co-ordinates, through subordinate supervisory personnel, activities of workers engaged in planting of seed, raising, feeding, and controlling growth and disease of plants, and transplanting, potting, or cutting plants for marketing. Co-ordinates clerical, record keeping, accounting and marketing activities. May purchase nursery stock for resale and sell gardening accessories, such as sprays, garden implements and plant nutrients.

ISCO 08 Unit Group Details:

Code 1311
Title Agricultural and Forestry Production Managers

1311.0901 Rubber Nursery Manager

Rubber Nursery Manager controls and co-ordinates all the nursery activities, labour management and office work. He is responsible for the quality assurance of the planting materials produced from the nursery.

Qualification Pack Details:

QP NOS Reference	RSC/Q0932
QP NOS Name	Rubber Nursery Manager
NSQF Level	6

ISCO 08 Unit Group Details:

Code 1311
Title Agricultural and Forestry Production Managers

1311.1000 Manager, Aerial Planting and Cultivation

Manager, Aerial Planting and Cultivation manages operations of aerial seed sowing and crop dusting establishment. Negotiates contracts with farm personnel to sow seeds of specified varieties or to spray or dust fields or crops with specified agricultural chemicals. Confers with the required authority to determine materials and conditions required to meet terms of contract and schedules flights according to factors, such as client requests, weather conditions, aircraft availability, and legal and safety considerations. Monitors mixing of chemicals, loading chemicals and seeds into hopper of aircraft, and indicates flight passes to pilots from ground to ensure efficient and safe operations. Purchases seeds and chemicals from suppliers. Oversees repair and maintenance of aircraft and contracts for repair and maintenance of hangars, runway, and related company facilities. Maintains records for billing and payroll purposes. Initiates personnel actions, such as hiring, firing, and disciplining workers.

ISCO 08 Unit Group Details:

Code 1311
Title Agricultural and Forestry Production Managers

1311.1100

Manager, Orchard

Manager, Orchard manages orchards: Directs and co-ordinates, through subordinate supervisory personnel, orchard activities, such as orchard development, irrigation, chemical application and harvesting to ensure that company production goals are met. Evaluates oral and written reports and observes operations to monitor progress of work and to detect and resolve problems. Determines and authorizes alternative procedures to accommodate

variables, such as weather conditions, water supply, stage of crops or tree development, and new legislation. Co-ordinates activities of the orchard department with those of engineering, equipment maintenance, packing house, and other related departments. Analyses financial statements and makes budget proposals. May initiate personnel actions, interpret company policies, and enforce safety regulations

ISCO 08 Unit Group Details:

Code 1311
Title Agricultural and Forestry Production Managers

1311.1200

Manager, Horticulture Farm

Manager, Horticulture Farm organizes and supervises planting, maintenance and growth of fruit plants and arranges for marketing of produce. Determines types of fruits or nuts to be grown depending on the nature of soil and climate, irrigation and market facilities. Selects and purchases plants, fertilisers and agricultural implements. Organizes operations of ploughing, manuring, sowing or planting and watering. Devises ways and means to supply regular flow of water for irrigation. Supervises agricultural operations, such as weeding, spraying insecticides, manuring and harvesting. Selects the best market for produce and arranges its transportation. Supervises and controls field and office staff. Trains field workers in latest methods of grafting and planting of trees. Attends to office correspondence and maintains cost and production accounts. Keeps equipment and building, etc. in good order. Pays various taxes and dues and fulfils other obligations. May specialize in growing particular types of

fruits. May conduct research and organize field demonstration.

May arrange preservation of fruits by canning or in cold storage. May develop variety of fruit trees by grafting and budding.

ISCO 08 Unit Group Details:

Code 1311
Title Agricultural and Forestry Production Managers

1311.1300

Manager, Livestock Farm

Manager, Livestock Farm manages a live-stock farm on behalf of the employer for breeding and raising different kinds of live-stock. Arranges equipment and supplies for housing and feeding animals in consultation with the employer. Selects and buys animals. Supervises preparation of feed, grazing arrangements and proper medical aid to keep animals in good health. Looks after pairing of animals on the basis of pedigree for breeding. Supervises artificial insemination for developing good breed. Takes care of animals during birth of young and upbringing of young stock. Selects and sells animals for breeding and field work. Disposes off unproductive and unprofitable animals to avoid wastage. Watches expenditure and receipts to ensure economic running of the farm. Controls office and field staff and co-ordinates work. Maintains accounts and records details of feed consumed, milk and other items produced, purchase and sale of animals and other accounts relating to the live-stock farm. May raise and exhibit show animals. May supervise cultivation and raising of feed for animals. May specialise in any particular branch of live-stock farming. May supervise work of Stockman.

ISCO 08 Unit Group Details:

Code 1311
Title Agricultural and Forestry Production Managers

1311.1400

Manager, Dairy Farm

Manager, Dairy Farm manages a dairy farm on behalf of the employer for production of milk, butter, ghee, etc. Supervises selection and purchase of animals, in consultation with the employer. Makes proper arrangements for housing, feeding and treatment of milking animals. Pairs animals for breeding on basis of pedigree. Arranges artificial insemination for developing good breed. Takes proper care of animals during birth of young and takes necessary precautions during upbringing of young animals. Ensures that hygienic methods are maintained while cleaning udder of animals, washing hands of Milkman, milk containers, etc. before milking. Supervises milking, preparation of butter, ghee, etc. and arranges their transportation and marketing. Selects and sells unprofitable animals. Controls office and field staff and co-ordinates their work. Records details of feed consumed, milk and other produce, purchase and sale of animals and other items relating to the income and expenditure of the dairy. Avoids wastage, maintains proper accounts and watches expenditure and receipts of farm for economic consideration. May raise and exhibit show animals. May arrange and supervise production of feed for animals. May conduct research and demonstrate process of working.

ISCO 08 Unit Group Details:

Code 1311
Title Agricultural and Forestry Production Managers

1311.1500
Manager, Poultry Farm

Manager, Poultry Farm manages a poultry farm on behalf of the employer to raise poultry for eggs and table use and arranges sale of produce. Determines varieties of poultry to be raised in consultation with the employer. Purchases feed, eggs, chicken, incubators and other equipment required for the poultry farm. Supervises arrangements for feeding, breeding, hatching and construction of foster-mother, pan, and brooder houses for housing newly born chicks and adult birds. Makes provision for proper sanitation and medical facilities and gets them vaccinated at a proper age. Adopts labour saving devices, co-ordinates work of various sections and controls office staff. Implements plans carefully to achieve fixed target of production and yield profit. Takes preventive measures against diseases of birds. Isolates and treats or disposes off ailing birds and takes measures against the spread of epidemics. Determines selling price for eggs of different grades and stock of different ages and pedigree. Maintains breeding record. Studies improved methods in poultry development. Arranges preservation of eggs during summer and disposal of poultry by-products. Undertakes measures to publicise products. Maintains all accounts and correspondence relating to the farm. May raise selected poultry and sell quality eggs for hatching. May arrange demonstration of various kinds of hatchery plants to develop hatching of eggs. May raise and exhibit show stock.

ISCO 08 Unit Group Details:

Code 1311

Title Agricultural and Forestry Production Managers

1311.9900
Agricultural and Forestry Production Managers, Others

Agricultural and Forestry Production Managers, Others include all other Farm Managers and supervisors engaged in agriculture, horticulture, poultry, dairy, livestock and farming, not elsewhere classified.

ISCO 08 Unit Group Details:

Code 1311
Title Agricultural and Forestry Production Managers

Family 1312
Aquaculture and Fisheries Production Managers

Aquaculture and Fisheries Production Managers plan, direct, and co-ordinate production in large scale aquaculture and fishery operations to catch and harvest fish and shellfish, and to grow fish, shellfish or other forms of aquatic life, as cash crops or for release into freshwater or saltwater.

Group 132

Manufacturing, Mining, Construction and Distribution Managers

Manufacturing, Mining, Construction, and Distribution Managers plan, organize, and co-ordinate the manufacturing, mineral extraction, construction, supply, storage and transportation operations.

Occupations in this Group are classified into the following Families:

1321	Manufacturing Managers
1322	Mining Managers
1323	Construction Managers
1324	Supply, Distribution and Related Managers

Family 1321 Manufacturing Managers

Manufacturing Managers plan, direct, and co-ordinate manufacturing production activities of large enterprises or as the manager of a small manufacturing company.

1321.0100 Manager, Electricity

Manager, Electricity co-ordinates and supervises, within authority delegated efficient utilisation of men, money and material in public or private organizations or establishments, or one or more of its departments, branches, etc., engaged in generation, transmission and distribution of electricity to domestic and industrial consumers.

ISCO 08 Unit Group Details:

Code 1321
Title Manufacturing Managers

1321.0200 Terminal Manager

Terminal Manager/Terminal Superintendent manages plants in which Liquefied Petroleum Gas, lubricants, and petroleum fuels are stored and distributed in bulk. Formulates policies with regard to storage, distribution and other operating

problems. Determines type and quantities of products according to consumer demand. Contacts refineries and petroleum canning plants to schedule shipment of products. Establishes operating procedures for incoming shipments, indicating storage tanks and warehouse facilities to be used. Formulates policies for distribution and sale of products to wholesale and retail outlets and consumers.

ISCO 08 Unit Group Details:

Code 1321
Title Manufacturing Managers

1321.0300 Manager, Gas

Manager, Gas co-ordinates and controls, within authority delegated, efficient utilization of men, money and material in public or private organizations or establishments, or one or more of its departments, sections or branches, engaged in manufacture of gas and distribution of manufactured or natural gas to consumers, and production and supply of steam for heat, power, etc.

ISCO 08 Unit Group Details:

Code 1321
Title Manufacturing Managers

1321.0400 Manager, Water Supply

Manager, Water Supply co-ordinates and supervises within powers delegated, efficient utilisation of men, money and material in public or private organizations, or one or more of its departments or branches, engaged in storing, filtering and purifying water and supplying water to consumers.

ISCO 08 Unit Group Details:

Code 1321
 Title Manufacturing Managers

1321.0500**Manager, Food Processing Plant**

Manager food processing plant directs and co-ordinates activities of food processing plants. Contacts buyers or growers to arrange for purchasing or harvesting and delivery of agricultural products, seafood, meat, or other raw materials to plant for processing. Directs, through subordinate supervisory personnel, workers engaged in processing, canning, freezing, storing, and shipping food products. Directs and co-ordinates activities concerned with dismantling, moving, installing, or repair of machines and equipment. Approves plant payroll and payments for purchased materials or products. Estimates quantities of foods for processing required and orders foods, materials, supplies, and equipment needed. Hires, transfers, and discharges employees. May provide suppliers with transportation to expedite delivery of purchased products or supplies to the plant. May arrange for freezing of packaged products by other food processing plants. May negotiate with suppliers or growers regarding prices to be paid for purchases.

ISCO 08 Unit Group Details:

Code 1321
 Title Manufacturing Managers

1321.0600**Manager, Manufacturing**

Manager, Manufacturing organizes, co-ordinates and supervises, within powers delegated, efficient utilisation of men, money and material in public or private

organizations or establishment, or one or more of its departments or branches, engaged in producing, maintaining or repairing capital or consumer goods, excluding crops, minerals electricity and natural gas. Is designated according to work performed or powers exercised such as:

MANAGER(MANUFACTURING). FACTORY MANAGER. PLANT MANAGER. FACTORY SUPERINTENDENT,
 WORKS SUPERINTENDENT.
 MANAGER, TEXTILE MILLS, MANAGER, TANNERY, MANAGER, SHOE FACTORY, MANAGER, BAKERY, MANAGER, PRESS, MANAGER, STEEL PLANT, MANAGER, GLASS FACTORY.

ISCO 08 Unit Group Details:

Code 1321
 Title Manufacturing Managers

1321.0700**General Manager, Electricity**

General Manager, Electricity co-ordinates and supervises, within authority delegated efficient utilization of men, money and material in public or private organizations or establishments, or one or more of its departments, branches, etc., engaged in generation, transmission and distribution of electricity to domestic and industrial consumers.

ISCO 08 Unit Group Details:

Code 1321
 Title Manufacturing Managers

1321.0800**General Manager, Gas**

General Manager, Gas co-ordinates and controls, within authority delegated, efficient utilization of men, money and material in public or private organizations or establishments, or one or more of its departments, sections or branches,

engaged in manufacture of gas and distribution of manufactured or natural gas to consumers, and production and supply of steam for heat, power, etc.

ISCO 08 Unit Group Details:

Code 1321
Title Manufacturing Managers

1321.0900

General Manager, Water Supply

General Manager, Water Supply co-ordinates and supervises within powers delegated, efficient utilization of men, money and material in public or private organizations, or one or more of its departments or branches, engaged in storing, filtering and purifying water and supplying water to consumers.

ISCO 08 Unit Group Details:

Code 1321
Title Manufacturing Managers

1321.1000

General Manager, Manufacturing

General Manager, Manufacturing organizes, co-ordinates and supervises, within powers delegated, efficient utilisation of men, money and material in public or private organizations or establishments, or one or more of its departments or branches, engaged in producing, maintaining or repairing capital or consumer goods, excluding crops, minerals electricity and natural gas.

ISCO 08 Unit Group Details:

Code 1321
Title Manufacturing Managers

1321.9900

Manufacturing Managers, Other

Manufacturing Managers, Other includes all other General Managers engaged in manufacturing and other related activities, not elsewhere classified.

ISCO 08 Unit Group Details:

Code 1321
Title Manufacturing Managers

Family 1322

Mining Managers

Mining Managers plan, direct, and co-ordinate the production activities of mining, quarrying and oil and gas extraction operations.

1322.0100

Manager, Mine

Manager, Mine controls and supervises operations in mines or one or more sections of mines for extraction of minerals such as coal, ore, mica, etc., observing statutory regulations and in accordance to policy and direction of management. Ensures satisfactory production and safety of men and material. Is designated according to powers exercised, work performed or material extracted such as: MINE SUPERINTENDENT. MANAGER, COLLIERY. MANAGER, IRON MINE, MANAGER, COPPER MINE.

ISCO 08 Unit Group Details:

Code 1322
Title Mining Managers

1322.0200

Manager, Quarry

Manager, Quarry controls and supervises, within authority delegated, operations in public or private quarry for extraction of stone, slate, clay, sand, etc. observing

statutory regulations and following policies and direction of higher authorities. Ensures satisfactory production and safety of men and material. Is designated according to powers exercised or minerals extracted such as: MANAGER, STONE QUARRY, MANAGER, LIME QUARRY, MANAGER, SLATE QUARRY.

ISCO 08 Unit Group Details:

Code	1322
Title	Mining Managers

1322.0300 Manager, Well Drilling

Manager, Well Drilling controls and supervises within authority delegated, activities of public or private organizations engaged in drilling and sinking of wells and operating wells for extraction of mineral oil, natural gas, etc. Is designated according to work performed or authority delegated such as: MANAGER, OIL WELL, MANAGER, GAS WELL

ISCO 08 Unit Group Details:

Code	1322
Title	Mining Managers

1322.0400 General Manager, Mine

General Manager, Mine controls and supervises operations in mines or one or more sections of mines for extraction of minerals such as coal, ore, mica, etc., observing statutory regulations and in accordance with policies and direction of management. Ensures satisfactory production and safety of men and material. Is designated according to powers exercised, work performed or material extracted.

ISCO 08 Unit Group Details:

Code	1322
Title	Mining Managers

1322.0500 General Manager, Quarry

General Manager, Quarry controls and supervises, within authority delegated, operations in public or private quarry for extraction of stone, slate, clay, sand, etc. observing statutory regulations and following policies and direction of higher authorities.

Ensures satisfactory production and safety of men and material. Is designated according to powers exercised or minerals extracted.

ISCO 08 Unit Group Details:

Code	1322
Title	Mining Managers

1322.0600 General Manager, Well Drilling

General Manager, Well Drilling controls and supervises within authority delegated, activities of public or private organizations engaged in drilling and sinking of wells and operating wells for extraction of mineral oil, natural gas, etc. Is designated according to work performed or authority delegated such as: GENERAL MANAGER, OIL WELL. GENERAL MANAGER, GAS WELL.

ISCO 08 Unit Group Details:

Code	1322
Title	Mining Managers

1322.9900 Mining Managers, Other

Manager, Mining and Quarrying, Electricity, Gas, Water Supply and

Manufacturing, Other include all other Working Proprietors, Directors and Managers engaged in manufacturing, construction, mining, quarrying, well drilling and other related activities, like forestry, logging, etc. not elsewhere classified.

ISCO 08 Unit Group Details:

Code	1322
Title	Mining Managers

Family 1323 Construction Managers

Construction Managers plan, direct and co-ordinate the construction of civil engineering projects, buildings and dwellings.

1323.0100 Manager, Construction/Manager Construction Projects

Manager, Construction co-ordinates and supervises, within powers delegated, activities of public or private organizations or one or more of its departments or branches engaged in construction, maintenance and repairs of buildings, roads, railway tracks, aerodromes, bridges, canals, dams, etc. Is designated according to work performed or powers delegated such as: MANAGER, CONSTRUCTION. PROJECT MANAGER, CONSTRUCTION MANAGER EXCAVATIONS, CONSTRUCTION.

ISCO 08 Unit Group Details:

Code	1323
Title	Construction Managers

1323.0200 Manager, Land Survey

Manager, Land Survey plans, directs, and co-ordinates work of survey parties, and related staff, engaged in surveying earth's surface and preparing reports and legal descriptions of land. Develops organization policies or interprets it to staff. Prepares or approves budget for unit or organization within the assigned area of responsibility. Co-ordinates work of Land Surveyor with that of legal, engineering, architectural, and other staff on project. Directs survey parties and projects, and reviews and certifies completed work to satisfy legal requirements. Writes or directs the writing of descriptions of land to satisfy legal requirements according to standard surveying practices. Appears as expert witness in court in cases involving land or boundary disputes. Monitors new technology and evaluates and purchases or authorises purchase of new equipment and supplies. Selects new staff for employment and takes disciplinary action when necessary. Assumes legal responsibility for work performed and is licensed by state.

ISCO 08 Unit Group Details:

Code	1323
Title	Construction Managers

1323.0300 General Manager, Construction/General Manager Construction Projects

General Manager, Construction co-ordinates and supervises, within powers delegated, activities of public or private organizations or one or more of its departments or branches engaged in construction, maintenance and repairs of buildings, roads, railway tracks, aerodromes, bridges, canals, dams, etc.

ISCO 08 Unit Group Details:

Code 1323
 Title Construction Managers

1323.9900**Construction Managers, Other**

Construction Managers, Other includes all other General Managers engaged in construction, and other related activities, not elsewhere classified.

ISCO 08 Unit Group Details:

Code 1323
 Title Construction Managers

Family 1324**Supply, Distribution and Related Managers**

Supply, Distribution and Related Managers plan, direct and co-ordinate the supply, transportation, storage and distribution of goods.

1324.0100**Manager, Material Control/Manager Materials**

Manager, Material Control directs and co-ordinates activities of personnel engaged in purchasing and distributing raw materials, equipment, machinery, and supplies in industrial plants, public utilities, or other organizations: Prepares instructions regarding purchasing systems and procedures. Prepares and issues purchase orders and submits notices to Purchasing Agents. Analyses market and delivery conditions to determine present and future material availability and prepares market analysis reports. Reviews purchase order claims and contracts for conformance to company policy. Develops and installs clerical and office procedures

and practices, and studies work flow, sequence of operations, and office arrangement to determine expediency of installing new or improved office machines. Arranges for disposal of surplus materials.

ISCO 08 Unit Group Details:

Code 1324
 Title Supply, Distribution and Related Managers

1324.0101**Manager Supplier Quality**

Manager Supplier Quality needs to be responsible for overall supplier quality assurance functions for all facilities including incoming inspection, issue containment and supplier corrective actions.

Qualification Pack Details:

QP NOS Reference	ASC/Q6302
QP NOS Name	Manager Supplier Quality Level 6
NSQF Level	6

ISCO 08 Unit Group Details:

Code 1324
 Title Supply, Distribution and Related Managers

1324.0102**Material Co-ordination Manager**

Material Co-ordination Manager needs to co-ordinate and expedite procurement and flow of materials, parts, and assemblies between sections or departments of manufacturing, according to production and shipping schedules to ensure timely production of goods.

Qualification Pack Details:

QP NOS Reference ASC/Q6105

QP NOS Name	Material Co-ordination Manager
	Level 6
NSQF Level	6

ISCO 08 Unit Group Details:

Code 1324
Title Supply, Distribution and Related Managers

1324.0103

Manager Vendor Development

Manager Vendor Development needs to co-ordinate and expedite procurement and flow of materials, parts, and assemblies between sections or departments of manufacturing, according to production and shipping schedules to ensure timely production of goods.

Qualification Pack Details:

QP NOS Reference	ASC/Q6203
QP NOS Name	Manager Vendor Development
	Development Level
	6
NSQF Level	6

ISCO 08 Unit Group Details:

Code 1324
Title Supply, Distribution and Related Managers

1324.0200

Manager, Transport

Manager, Transport supervises co-ordinates and controls, within authority delegated, efficient utilisation of men, money and material in public or private organizations or establishments, or one or more of its departments, branches or sections, engaged in transporting passengers and freight by railways, tramways, buses, trucks, taxis, rickshaws,

boats, launches, ships, aircrafts and other means of transport, and operating services incidental to transport. Is designated according to work performed, authority exercised or transport service supervised such as: DIVISIONAL SUPERINTENDENT (RAILWAY), TRAFFIC SUPERINTENDENT(RAILWAY). COMMERCIAL SUPERINTENDENT(RAILWAY). STATION SUPERINTENDENT(RAILWAY). MANAGER, ROAD TRANSPORT, TRAFFIC MANAGER, MOTOR TRANSPORT, MANAGER, ROADWAYS, MANAGER, TAXI SERVICE, MANAGER, AIRLINES, AREA MANAGER, AIRLINES, TRAFFIC MANAGER, AIRLINES, OPERATING MANAGER, AIRLINES, MANAGER, SHIPPING, MANAGER, DOCK.

ISCO 08 Unit Group Details:

Code 1324
Title Supply, Distribution and Related Managers

1324.0300

Station Master, Roadways

Station Master, Roadways controls and co-ordinates work of staff employed at roadways' stations, and supervises operation of all passenger buses, cars, luggage vans, and goods trucks within his section. Arranges layout of roadways' station for parking of vehicles, signboards of routes, scheduled timings of incoming and outgoing vehicles, passenger waiting hall, booking office counters, etc. for orderly conduct of business. Displays time and fare table and other important notices in station premises. Provides passenger amenities such as drinking water, and other conveniences for passengers. Prepares duty roster of Bus Conductors, Drivers and Cleaners. Checks attendance of staff under him and supervises their work. Maintains check sheets of all incoming and outgoing

vehicles, their number, station from where arrived, destination, time of arrival and departure etc. to ensure regularity and punctuality of service. Maintains fuel records issued to vehicles and checks way bills and journey bills of Conductors to verify correctness of fuel consumption, passenger fare and freight charge collections. Ensures that parcels and luggage's offered for transport by bus van and truck are packed, labelled and addressed properly. Arranges for running of additional buses to relieve heavy traffic of passengers in time of mela and important occasions. Rushes relief buses and other assistance in case of break down and accident. Attends to passenger complaints and takes re-medial action by reporting to proper authority as case merits. Maintains necessary records and registers, submits return as prescribed and performs other duties to promote road transport. Checks malpractices, ensures safety of passengers and goods booked, cleanliness of premises and incoming and outgoing buses, convenience of passengers, etc. May check passengers' tickets en route within his jurisdiction.

ISCO 08 Unit Group Details:

Code 1324
 Title Supply, Distribution and Related Managers

1324.0400 **Traffic Inspector, Motor Transport**

Traffic Inspector, Motor Transport inspects buses running on any route or area allotted to him and supervises work of Ticket Examiners, Time Keepers, Bus Conductors and Bus Drivers. Checks general appearance of buses and whether Conductors and Drivers are in uniform. Checks whether buses are running at

scheduled timings. Examines tickets and luggage of passengers to see whether correct tickets have been issued, and properly punched. Supervises alighting and boarding of passengers at important stops or destinations. Regulates arrival, departure and frequency of buses at important stops. Arranges for running of extra buses in cases of heavy rush of traffic. Visits spot in case of accidents, obtains facts and evidence thereof, etc. Informs nearest police station, gets in touch with depot or headquarters and submits reports to higher authorities. Diverts buses to alternate routes within city in case of fire, breakdown, jam, etc. Studies traffic requirements within his area, offers suggestions regarding timings, frequency, introduction or curtailment of services, and communicates reaction of passengers to management for appropriate action. May be designated as CHIEF INSPECTOR. MOTOR TRANSPORT if also engaged in supervising work of other MOTOR TRANSPORT INSPECTORS.

ISCO 08 Unit Group Details:

Code 1324
 Title Supply, Distribution and Related Managers

1324.0500

Manager, Traffic

Manager, Traffic conducts studies on company freight and passenger classifications, rates, and tariffs and formulates changes required to provide for increased revenues and profitability of operations: Analyses financial reports on operations and evaluates existing classifications, rates, and tariffs to determine changes required and need for expansion or curtailment of schedules and routes. Documents data to support proposals for increased revenues, expansion of schedules or routes, and files

application for new rates, schedules, or routes with regulatory agencies. Testifies before regulatory agencies to present company's position and need for increased revenues in order to operate profitability. Negotiates with personnel of other transportation companies on division of interline revenues and signs contract on terms of agreement. Consults with officials of other companies on traffic movement problems, such as freight handling, transfer, and in-transit storage. Directs and co-ordinates activities of workers in classification of shipments and in applying and enforcing rates and tariffs.

ISCO 08 Unit Group Details:

Code 1324
Title Supply, Distribution and Related Managers

1324.0600 **Traffic Inspector, Railway**

Traffic Inspector, Railway inspects activities of stations under his jurisdiction to ensure compliance of all traffic and operative rules. Examines records and registers maintained at each station to check attendance records and efficiency of staff and extent to which trains operate on schedule. Inspects condition of station building, platform, drinking-water, refreshment facilities and other public conveniences. Checks crossing gates, goods shed, and parcel office for compliance with safety regulations. Conducts night inspection of signals and ensures that lighting arrangements are adequate. Makes surprise inspections by travelling in passenger or goods trains to check compliance with traffic rules. Accompanies important passengers in train to ensure that all facilities and courtesies are provided to them. Resolves public complaints and investigates minor

accidents, theft of goods, delays, etc.

ISCO 08 Unit Group Details:

Code 1324
Title Supply, Distribution and Related Managers

1324.0700 **Traffic Inspector, Tram**

Traffic Inspector Tram supervises work of Tram Conductors and Tram Car Drivers to ensure operation of trams on schedule. Substitutes temporarily for Tram Starter. Checks Conductor's memo by field inspection to ensure running of tram at scheduled time. Tallies tickets sold with recorded entry and tickets held by passengers travelling in trams to check and avoid over payment of fares or over travelling by passengers. Reports complaints of poor service to higher authorities for action. Visits accident or breakdown sites and arranges to clear line to restore normal traffic. Provides first aid to injured persons. Observes performance of Conductors and reports any irregularity noticed to higher authorities. Maintains statistics of passengers travelling in tram cars and suggests improvement in schedule to divisional authorities.

ISCO 08 Unit Group Details:

Code 1324
Title Supply, Distribution and Related Managers

1324.0800 **Manager, Flight Operation**

Manager, Flight Operation directs and co-ordinates through subordinate management personnel, flight operations and control activities of the air transport company's terminal station: Reviews flight schedules, flight crew bid sheet for

route, and crew schedules to ensure that assignments for schedules and routes are in accordance with personnel qualifications for type of aircraft, federal safety and operational regulations, union contract provisions, and company policies. Confers with flight crew personnel to resolve any differences regarding schedule and route assignments. Co-ordinates activities of sections in flight operations department, such as dispatching, flight control, flight training and meteorology, to ensure maximum operating efficiency. Confers with administrative personnel, government regulatory agencies, and representatives of other airlines to propose revision and adoption of rules and procedures governing flight operation activities. Directs preparation of supplemental training materials or revision of operational manuals resulting from changes in rules and procedures. Conducts investigations in co-operation with federal agencies to determine causes of aircraft accidents and to establish accident prevention and emergency methods and procedures. May check flight crew personnel on aircraft.

ISCO 08 Unit Group Details:

Code 1324

Title Supply, Distribution and Related Managers

1324.0900

Aerodrome Officer

Aerodrome Officer Co-ordinates work of all staff engaged at airport. Supervises movement of air traffic at aerodrome and renders assistance to visiting aircraft and passengers. Ensures that air field is fenced around to prevent unauthorised intrusion and to keep it clear of any obstruction for safe landing and take-off of aircraft.

Inspects runways and ensures that they are properly maintained, fire-fighting equipment is adequate and facilities for parking of aircrafts in aircraft hangers etc. are available. Obtains and transmits correct meteorological information to aircrafts. Provides proper lighting signal equipment to facilitate landing and take-off of aircraft. Looks after landing and take-off facilities and renders other aids to visiting aircraft. Collects and remits landing and parking charges on aircraft to Government treasury. Ensures that passengers' lounge, restaurants, book-stalls and other conveniences are well maintained. Provides first-aid to sick and injured passengers and crew. Supervises and controls fire-fighting operations at the airport. Assists search and rescue operations of aircraft and crew in distress. Takes security measures for protection of aerodrome. May attend to work of any of his subordinates, if required.

ISCO 08 Unit Group Details:

Code 1324

Title Supply, Distribution and Related Managers

1324.1000

Flight Operation Officer, Air Service

Flight Operation Officer, Air Service prepares flight plans based on meteorological reports, calculates fuel requirements and issues flight clearance certificates. Studies meteorological reports regarding air-current and prepares flight-plans. Calculates fuel requirements, taking into account air-routes, facilities regarding re-fuelling, etc. for guidance of Commander and Navigator of the aircraft. Prepares roster for flight crew for scheduled flights and briefs Pilots for journey indicating that the aircraft has been accepted by next airport at which it

is due to land and other factors e.g. approaching storm, unusual cargo, variation in the plane's, altitude and routing, or in normal take-off and landing operations. Ensures that other necessary arrangements, such as crew for stand-by flights, handing and taking over of flight documents, etc. have been made.

ISCO 08 Unit Group Details:

Code 1324

Title Supply, Distribution and Related Managers

1324.1100

Traffic Officer, Air Service/Traffic Controller

Traffic Officer, Air Service supervises loading and unloading of aircraft cargo and luggage and escorts passengers to and from craft. Guides passengers in and out of aircraft and arranges for the transport of their luggage to and from the aircraft. Stows cargoes into aircraft according to size, weight, type and destination as indicated in general loading instructions. Checks number of passengers aboard with the list available with the Airhostess or Steward. Ensures that the doors of the aircraft are properly closed before signal is given to Pilot for take-off. Arranges and supervises proper parking, housing and picketing of aircraft with the engineering staff. May operate teletype to send reports of passengers and cargo to next port of call. May arrange for the transportation of passengers to and from the airport.

ISCO 08 Unit Group Details:

Code 1324

Title Supply, Distribution and Related Managers

1324.1200

Manager, Storage and Warehousing

Manager, Storage and Warehousing supervises, co-ordinates and controls within authority delegated, public or private organizations or establishments or one or more of its departments, branches or sections engaged in providing storage and warehouse facilities to parties concerned and renders such other additional facilities as may be laid down or agreed to in business terms and conditions. May specialize in handling any particular type of item or commodity or sectional management and be designated accordingly.

ISCO 08 Unit Group Details:

Code 1324

Title Supply, Distribution and Related Managers

1324.1201

Warehouse Supervisor

Warehouse Supervisor in the Logistics industry is also known as Supervisor, Warehouse In Charge. Individuals in this role need to collect components required to obtain the required lists and information from the Data Entry Operator (DEO), plan the schedule for the day, allocate work to workers and oversee them for successful completion. Their responsibilities include solving operational issues in the warehouse and ensure smooth operations.

Qualification Pack Details:

QP NOS Reference LSC/Q2307

QP NOS Name Warehouse Supervisor

NSQF Level 5

ISCO 08 Unit Group Details:

Code 1324

Title Supply, Distribution and Related Managers

1324.1300 Goods Supervisor, Railway

Goods Supervisor, Railway supervises receipt, storage, despatch and delivery of goods, parcels, freights, etc. by rail. Regulates booking of materials for dispatch according to availability of waggons and ensures their easy flow as per priority the list. Inspects goods booked for proper packing and checks contents with sender's declaration. Checks adequacy of storage facilities for goods received. Directs loading of goods in waggons as instructed by Traffic Controller based on availability of clearance at other stations. Allots platforms for loading and unloading of goods to ensure speedy movement of waggons and minimise delays. Ensures compliance with necessary precautionary measures for loading and unloading explosives, inflammable, and like materials. Arranges for the delivery of goods to consignee against authorisations. Examines complaints and reports cases of thefts, shortages, losses, etc. to higher authorities for investigation. May issue receipts for goods received and payments made. May conduct loading and unloading operations.

ISCO 08 Unit Group Details:

Code 1324

Title Supply, Distribution and Related Managers

1324.1400 Goods Supervisor, Road Transport

Goods Supervisor, Road Transport supervises receipt, storage, despatch and delivery of goods, parcels, freights, etc. by

road transport. Co-ordinates running of lorry services and assists in fixing up competent Drivers and Cleaners, taking into consideration nature of transportation required. Inspects goods to be transported, checks their packing, if necessary, and directs loading and unloading operations. Makes test checks of calculation of charges. Travels on line and makes surprise checks to ensure that the contents of lorry, tallies with the way bill. Makes suitable arrangements for transportation of goods in cases of breakdowns and accidents. Suggests competitive revised freight rates, as and when required, for better profits and business. Ensures that goods are properly received and, delivered to consignees and also that staff members behave properly. Investigates into complaints and recommends suitable remedial or disciplinary action. May make deliveries to consignees against authorisation. May calculate charges and issue receipts for payments made.

ISCO 08 Unit Group Details:

Code 1324

Title Supply, Distribution and Related Managers

1324.1500 Station Master, Railway

Station Master, Railway co-ordinates work of all employees at railway station and supervises operation of all trains within his station limits. Notifies employees of changes in arrival and departure times of trains, boarding track numbers, and other changes affecting passengers for announcement over loud speakers and for posting on call board. Ascertains that shift workers and train crew report at their scheduled time, and obtains replacements, if necessary. Supervises

activities of passenger service personnel to ensure efficient and courteous service. Obtains clearance of line from next or junction station. Authorizes departure of passenger trains after transfer of mail and baggage is completed, delaying its departure, if necessary, for arrival of connecting train or on notification of train crew or Yardmaster. Authorizes repairs of station facilities or delegates their supervision. Investigates into causes of public complaints, minor accidents, etc. and takes remedial steps. Reports major mistakes, accidents, etc. to higher authorities, arranges transhipment of stranded passengers, and assists in providing first aid, medical, food and other services. Supervises performance of clerical and station staff, maintains prescribed records, registers, accounts, stock position, etc. and submits reports and returns as scheduled. May perform clerical tasks, sell tickets, etc. in small stations.

ISCO 08 Unit Group Details:

Code 1324
Title Supply, Distribution and Related Managers

1324.1600

Platform Inspector, Railway

Platform Inspector, Railway controls platform staff and ensures cleanliness and general appearance of platform and attached rooms at Railway Stations. Supervises work of Porters to ensure that passengers are not overcharged or harassed by them. Allots duties to station service staff, checks cleanliness of platforms, waiting rooms, tea stalls, refreshment rooms etc. and ensures that they are clean and proper hygienic standard is maintained. Prevents entry of unlicensed Porters, Vendors etc., inside

the platform. Inspects directional notices, posters and advertisements displayed on platform and gets defective and unauthorized ones removed. Attends to complaints, requests and inquiries from passengers and arranges services as provided under rules. Ensures safety of passengers in waiting rooms and takes necessary steps to prevent theft or any other illegal act within his jurisdiction. May intervene or settle platform disputes amongst passengers. May check overcrowding of passengers on platform and ensure their smooth flow by locating passages and incoming and outgoing gates at convenient places, in consultation with Station Master.

ISCO 08 Unit Group Details:

Code 1324
Title Supply, Distribution and Related Managers

1324.1700

Rates Inspector, Railway

Rates Inspector, Railway scrutinizes cases and submits proposals in connection with reduction or enhancement of rates or fares. Examines existing rates of storing, handling and transporting goods, parcels and luggage. Examines passengers' fares for various classes of travel by railways and calculates item-wise net cost to determine profit or loss incurred by the government. Studies proposals and public demands for quick and safe transport and travel amenities and determines feasibility of introducing them within available resources. Computes data and suggests proposal to Commercial Manager or appropriate authority to increase or reduce rates and fares, ensuring profit and improved service. May suggest measures to prevent malpractices, theft and loss of booked articles to minimise

payment of compensation to public. May suggest introduction or extension of railway service to productive areas to earn freight.

ISCO 08 Unit Group Details:

Code 1324

Title Supply, Distribution and Related Managers

1324.1800

Depot Starter, Tram

Depot Starter, Tram supervises work relating to allocation of operational staff and starting of trams from depots according to timetable. Obtains vehicle numbers from the engineering department for morning and evening turn out and prepares allocation statement showing route, route symbol and vehicles assigned. Maintains daily duty rotation board, weekly offs, leave and absentee statements of Tram Conductors and Drivers, arranges substitutes for absentees and forwards attendance statement to Time Keeper. Assigns Drivers and Conductors for duty to appropriate vehicles according to requirements of each vehicle. Announces crew and vehicle numbers as per stabling plan and ensures that vehicles turn out from depot at scheduled time and display appropriate route, route symbol and destination boards. Rearranges services during peak hours and periods of traffic congestion under instruction from higher authorities. Submits reports of vehicles turned out, routes covered, etc. Takes charge of lost items handed over by Conductors, Drivers or passengers and forwards them to lost property office at the headquarter. May take special measures during disturbances or abnormal conditions.

ISCO 08 Unit Group Details:

Code 1324

Title Supply, Distribution and Related Managers

1324.1900

Section Controller, Railway

Section Controller, Railway controls movement of rail traffic within his section, arranges crossing of trains, efficient utilization of waggons and formation of goods trains at junction stations. Controls movement of rail traffic within his territorial jurisdiction by constant telephonic contact with stations and on the basis of information received regarding movement of trains and rolling stock at different stations. Co-ordinates crossing of trains within his section with adjoining divisions and railways, according to time-table. Obtains full utilisation of waggons by adjusting supply and demand of waggons at different stations and controlling formation of trains at marshalling yard accordingly. Reschedules rolling stock, transhipment, etc. in case of accidents and breakdowns. Maintains charts of running trains and ensures receipt and submission of prescribed reports and returns. May recommend changes in time table in accordance with public request and requirement.

ISCO 08 Unit Group Details:

Code 1324

Title Supply, Distribution and Related Managers

1324.2000

Accident Officer, Tram

Accident Officer, Tram conducts inquiries of tram accidents and submits detailed report for further action. Visits accident site to assess loss of human life and or damage to property, if any. Notes down

names and addresses or identification marks of dead persons, contacts injured and provides medical aid to them. Informs nearest relatives of persons affected by the accident. Notes names of passengers and other persons present at the place of accident and records their statements. Examines tram-line and other accessories to determine the cause of accident such as sabotage, negligence of operation staff, etc. Submits detailed report to superiors. Investigates into complaints of passengers or other untoward incidents which might have caused the accident. May attend court proceedings for claims made, if any. May assist police in investigation of cause of accidents or assessment of damage or in launching criminal cases against saboteurs, hooligans, etc.

ISCO 08 Unit Group Details:

Code 1324

Title Supply, Distribution and Related Managers

1324.2100 General Manager, Transport

General Manager, Transport supervises, co-ordinates and controls, within authority delegated, efficient utilization of men, money and material in public or private organizations or establishments, or one or more of its departments, branches or sections, engaged in transporting passengers and freight by railways, tramways, buses, trucks, taxis, rickshaws, boats, launchers, ships, aircrafts and other means of transport, and operating services incidental to transport.

ISCO 08 Unit Group Details:

Code 1324

Title Supply, Distribution and Related Managers

1324.2200

General Manager, Storage and Warehousing

General Manager, Storage and Warehousing supervises, co-ordinates and controls within authority delegated, public or private organizations or establishments or one or more of its departments, branches or sections engaged in providing storage and warehouse facilities to parties concerned and render such other additional facilities as may be laid down or agreed to in business terms and conditions. May specialize in handling any particular type of item or commodity or sectional management and be designated accordingly.

ISCO 08 Unit Group Details:

Code 1324

Title Supply, Distribution and Related Managers

1324.9900

Supply, Distribution and Related Managers and General Managers, Other

Supply, Distribution and Related Managers and General Managers, Other, includes managers engaged in Transport, Storage and Communication, not elsewhere classified.

ISCO 08 Unit Group Details:

Code 1324

Title Supply, Distribution and Related Managers

Group 133

Information and Communications Technology Services Manager

Information and Communications Technology Service Managers plan, direct, and co-ordinate the acquisition, development, maintenance and use of computer and telecommunication systems.

Occupations in this Group are classified into the following Families:

1330 Information and Communication Technology Services Managers

**Family 1330
Information and Communication
Technology Services Managers**

Information and Communications Technology Service Managers plan, direct, and co-ordinate the acquisition, development, maintenance and use of computer and telecommunication systems.

**1330.0100
Manager, Communication**

Manager, Communication organizes, coordinates and supervises within authority delegated, efficient utilization of men, money and material in public or private organizations, or one or more of its branches or departments engaged in providing postal, telephone, telegraph, wireless and other communication services. Is designated according to work performed, authority exercised or communication service managed such as: SUPERINTENDENT, POST OFFICES, SUPERINTENDENT, RAILWAY MAIL SERVICE. DISTRICT MANAGER, TELEPHONE, SUPERINTENDENT TELEGRAPHS. SUB-DIVISIONAL OFFICER, PHONES.

ISCO 08 Unit Group Details:

Code 1330
Title Information and Communication Technology Services Manager

**1330.0101
Communication Analyst**

Communication Analyst is responsible for communication materials supporting product development, programme delivery and client services.

Qualification Pack Details:

QP NOS Reference	SSC/Q7102
QP NOS Name	Communication Analyst
NSQF Level	5

ISCO 08 Unit Group Details:

Code 1330
Title Information and Communication Technology Services Manager

**1330.0200
Contract Officer,
Telephone/Liaising
Officer/PRO/Business Executive**

Contract Officer, Telephone scrutinizes requests for telephones, executes contracts, prepares estimates and arranges stores, etc. for installing new telephone connections and supervises installation, removal and servicing of subscribers' apparatus. Scrutinizes requests from intending subscribers for installing new telephone connections, extensions and other telecommunication facilities and approves them. Prepares estimates of material for installation, removal and servicing of telephone apparatus. Organizes required personnel and supervises installation, removal and servicing of subscribers' apparatus. May

make operating tests on circuits and relays to ensure proper functioning. May specialize only in one phase of work such as installation or maintenance.

ISCO 08 Unit Group Details:

Code 1330

Title Information and Communication
Technology Services Manager

1330.0300

Post Master

Post Master controls and co-ordinates work of all employees under him in post-office to ensure efficient service to public in accordance with rules and regulations prescribed. Allocates and assigns responsibilities of subordinate personnel in his office. Maintains counters to facilitate service provided to public. Displays relevant postal rules and regulations and publicizes sales of special and commemorative stamp issues, Government bonds, etc. Controls sale of postage envelopes, stamps and other postal stationery and checks timely collection and delivery of letters, money orders, etc. within area prescribed. Checks cash book amounts, Saving Bank accounts and other prescribed records. Renders accounts to audit office relating to his office and sub-offices. Disburses pay and allowance to all categories of staff working under him in post office or branch offices. May supervise functions of telegraph office, if attached to post office. May keep cash and valuables in joint custody with Treasurer.

ISCO 08 Unit Group Details:

Code 1330

Title Information and Communication
Technology Services Manager

1330.0600

General Manager, Communication

General Manager, Communication organizes, co-ordinates and supervises within authority delegated, efficient utilisation of men, money and material in public or private organizations, or one or more of its branches or departments engaged in providing postal, telephone, telegraph, wireless and other communication services.

ISCO 08 Unit Group Details:

Code 1330

Title Information and Communication
Technology Services Manager

1330.0701

Cluster Manager

Cluster Manager is responsible for providing uninterrupted infra services to operators in the cluster. Ensure optimum utilization of resources; efficiency in reducing energy and other operational costs, delight customer by ensuring high up-time per mobile tower is maintained; adherence to compliance/performance parameters, technical and safety training of team and a holistic technical approach towards the entire infrastructure present at cell sites/mobile towers.

Qualification Pack Details:

QP NOS Reference TEL/Q4102

QP NOS Name Cluster Manager

NSQF Level 6

ISCO 08 Unit Group Details:

Code 1330

Title Information and Communication
Technology Services Manager

1330.9900

Information and Communication Technology Services Manager, Other

Information and Communication Technology Services Manager, Other include managers who plan, direct, and co-ordinate the acquisition, development, maintenance and use of computer and telecommunication systems not elsewhere classified.

ISCO 08 Unit Group Details:

Code 1330

Title Information and Communication Technology Services Manager

Group 134

Professional Services Managers

Professional Services Managers plan, direct and co-ordinate the provision of childcare, health, welfare, education and other professional services, and manage the branches of institutions providing financial and insurance services.

Occupations in this Group are classified into the following Families:

1341 Child Care Service Managers
1342 Health Services Managers
1343 Aged Care Services Managers
1344 Social Welfare Managers
1345 Education Managers
1346 Financial and Insurance Service Branch Managers
1349 Professional Services Managers Not Elsewhere Classified

Family 1341 Child Care Service Managers

Child Care Service Managers plan, direct, co-ordinate and evaluate the provision of care for children in before-school, after-school, vacation and day care centres and services.

Family 1342 Health Services Managers

Health Service Managers plan, direct co-ordinate and evaluate the provision of clinical and community health care services in hospitals, clinics, public health agencies and similar organizations.

Family 1343 Aged Care Services Managers

Aged Care Service Managers plan, direct co-ordinate and evaluate the provision of residential and personal care services for individuals and families who are in need of such services due to the effects of ageing.

Family 1344 Social Welfare Managers

Social Welfare Managers plan, direct, and co-ordinate the provision of social and community service programmes such as income support, family assistance, children's services and other community programmes and services.

Family 1345 Education Managers

Education Managers plan, direct, co-ordinate and evaluate the educational and administrative aspects of education services, primary and secondary schools,

colleges and faculties and departments in universities and other educational institutions.

1345.0100 Headmaster

Head Master directs and co-ordinates educational, administrative, and counselling activities of primary or secondary school. Develops and evaluates educational programmes to ensure conformance to state and school board standards. Develops and co-ordinates educational programmes through meetings with staff, review of teachers' activities, and issuance of directives. Confers with teachers, students, and parents concerning educational and behavioural problems in school. Establishes and maintains relationships with colleges, community organizations, and other schools to co-ordinate educational services. Requisitions and allocates supplies, equipment, and instructional material as needed. Directs preparation of class schedules, cumulative records, and attendance reports. Observes and evaluates teacher performance. interviews and hires teachers. Walks about school buildings and property to monitor safety and security. Plans and monitors school budget. May plan and direct building maintenance. May develop and administer educational programmes for students with mental or physical handicaps.

ISCO 08 Unit Group Details:

Code 1345
Title Education Managers

Family 1346

Financial and Insurance Service Branch Managers

Financial and Insurance Service Branch Managers plan, direct, and co-ordinate the branches of institutions that provide financial and insurance services, such as banks, building societies, credit unions and insurance companies. They provide advice and assistance to clients on financial and insurance matters.

1346.0100 Manager, Bank

Manager, Bank organizes, controls and supervises, within authority delegated, activities of private or public bank or one or more of its departments or branches. Is designated according to authority delegated or work performed such as: GENERAL MANAGER (BANK), MANAGER, LOANS DEPARTMENT (BANK) MANAGER, FOREIGN EXCHANGE DEPARTMENT (BANK). MANAGER, BANKING DEPARTMENT (BANK). CURRENCY OFFICER (BANK). CHIEF OFFICER, CREDIT (BANK). DISTRICT MANAGER(BANK). BRANCH MANAGER (BANK).

ISCO 08 Unit Group Details:

Code 1346
Title Financial and Insurance Service
Branch Managers

1346.0200 Manager, Insurance

Manager, Insurance organizes, controls and supervises, within authority delegated, activities of private or public organizations or one or more of its departments or branches, engaged in life, fire, accident, marine and other general insurance business. Is designated

according to work performed or authority exercised such as: ZONAL MANAGER (INSURANCE), DIVISIONAL MANAGER (INSURANCE), REGIONAL MANAGER (INSURANCE), AREA MANAGER (INSURANCE), BRANCH MANAGER (INSURANCE), BRANCH SECRETARY (INSURANCE), MANAGER, LIFE DEPARTMENT (INSURANCE).

ISCO 08 Unit Group Details:

Code 1346

Title Financial and Insurance Service Branch Managers

1346.9900

Financial and Insurance Service Branch Managers, Other

Financial and Insurance Service Branch Managers, Other include managers engaged in business services, not elsewhere classified.

ISCO 08 Unit Group Details:

Code 1346

Title Financial and Insurance Service Branch Managers

Family 1349

Professional Services Managers Not Elsewhere Classified

This unit group covers managers who plan, direct co-ordinate and evaluate the provision of specialized professional and technical services and are not classified in sub-major group 12, Business Services and Administration Managers, or elsewhere in sub-major group 13, Professional Services Managers. For instance, Managers responsible for the provision of policing, corrective actions, library, legal and fire services are classified here.

Sub Division 14

Hospitality, Retail and Other Services Managers

Hospitality, Retail and Other Services Managers plan, organize and direct the operations of establishments which provide accommodation, hospitality, retail and other services.

Tasks performed by workers in this sub-major group usually include: planning and organizing special functions, sporting, gaming and entertainment activities and the range and mix of products, stock levels and service standards; promoting and selling goods and services; observing liquor, gaming, health and other laws and regulations; developing and reviewing policies, programmes and procedures concerning customer relations and goods and services provided; promoting facilities, for conferences, conventions and trade shows, to potential customers; organizing the purchase and maintenance of transport vehicles, equipment and fuel, and transporting goods; controlling the selection, training and supervision of staff; ensuring compliance with occupational health and safety regulations.

Occupation in this Sub Division are classified into the following Groups:

141	Hotel and Restaurant Managers
142	Retail and Wholesale Trade Managers
143	Other Services Managers

Group 141

Hotel and Restaurant Managers

Hotel and Restaurant Managers plan, organize and direct the operations of establishments that provide

accommodation, meals, beverages and other hospitality services.

Occupations in this Group are classified into the following Families:

1411 Hotel Managers
1412 Restaurant Managers

Family 1411 Hotel Managers

Hotel Managers plan, organize and direct the operations of hotels, motels and similar establishments to provide guest accommodation and other services.

1411.0100 Manager, Lodging and Catering Services/Resident Manager

Manager, Lodging and Catering Services organizes and supervises, within authority delegated, efficient utilisation of men, money and material in public or private organizations or establishments, or one or more of its departments or branches, engaged in preparing and serving food, drinks and beverages and providing lodging and camping facilities to public. Included are: MANAGER, HOTEL. MANAGER, RESTAURANT. MANAGER, CAFE, MANAGER, TEA HOUSE. MANAGER, COFFEE HOUSE. MANAGER, BAR, MANAGER, REST HOUSE.

ISCO 08 Unit Group Details:

Code 1411
Title Hotel Managers

1411.0200 General Manager, Lodging and Catering Services

General Manager, Lodging and Catering Services organizes and supervises, within authority delegated, efficient utilization of men, money and material in public or private organizations or establishments, or one or more of its departments or branches, engaged in preparing and serving food, drinks and beverages and providing lodging and camping facilities to public. Included are: GENERAL MANAGER, HOTEL. MANAGER, RESTAURANT. MANAGER, CAFE, MANAGER, TEA HOUSE, MANAGER, COFFEE HOUSE, MANAGER, BAR, MANAGER, REST HOUSE.

ISCO 08 Unit Group Details:

Code 1411
Title Hotel Managers

1411.9900 Hotel Managers, Others

Production and Operation Department Managers in Restaurants and Hotels, Other include Managers engaged both in restaurants and hotels, not elsewhere classified.

ISCO 08 Unit Group Details:

Code 1411
Title Hotel Managers

Family 1412 Restaurant Managers

Restaurant Managers plan, organize and direct the operations of cafes, restaurants and related establishments to provide dining and catering services.

1412.0100 Manager, Fast Food Service

Manager, Fast Food Service manages franchised or independent fast food or

wholesale prepared food establishments. Directs, co-ordinates, and participates in preparation of and cooking, wrapping or packing types of food served or prepared by establishments, collects money from in-house or take-out customers or assembles food orders for wholesale customers. Co-ordinates activities of workers engaged in keeping business records, collecting and paying accounts, ordering or purchasing supplies, and delivery of foodstuff to wholesale or retail customers. Interviews, hires, and trains personnel. May contact prospective wholesale customers, such as mobile food vendors, Vending Machine Operators, bar and tavern owners, and institutional personnel, to promote sale of prepared food. May establish delivery routes and schedules for supplying wholesale customers. Workers may be known according to the type or name of franchised establishment or type of prepared foodstuff retailed or wholesaled.

ISCO 08 Unit Group Details:

Code 1412
 Title Restaurant Managers

1412.9900

Restaurant Managers, Other

General Managers, Restaurants and Hotels, other include all other General Managers engaged in restaurant, hotel and other related activities, not elsewhere classified.

ISCO 08 Unit Group Details:

Code 1412
 Title Restaurant Managers

Group 142

Retail and Wholesale Trade Managers

Retail and Wholesale Trade Managers plan, organize, co-ordinate and control the operations of establishments that sell goods on a retail or wholesale basis. They are responsible for the budgets, staffing and strategic and operational direction of shops, or of organizational units within shops that sell particular types of product.

Occupations in this Group are classified into the following Families:

1420 Retail and Wholesale Trade Managers

Family 1420

Retail and Wholesale Trade Managers

Retail and Wholesale Trade Managers, plan, organize, co-ordinate and control the operations of establishments that sell goods on a retail or wholesale basis. They are responsible for the budgets, staffing and strategic and operational direction of shops, or of organizational units within shops that sell particular types of products.

1420.0100

Manager, Wholesale Trade

Manager, Wholesale Trade organizes and manages wholesale trade organizations, or one or more if its branches or departments, engaged in buying goods and selling them for profits to retailers or industrial and commercial consumers. Is designated according to work performed or level of responsibility such as: MANAGER (Wholesale Trade), BRANCH MANAGER (Wholesale Trade), SALES MANAGER (Wholesale Trade).

ISCO 08 Unit Group Details:

Code 1420
 Title Retail and Wholesale Trade Managers

1420.0200 Manager, Retail Trade

Manager, Retail Trade organizes and manages retail trade organizations, or one or more of its branches or departments, engaged in buying goods and merchandise and selling them for profit to customers. Is designated according to work performed or level of responsibility such as: BRANCH MANAGER (Retail Trade). AREA MANAGER (Retail Trade, DEPARTMENTAL MANAGER (Retail Trade).

ISCO 08 Unit Group Details:

Code 1420
 Title Retail and Wholesale Trade Managers

1420.0300 Manager, Export

Manager, Export directs foreign sales and service outlets of an organization:. Negotiates contracts with foreign sales and distribution centres to establish outlets. Directs clerical staff in expediting export correspondence, bid requests, and credit collections. Arranges shipping details, such as export licenses, customs declarations, and packing, shipping, and routing of products. Directs clerical and technical staff in preparation of foreign language sales manuals. Expedites import-export arrangements and maintains current information on import-export tariffs, licenses, and restrictions.

ISCO 08 Unit Group Details:

Code 1420
 Title Retail and Wholesale Trade Managers

1420.0400 General Manager, Wholesale Trade/Senior Manager, Wholesale Trade

General Manager, Wholesale Trade organizes and manages wholesale trade organizations, or one or more of its branches or departments engaged in buying goods and selling them for profits to retailers or industrial and commercial consumers.

ISCO 08 Unit Group Details:

Code 1420
 Title Retail and Wholesale Trade Managers

1420.0500 General Manager, Retail Trade, Senior Manager, Retail Trade

General Manager, Retail Trade organizes and manages retail trade organizations, or one or more of its branches or departments, engaged in buying goods and merchandise and selling them for profit to customers.

ISCO 08 Unit Group Details:

Code 1420
 Title Retail and Wholesale Trade Managers

1420.9900 Retail and Wholesale Trade Managers, Other

General Managers in Wholesale and Retail Trade, Other include all other General Managers engaged in wholesale, retail trades and other related activities, not elsewhere classified.

ISCO 08 Unit Group Details:

Code 1420
 Title Retail and Wholesale Trade Managers

Group 143**Other Services Managers**

Other Services Managers plan, organize, and control the operations of establishments that provide sporting, cultural, recreational, travel, customer contact and other amenity services.

Occupations in this Group are classified into the following Families:

1431 Sports, Recreation and Cultural Centre Managers
1439 Services Manager Not Elsewhere Classified

Family 1431**Sports, Recreation and Cultural Centre Managers**

Sports, Recreation and Cultural Centre Managers plan, organize, and control the operations of establishments that provide sporting, artistic, theatrical and other recreational and amenity services.

1431.0100**General Manager, Recreation and Entertainment**

General Manager, Recreation and Entertainment controls, co-ordinates and supervises, within authority delegated, efficient and economic utilisation of men, money and material in public and private organizations, establishments etc., or one or more of its branches or departments, engaged in producing, distributing and

exhibiting motion pictures; producing and presenting stage and circus shows; organizing and presenting radio and television broadcasts; operating carnivals and amusement parks; organizing games, hunting, fishing, excursions, competitions, etc., and providing other entertainment and recreation services. Included are: MANAGER, CINEMA. MANAGER, STUDIO. MANAGER, THEATRE. MANAGER, STAGE. MANAGER, CIRCUS. MANAGER, VARIETY SHOW. MANAGER, AMUSEMENT PARK, MANAGER, MAGIC SHOW, MANAGER, TOURNAMENT, MANAGER, STADIUM, MANAGER, CLUB, MANAGER, SWIMMING POOL, MANAGER, DANCE HALL, MANAGER, ORCHESTRA, MANAGER, EXHIBITION, MANAGER, CARNIVAL, MANAGER, RACE COURSE, MANAGER, GYMNASIUM.

ISCO 08 Unit Group Details:

Code 1431
 Title Sports, Recreation and Cultural Centre Manager

1431.9900**Sports, Recreation and Cultural Centre Manager, Other**

Sports, Recreation and Cultural Centre Manager, Other includes all other General Managers not covered in any of the families of Group 130.

ISCO 08 Unit Group Details:

Code 1431
 Title Sports, Recreation and Cultural Centre Manager

Family 1439**Services Manager Not Elsewhere Classified**

This unit group covers managers who plan, direct and co-ordinate the provision of services and are not classified in sub-major group 13, Production and Specialized Services Managers or elsewhere in sub-major group 14, Hospitality, Retail and Other Services Managers. For instance, Managers of travel agencies, conference centres, contact centres and shopping centres are classified here.



Professionals

Professionals increase the existing stock of knowledge, apply scientific or artistic concepts and theories, teach about the foregoing in a systematic manner, or engage in any combination of these activities.

Tasks performed by Professionals usually include: conducting analysis and research, and developing concepts, theories and operational methods, and advising on or applying existing knowledge related to physical sciences including mathematics, engineering and technology, and to life sciences including medical and health services social sciences and humanities; teaching the theory and practice of one or more disciplines at different educational levels; teaching and educating persons who are differently-abled; providing various business, legal and social services; creating and performing works of art; providing spiritual guidance; preparing scientific papers and reports. Supervision of other workers may be included.

Occupations in this Division are classified into the following Sub Divisions:

21	Science and Engineering Professionals
22	Health Professionals
23	Teaching Professionals
24	Business and Administrative Professionals
25	Information and Communication Technology Professionals
26	Legal, Social and Cultural Professionals

Sub Division 21 Science and Engineering Professionals

Physical, Mathematical and Engineering Science Professionals conduct research, improve or develop concepts, theories and operational methods, or apply scientific knowledge relating to fields such as physics, astronomy, meteorology, chemistry, geophysics, geology, mathematics, statistics, computing, architecture, engineering, and technology. Tasks performed by workers in this sub-major group usually include: conducting research, enlarging, advising on or applying scientific knowledge obtained through the study of structures and properties of physical matter and phenomena, chemical characteristics and processes of various substances, materials and products, and of mathematical, statistical and computing concepts and methods; advising on, designing and directing construction of buildings, towns and traffic systems, or civil engineering and industrial structures, as well as machines and other equipment, and advising on and applying mining methods, and ensuring their optimum use; surveying and sea and making maps; studying and advising on technological aspects of particular materials, products and processes, and on efficiency of

production and work organization; preparing scientific papers and reports. Supervision of other workers may be included.

Occupations in this Sub Division are classified into the following Groups:

211	Physical and Earth Science Professionals
212	Mathematicians, Actuaries and Statisticians
213	Life Sciences Professionals
214	Engineering Professionals (excluding Electro technology)
215	Electro technology Engineers
216	Architects, Planners, Surveyors and Designers

Group 211 Physical and Earth Science Professionals

Physical and Earth Science Professionals conduct research, improve or develop concepts, theories and operational methods, or apply scientific knowledge relating to physics, astronomy, meteorology, chemistry, geology and geophysics.

Occupations in this Group are classified into the following Families:

2111	Physicists and Astronomers
2112	Meteorologists
2113	Chemists
2114	Geologists and Geophysicists

Family 2111 Physicists and Astronomers

Physicists and Astronomers conduct research and improve or develop concepts, theories and operational methods concerning matter, space, time, energy, forces and fields and the interrelationship between these physical phenomena. They apply scientific knowledge relating to physics and astronomy in industrial, medical, military or other fields.

2111.0100

Physicist, General

Physicist, General conducts theoretical and experimental studies and research in different branches of physics such as gravitation, structure and properties of matter, heat, light, sound, electricity, magnetism, electronics, atomic and nuclear physics, biophysics, astrophysics, and geophysics to formulate theories of physical phenomena and to solve industrial and technical problems. Studies theory and experiments with physical properties of solids, liquids and gases. Performs experiments on laws of motion, electricity, centre of gravity, liquid pressure etc., to identify and measure elements of matter and energy and their interaction. Applies results to formulate theories of physical phenomena, solve industrial and technical problems and for making delicate instruments and testing equipment. Undertakes study of applied physics for understanding analysis data, Solar stellae and astrophysics, biological and geophysical phenomena, etc. May specialize in one or more branches of physics such as mechanics, heat, light, sound, electronics, aero and hydrodynamics, or use of X-Rays in testing of materials.

ISCO 08 Unit Group Details:

Code	2111
Title	Physicists and Astronomers

2111.0200**Physicist, Mechanics**

Physicist, Mechanics conducts theoretical and experimental studies and research in fields of mechanics and aero dynamics, hydrodynamics, elasticity, hydrostatics, ballistics, etc., to formulate a theory of physical phenomena and solve industrial and technical problems. Performs basic tasks similar to those of Physicist General and conducts theoretical and experimental studies and research in different fields of mechanics using appropriate instruments, apparatus and equipment. Analyses data and formulates theories of physical phenomena and solves industrial and technical problems relating to hydrostatic, gravitation aerodynamics, hydrodynamics, ballistics, elasticity, use of high pressure or high-vacuum, control and efficiency of mechanical instruments and measuring devices, etc. May specialize in one or more branches of mechanics.

ISCO 08 Unit Group Details:

Code 2111
Title Physicists and Astronomers

2111.0300**Physicist, Heat**

Physicist, Heat conducts theoretical and experimental research and studies in the branch of physics concerning heat to formulate theories on its physical phenomena, and to solve connected industrial and technical problems. Performs basic tasks similar to Physicist General, conducts theoretical and experimental studies and research in generation, application or withdrawal of heat such as those connected with calorimetry, thermodynamics, high and low temperature effects, temperature measurements, and radiation. Analyses

data and effects on physical state and evolves theories and formulae for designing heat engines, temperature recording instruments, application of heat, maintenance of temperature, cooling devices and other industrial and technical problems. May specialize in any particular branch of research on problems relating to heat.

ISCO 08 Unit Group Details:

Code 2111
Title Physicists and Astronomers

2111.0400**Physicist, Light**

Physicist, Light conducts theoretical and experimental studies and research on transmission and projection of light and other optical problems for formulation of theories on light and to apply them to industrial and technical uses. Performs basic tasks similar to Physicist General, conducts studies and experiments on transmission and projection of light and optical problems using lenses, mirrors, prisms, projectors and other appropriate apparatus, instruments and equipment. Analyses data, formulates theories and evolves formulae for designing optical instruments, solving optical problems and application to industrial and technical uses. May specialize in any particular branch of light such as illumination, spectroscopy, colometry, optics, photography, polarized light, photometry, and intra and ultra-rays.

ISCO 08 Unit Group Details:

Code 2111
Title Physicists and Astronomers

2111.0500

Physicist, Sound

Physicist, Sound conducts theoretical and experimental studies and research in the field of acoustics to formulate theories and solve various industrial and technical problems connected with generation, propagation, dispersion and reception of sound waves. Performs basic tasks similar to Physicist General, conducts studies and experiments for recording frequency, amplitude and compression of sound waves, using amplitude detector, frequency modulation detector, amplifiers, automatic recorders. Analyses data and evolves scientific theories for designing delicate sound recording and propagating instruments, vibration recorders, musical instruments etc. May specialize in any particular branch of sound such as broadcasting, transmitting, reception, musical instruments, etc.

ISCO 08 Unit Group Details:

Code	2111
Title	Physicists and Astronomers

2111.0600

Physicist, Electricity and Magnetism

Physicist, Electricity and Magnetism conducts theoretical and experimental studies and research in the fields of electricity and magnetism to formulate theories, evolve formulae and solve related industrial and technical problems. Performs basic tasks similar to Physicist General, conducts studies and research in various fields of electricity and magnetism, such as direct and alternate electrostatics, electromagnetism, electric currents, magnetic and electric fields, electrical generators and motors, electrical measuring instruments,

radiation from high frequency circuits, electromagnetic induction, flow of electricity conductors, and insulators, using appropriate apparatus and equipment, such as ammeters, voltaic cells, voltmeters, galvanometers, magnetic compass, variable resistances, magnets, potentiometer and arc lamps. Analyses observations and readings, formulates theories, evolves formulae and applies them to design magnetic and electrical equipment, to solve industrial and technical problems, and in fields of electro-chemistry, X-Ray, heat and electronics. May specialize in particular field of electricity and magnetism.

ISCO 08 Unit Group Details:

Code	2111
Title	Physicists and Astronomers

2111.0700

Physicist, Electronics

Physicist, Electronics conducts theoretical and experimental studies and research on electronics to formulate theories and evolve electronic laws and formulae for designing electronic equipment and solve industrial and technical problems. Performs basic tasks similar to Physicist General, conducts theoretical and experimental studies and research in the field of electronics, such as reception and transmission of electromagnetic waves, cathode rays, radiology, physiotherapy, and electronic signals for designing wireless receiving and transmission equipment, X-Ray electron microscopes, television, radio navigational aids, radar, electronic calculating machines electronic tubes, electronic equipment for civil, medical and defence purposes and to solve industrial and technical problems. May specialize in any particular field of electronics such as electron optics,

electron emission, fluorescent materials, photo-electric cells, radio, circuits, microwaves, and electronic brain computers.

Qualification Pack Details:

QP NOS Reference

QP NOS Name

NSQF Level

ISCO 08 Unit Group Details:

Code 2111

Title Physicists and Astronomers

2111.0800

Physicist, Nuclear

Physicist, Nuclear; Physicist, Atomic conducts theoretical and experimental studies and research in fields of nuclear physics to formulate and apply theories in atomic fields for peaceful purposes. Performs basic tasks similar to Physicist General, conducts research and studies in atomic fields such as nuclear structure and disintegration, measurements and separation of isotopes (elements having very similar chemical and physical properties but slightly different in atomic weights), generation of high velocity particles and X-Ray crystallography. Analyses observations and data and evolves theories and designs for nuclear generation of power, fission and fusion of atoms, medical use and other purposes. May specialize in any particular field of nuclear physics.

ISCO 08 Unit Group Details:

Code 2111

Title Physicists and Astronomers

2111.0900

Astronomer

Astronomer, Astrophysicist studies, size, shape, position, mass, movement and other characteristics of heavenly bodies such as moon, planets and stars, and interprets solar and stellar prominences and other celestial phenomena. Observes celestial bodies with telescopes fitted with complex devices such as spectroscopes, photometers, bolometers and other photography and radiation-recording instruments and records observations. Computes position and orbits of stars, planets, comets and asteroids. Takes photographs of sun in calcium and hydrogen lights to locate sun spots and eruption. Interprets data regarding size, composition, position, temperature etc. of planets and other heavenly bodies at given times to be used by air and sea navigators. Publishes results of observations and solar prominences, dark marking and other phenomena. Sends periodical messages to research centres regarding solar and geomagnetic observations, behaviour and other phenomena of sun and moon during particular periods (International geophysical year). May undertake research in special fields. May specialize in particular fields and activities such as cosmic rays, ozone, radio astronomy etc.

ISCO 08 Unit Group Details:

Code 2111

Title Physicists and Astronomers

2111.1000

Metrologist

Metrologist develops and evaluates calibration systems that measure characteristics of objects, substances, or phenomena, such as length, mass, time,

temperature, electric current, luminous intensity, and derived units of physical or chemical measure: Identifies magnitude of error sources contributing to uncertainty of results to determine reliability of measurement process in quantitative terms. Redesigns or adjusts measurement capability to minimize errors. Develops calibration methods and techniques based on principles of measurement science, technical analysis of measurement problems, and accuracy and precision requirements. Directs engineering, quality, and laboratory personnel in design, manufacture, evaluation, and calibration of measurement standards, instruments, and test systems to ensure selection of approved instrumentation. Advises others on methods of resolving measurement problems and exchanges information with other metrology personnel through participation in government and industrial standardization committees and professional societies.

ISCO 08 Unit Group Details:

Code 2111
Title Physicists and Astronomers

2111.1100

Material Scientist

Material Scientist conducts scientific studies for understanding, characterizing and developing materials leading to potential uses for the benefit of science and emerging technologies. Conducts programmes for studying structures and properties of various materials, such as metals, alloys, ceramics, semiconductors and polymers to obtain research data. Plans experimental laboratory production of materials having special characteristics to confirm feasibility of processes and techniques for potential users. Prepares

reports of material studies for information of other scientists and requestors. May guide technical staff engaged in developing materials for specific use in projected product or device.

ISCO 08 Unit Group Details:

Code 0
Title Chemists; Physicists and Astronomers

2111.9900

Physicists and Astronomers, Other

Physicists and Astronomers, Other include all other physicists and astronomers working in other fields of physics and astronomy such as those engaged in controlling, testing and analysing physical and astronomical properties or in developing experimental, testing and recording equipment, not elsewhere classified.

ISCO 08 Unit Group Details:

Code 2111
Title Physicists and Astronomers

Family 2112

Meteorologists

Meteorologists prepare short-term or long-term weather forecasts used in aviation, shipping, agriculture and other areas and for the information of general public. They conduct research related to the composition, structure and dynamics of the atmosphere.

2112.0100

Meteorologist

Meteorologist studies, compiles and interprets weather data, forecast changes in weather over short and long periods

and supplies metrological information for various interests, such as agriculture, aviation, etc. Sets up metrological post equipped with special devices and equipment, such as barometer, thermometer, anemometer, hygrometer, humidity recorders, balloons, and radio-theodolite. Observes and records readings from equipment and analyses them to determine barometric pressure, temperature and moisture content of air, fog and snow, direction and speed of wind, rainfall and atmospheric ozone. Interprets data and forecasts changes in weather conditions for agriculture, navigation, scientific aviation and other purposes. Informs aerodrome authorities about weather conditions for safety of planes in flight. Prepares weather charts and maps indicating climatic and weather conditions. Checks recording instruments, hydrogen balloons, equipment and accessories periodically and ensures their accuracy and correct performance. May undertake research in specific fields and specialize in any particular branch of metrology such as solar and stellar observation or radio astronomy. Is designated as Climatologist, if engaged in compiling and interpreting data on temperature, sunlight, rainfall, humidity and wind for forecasting weather conditions. Is designated as Aeronautical Meteorologist, if engaged in forecasting weather changes for aircraft flights stressing atmospheric conditions, such as wind, aloft, ceiling, visibility, cloud formation etc. Is designated as Hydro-meteorologist, if engaged in analysing problems of formation and movement of water particularly relating to flood control, hydroelectric power, irrigation and similar field of engineering and water resources. Is designated as radio-meteorologist, if engaged in propagation of radio engineering through atmosphere by use of radio and radar equipment in

metrology and as Aerologist, if engaged in studying phenomena of upper air for use of Pilots proposing high altitude flights.

ISCO 08 Unit Group Details:

Code	2112
Title	Meteorologists

2112.9900

Meteorologists, Other

Meteorologists, Other include meteorologists who conduct research, improve or develop concepts, theories and operational methods related to the composition, structure and dynamics of the atmosphere, and prepare detailed or long term weather forecasts used in aviation, shipping, agriculture and other areas and for the information of general public not elsewhere classified.

ISCO 08 Unit Group Details:

Code	2112
Title	Meteorologists

Family 2113

Chemists

Chemists conduct research, improve or develop concepts, theories and operational methods, or apply scientific knowledge relating to chemistry, to develop new knowledge or products and for quality and process control.

2113.0100

Chemist, General

Chemist, General conducts chemical analysis, synthesis, research and sampling of solids, liquids or gases to determine their composition, properties, physical and chemical changes as means of developing new products effecting

improved production process and advancing scientific knowledge. Tests samples of materials or substances by various chemical means such as dissolving them in solvents observing changes from application of heat, pressure or vacuum from reaction to acids, standard reagents (gases and chemicals), and from precipitation, filtration, dehydration and cooling to determine their properties. Conducts quantitative, qualitative, ion exchange, and micro-chemical analysis, microscopic analysis, electronic hydrogen ion measurements, component separation by electrolysis, etc. to find physical and chemical composition, crystalline structure, pH values, optical activity, behaviour of ions and other characteristics of samples. Assesses results of experiments and conducts any additional research needed to devise or improve methods of production, perfect formulae, develop new products or for further knowledge in the field. May control chemical processes and production methods and supervise performance of Laboratory Assistants, Chemical. May guard against explosions and accidents. May interpret findings statistically. May specialize in particular field of work.

ISCO 08 Unit Group Details:

Code	2113
Title	Chemists

2113.0200

Chemist, Organic

Chemist, Organic conducts analysis tests, and experiments on organic carbon compounds such as petroleum, dyes, and rubber to determine their properties, structure and other characteristics for improving production processes or for advancing technical knowledge. Performs

basic tasks similar to Chemist General utilizing appropriate chemical processes depending on nature of test or experiment. Assesses results obtained to find new compounds, perfect formula, effect improvement in production processes or to further develop research processes. May specialize in a particular branch of organic chemistry, such as petroleum, dyes, rubber, alcohol, oils, natural fats, organic acids, pesticides, organic compounds and their polymerization and precipitate products, plastics and soaps.

ISCO 08 Unit Group Details:

Code	2113
Title	Chemists

2113.0300

Chemist, Inorganic

Chemist, Inorganic conducts analysis tests and experiments on inorganic substances such as metals, acids, salts and gases to determine their properties, reactions, and other characteristics. Performs basic tasks like Chemist General utilizing chemical processes according to nature of test or experiment such as distillation, evaporation, filtration, detection of cations and anions (positive and negative ions), and salt analysis. Assesses results to find different constituents of compounds and solutions, their strength, optical activity etc., for sampling, to develop new compounds, improve production procedures or increase technical knowledge in the research field. May specialize in particular field of work such as production acids, salts, minerals and metals or in the laboratory research and analysis work. NATIONAL CLASSIFICATION OF OCCUPATIONS

ISCO 08 Unit Group Details:

Code 2113
 Title Chemists

2113.0400**Chemist, Physical**

Chemist, Physical conducts tests and experiments with metal ores, gases and different chemical elements and compounds to ascertain their physical and chemical properties, radio activity, structures, atomic and molecular weight etc., by application of electro-chemistry thermodynamics and various physico-chemical processes. Performs basic tasks similar to Chemist General using instruments and apparatus such as sensitive balances, spectroscope, microscope, X-Ray, pressure and temperature measuring devices, depending upon type of test or experiment. Analyses readings and assesses results by applying principles of electro-chemistry, thermodynamics periodic classification of elements, atomic theory, chromatography (Qualitative and quantitative measurements of ions) to determine physical and chemical properties, atomic weight, atomic structure, pH value, radio activity, relationship in periodic classification table, characteristics, reaction at different temperature and pressures fission and fusion of atoms, change of state of solid, liquid and gases etc., for advancement of research knowledge and for improvement of production processes. May specialize in particular branch of physical chemistry.

ISCO 08 Unit Group Details:

Code 2113
 Title Chemists

2113.0500
Chemist, Analytical

Chemist, Analytical conducts chemical analysis of inorganic and organic samples to ascertain their composition, reaction and properties. Performs basic tasks like Chemist General using instruments, apparatus and standard reagents in the laboratory such as spectroscope, pressure and temperature recording devices, desiccators, balances, acids, alkalize, and standard solution indicators to determine composition, strength or conformity with prescribed standards to ascertain presence or absence of a particular element. Analyses findings and submits report to medical or other authorities. May do statistical interpretation of observations.

ISCO 08 Unit Group Details:

Code 2113
 Title Chemists

2113.0600
Chemist, Industrial

Chemist, Industrial analyses at different stages of production samples of heavy chemicals, hydrogenation of oils, fertilizers, cosmetics etc., to ensure stipulated correct chemical composition of end product. Studies chemical properties of raw ingredients, chemical reactions being effected, and composition of final product to determine most economic qualitative and quantitative production processes. Applies findings in collaboration with Production Manager and Chemical Engineer. Prescribes rate of feeding of raw material, tests samples at different stages of production, regulates chemical reactions by various processes such as application or pressure or vacuum, introduction of catalyst (substance which

causes chemicals to react but which itself is not involved), evaporation, and filtration to ensure stipulated qualitative and quantitative control. Tests samples of final product and makes any needed adjustments in manufacture process to maintain prescribed standards. May suggest alterations or modifications in the plant and lay out designs to improve production process. May specialize in any particular branch of work.

ISCO 08 Unit Group Details:

Code	2113
Title	Chemists

2113.0601

Quality Control Chemist

Quality Control Chemist prepares and tests samples from all phases of the manufacturing process to ensure that the product quality meets the standards, prepares documents that report test results and is responsible for preserving workplace safety while handling hazardous materials. Also responsible for testing of in-process/input raw materials and packing materials, in-process samples apart from finished products. Also responsible for testing of process validation samples, product stability samples and cleaning validation samples (Rinse samples/Swab samples etc.)

Qualification Pack Details:

QP NOS Reference	LFS/Q0203
QP NOS Name	Quality
Control Chemist	
NSQF Level	5

ISCO 08 Unit Group Details:

Code	2113
Title	Chemists

2113.0621

Lab Chemist-Finished Product Testing

Lab Chemist-Finished Product Testing carries out testing for the finished rubber product as per laid down methods and specifications.

Qualification Pack Details:

QP NOS Reference	RSC/Q0315
QP NOS Name	Lab Chemist-
Finished product testing	
NSQF Level	5

ISCO 08 Unit Group Details:

Code	2113
Title	Chemists

2113.0622

Lab Chemist-Incoming raw material testing

Lab Chemist-Incoming raw material testing carries out of tests of incoming raw materials used for preparation of rubber compound as per laid down methods and specifications.

Qualification Pack Details:

QP NOS Reference	RSC/Q0312
QP NOS Name	Lab Chemist-
Incoming raw	
material testing	
NSQF Level	5

ISCO 08 Unit Group Details:

Code	2113
Title	Chemists

2113.0623

Lab Chemist-Compound testing–Batch Release

Lab Chemist-Compound testing-Batch Release carries out tests as per laid down methods and specifications.

Qualification Pack Details:

QP NOS Reference	RSC/Q0313
QP NOS Name	Lab Chemist-Compound testing – Batch Release
NSQF Level	5

ISCO 08 Unit Group Details:

Code	2113
Title	Chemists

2113.0624

Lab Chemist-Cured compound testing

Lab Chemist-Cured compound testing carries out testing for the cured compound as per laid down methods and specifications.

Qualification Pack Details:

QP NOS Reference	RSC/Q0314
QP NOS Name	Lab Chemist-Cured compound testing
NSQF Level	5

ISCO 08 Unit Group Details:

Code	2113
Title	Chemists

2113.0800

Chemist, Forensic Science

Chemist, Forensic Science applies scientific principles for analysis, identification, and classification of mechanical devices, chemical and physical substances, materials, liquids, or other physical evidence related to criminology, law enforcement, or investigative work. Searches for, collects, photographs, and preserves evidence. Performs variety of

analytical examinations, utilising chemistry, physics, mechanics, and other sciences. Analyses items, such as paint, glass, printed matter, paper, ink, fabric, dust, dirt, gases, or other substances, using spectroscope, microscope, infrared and ultraviolet light, microphotography, gas chromatograph, or other recording, measuring, or testing instruments. Identifies hair, skin, tissue, blood, bones, or human organs. Examines and classifies explosives, firearms, bullets, shells, and other weapons. Interprets laboratory findings relative to drugs, poisons, narcotics, alcohol, or other compounds ingested or injected into the body. Reconstructs crime scene, preserving marks or impressions made by shoes, tires, or other objects by plaster or moulage casts. Prepares reports or presentations of findings, methods, and techniques used to support conclusions, and prepares results for court or other formal hearings. May testify as expert witness on evidence or crime laboratory techniques. Confers with experts in such specialties as ballistics, fingerprinting, handwriting, documents, electronics, metallurgy, biochemistry, medicine, or others.

ISCO 08 Unit Group Details:

Code	2113
Title	Chemists

2113.0901

Quality Assurance Chemist

Quality Assurance Chemist performs physical checks, conducts document verification exercises, ensures compliance to systems and procedures, conducts/participates in internal/external audits and also carries out in-process sampling, and finished product sampling activities.

Qualification Pack Details:

QP NOS Reference	LFS/Q0301
QP NOS Name	Quality Assurance Chemist
NSQF Level	5

ISCO 08 Unit Group Details:

Code	2113
Title	Chemists

2113.9900**Chemists, Other**

Chemists, Other include all other chemists performing laboratory tests, analysis and experiments such as those engaged in agricultural chemistry, geochemistry, etc., not elsewhere classified.

ISCO 08 Unit Group Details:

Code	2113
Title	Chemists

Family 2114**Geologists and Geophysicists**

Geologists and Geophysicists conduct research; improve or develop concepts, theories and operational methods, or apply scientific knowledge relating to geology and geophysics in such fields as oil, gas and mineral exploration and extraction, water conservation, civil engineering, telecommunications and navigation, and assessment and mitigation of the effects of development and waste disposal projects on the environment.

2114.0100**Geologist**

Geologist studies physical structure of earth's crust, its rock formations and fossils to determine earth's history, gradual changes and development or to locate minerals and fuels. Conducts

exploratory geological survey using special instruments and techniques such as air survey and air-photo mapping and geo-chemical and geophysical prospecting methods to locate deposits of mineral, oil and gas. Supervises drilling operations in areas of economic mineral deposits. Collects samples of minerals or rocks at various depths for detailed study to determine their formulation and quality and quantity of deposits. Evaluates extent of deposit for commercial exploitation and under-takes and co-ordinates various activities relating to drilling, testing, development and production. Prepares reports, maps and diagrams showing outcrops of rocks and ore bodies and their various geological structures. Advises on suitability of soils and rocks for construction of dams, tunnels, roads, buildings, etc., and on strength of foundation necessary. Renders advice on problems of underground water reservoirs. Studies natural phenomena such as earthquakes, volcanoes, glaciers and mountain building for advancement of knowledge and research on gradual changes and development of earth's crust. May combine teaching with research and administrative work when employed by college or university. May be designated according to the field of duties such as Exploration Geologist, Test Geologist, Development Geologist and Resident Geologist.

ISCO 08 Unit Group Details:

Code	2114
Title	Geologists and Geophysicists

2114.0200**Petrologists**

Petrologists study composition, structure and genesis of rocks and minerals forming earth's crust. Studies thin section of rocks

and minerals using microscopes. Traces causes of rock and mineral formation on basis of microscopic studies, pattern of sedimentation etc. Makes genetic classification of rocks and reconstructs geological history of sedimentation and igneous activities. May advise on economic exploitation and composition of rocks and indicate likely pattern of ore and mineral concentration.

ISCO 08 Unit Group Details:

Code 2114

Title Geologists and Geophysicists

2114.0300

Palaeontologist

Palaeontologist studies fossilized remains of plants and animals, founding geological formations, in order to trace historical sequence of evolution and development of past life and to identify geological formations according to their nature and chronology. Visits different areas and studies earth and rock formations, nature of soil, etc. Collects fossilized specimens from geological formations using special tools such as hammer, sickle, etc. and classifies them according to botanical and zoological families and probable age. Prepares treatises on findings giving evaluation of life, formation of earth and sea and other geological data to aid location of natural resources such as petroleum bearing formations or coal. May maintain fossil specimens as museum exhibits. ay also study plant fossils.

ISCO 08 Unit Group Details:

Code 2114

Title Geologists and Geophysicists

2114.0400

Geophysicist

Geophysicist studies seismic, gravitational, electrical, thermal and magnetic phenomena to determine structure and composition of earth and its environment in space. Investigates origin, location and activities of glaciers and volcanoes and characteristics of earthquakes. Prepares charts of oceans, takes related measurements concerning shape and movement of earth and acoustic, optical and electrical phenomena in atmosphere using precision instruments, such as seismograph, magnetometer, gravimeter etc. to measure transmission of vibrations through earth's interior, magnetization of different kinds of rocks and pull of gravity. Applies electromagnetic, magnetic, gravity and seismic tests and other research data to locate petroleum, mineral deposits and other structural features. Selects fixed points on surface of earth for use in making navigational charts and maps. Predicts radio-communication and atmospheric conditions. Develops water supply and flood-control programmes. May specialize in a particular branch of geophysics and be designated according to the field of work, such as Exploration Geophysicist or Development Geophysicist.

ISCO 08 Unit Group Details:

Code 2114

Title Geologists and Geophysicists

2114.0500

Hydrologist

Hydrologist Studies distribution, disposition, and development of waters of land areas, including form and intensity of precipitation, and modes of return to the ocean and atmosphere. Maps and charts water flow and disposition of sediment. Measures changes in water volume due to evaporation and melting of snow. Studies

storm occurrences and nature and movement of glaciers, and determines rate of ground absorption and ultimate disposition of water. Evaluates data obtained in reference to such problems as flood and drought forecasting, soil and water conservation programmes, and planning water supply, water power, flood control, drainage, irrigation, crop production, and inland navigation projects.

ISCO 08 Unit Group Details:

Code 2114

Title Geologists and Geophysicists

2114.0600 Mineralogist

Mineralogist examines, analyses and classifies minerals to determine their composition and internal structure. Conducts microscopic, X-Ray, spectroscopic and other examinations of minerals to determine their composition. Does chemical analysis of minerals and renders advice on economic exploitation of mineral deposits.

ISCO 08 Unit Group Details:

Code 2114

Title Geologists and Geophysicists

2114.0700 Seismologist

Seismologist investigates phenomena relating to earth, cause and effects of earthquakes and other seismic activities using seismographs and other instruments for registering earthquakes. Designs, develops and calibrates seismographic instruments according to the degree of sensibility and type of data required. Supervises selecting of sites and setting of seismograph. Collects and analyses data

recorded by seismographs to locate the epicentre of an earthquake, depth of focus, intensity and frequency of impulses, etc. Processes data and disseminates conclusion by issuing bulletins and reports. Conducts studies at important earthquake sites to determine intensity of earthquakes and other seismic phenomena. Locates faults in earth's crust structure and prepares detailed seismic zonal maps. Conducts field studies by evaluating nature of damage through explosive seismology to evolve suitable seismic design co-efficient for structures like dams and buildings to counter-balance destructive effects of seismic phenomena to locate important faults in earth's crust structure and geology, and for advance explanation of seismic phenomena. May conduct seismological investigation in exploration of ores and oil deposits.

ISCO 08 Unit Group Details:

Code 2114

Title Geologists and Geophysicists

2114.0800 Oceanographer

Oceanographer studies characteristics of oceans for use in navigation, geography, meteorology and other sciences. Makes oceanic explorations to gather data on configuration and nature of ocean bed and such phenomena as tides, currents and icebergs. Makes chemical analysis of bottom mud and seawater at various depths. Maps deposition of sand on beaches. Studies and summarizes exploration data to develop a comprehensive and unified picture of oceanic behaviour.

ISCO 08 Unit Group Details:

Code 2114

Title Geologists and Geophysicists

2114.1500

Geologist, Petroleum

Geologist, Petroleum explores and charts stratigraphic arrangement and structure of earth to locate gas and oil deposits. Studies well logs, analyses cores and cuttings from well drillings, and interprets data obtained by electrical or radioactive well logging and other subsurface surveys to identify earth's strata. Examines aerial photographs, evaluates results of geophysical prospecting, and prepares surface and subsurface maps and diagrams depicting stratigraphic arrangement and composition of earth and probable deposits of gas and oil. Recommends acquisition, retention, or release of property leases or contracts. Estimates oil reserves in proven or prospective fields, and consults with PETROLEUM ENGINEERS (petrol. & gas) concerning drilling and production methods. May direct drilling of shallow exploratory wells.

ISCO 08 Unit Group Details:

Code 2114

Title Geologists and Geophysicists

2114.5500

Hydrographer, Waterworks

Hydrographer, Waterworks analyses hydrographic data to determine trends in movement and utilization of water. Reads meters and gauges to measure water flow and pressure in streams, conduits, and pipelines, and records data. Measures water level in lakes, reservoirs, and tanks. Calculates seepage and evaporation rates for dams and reservoirs. Measures depth of water in wells and test holes to determine ground water level. Measures

snow characteristics to evaluate water yield from snow runoff. Prepares graphs and charts to illustrate water patterns. Positions sluice gates to direct water onto spreading grounds. Installs, calibrates, and maintains metering instruments. Recommends locations for metering stations and placement of instruments.

ISCO 08 Unit Group Details:

Code 2114

Title Geologists and Geophysicists

2114.9900

Geologists and Geophysicists, Other

Geologists and Geophysicists, Other include all other Geologists and Geophysicists, performing research, improve or develop concepts, theories and operational methods, or apply scientific knowledge relating to geology and geophysics in such fields as oil, gas and mineral exploitation, water conservation, civil engineering, telecommunications and navigation not elsewhere classified.

ISCO 08 Unit Group Details:

Code 2114

Title Geologists and Geophysicists

Group 212

Mathematicians, Actuaries and Statisticians

Mathematicians, Actuaries and Statisticians conduct research, improve or develop mathematical, actuarial and statistical concepts, theories and operational models and techniques and apply this knowledge to a wide range of tasks in such fields as engineering, business and social and other sciences

Occupations in this Group are classified into the following Families:

2120 Mathematicians, Actuaries and Statisticians

**Family 2120
Mathematicians, Actuaries and Statisticians**

Mathematicians, Actuaries and Statisticians conduct research and improve or develop mathematical, actuarial and statistical concepts, theories and operational methods and techniques and advise on or engage in their practical application in such fields as engineering, business and social and other sciences.

**2120.0100
Mathematician**

Mathematician solves mathematical problems by using known principles or by evolving new principles and techniques and applies mathematical principles and methods of analysis for solution of various economic and other scientific problems. Determines and applies mathematical principles involved for solution of problems. Carries out research to discover new principles or to develop and improve known principles. Formulates their own mathematical tools and ways of application to abstract theoretical problems. May work problems of mathematical nature in other branches of science such as mechanics, hydrodynamics, communication, power transmission thermodynamics etc.

ISCO 08 Unit Group Details:

Code 2120

Title Mathematicians, Actuaries and Statisticians

**2120.0200
Actuary**

Actuary calculates and fixes premium rates for insurance against different types of risks on the basis of statistical, mathematical and financial calculations involving probability of future payment or contingencies. Collects and analyses data from different sources concerning losses to person from death, disability, sickness, injury etc. and losses to property from fire, burglary, explosion, hazards etc. Considers probable frequency of such risks, calculates their costs, and fixes rates of premiums for different types of risks taking in to account money market and economic conditions and probable future trends thereon. Studies continually about new developments, business trends, legislative, social and other factors affecting insurance business. Prepares contract provisions of insurance and pension plans. Determines proper basis and methods of evaluating liability of insurance and pension organizations. Recommends to management suitable measures regarding future policies and course of action for raising earnings. Advises management about extent of bonus out of profits if valuation discloses strong financial position. May prepare records on mortality (death), morbidity (sickness) and compute tables of premium rates and policy values. May prepare articles, press releases and speeches dealing with insurance business.

ISCO 08 Unit Group Details:

Code 2120

Title Mathematicians, Actuaries and Statisticians

2120.0300**Statistician**

Statistician develops and applies most effective methods for collecting, tabulating and interpreting quantitative data in any one of the various fields. Determines character and volume of information necessary for solution of any statistical problem and obtains or devises methods for collecting necessary information. Reduces or determines most effective techniques for reduction of data according to nature of available information and type of problem under study. Interprets and presents data in the form of charts, graphs, diagrams and written summaries. May write reports analysing and evaluating conclusions on the basis of variable conditions affecting interpretation or validity. May specialize in any particular branch of statistics such as financial or industrial statistics, or in statistical analysis in specific scientific field such as physics, chemistry or biology.

ISCO 08 Unit Group Details:

Code 2120

Title Mathematicians, Actuaries and Statisticians

2120.0400**Statistician, Applied**

Statistician, Applied plans data collection, analyses and interprets numerical data from experiments, studies, surveys, and other sources and applies statistical methodology to provide information for scientific research and statistical analysis: Plans methods to collect information and develops questionnaire techniques according to survey design. Conducts surveys utilizing sampling techniques or complete enumeration bases. Evaluates reliability of source information, adjusts

and weighs raw data, and organizes results into a form compatible with analysis by computers or other methods. Presents numerical information by computer readouts, graphs, charts, tables, written reports or other methods. Describes sources of information, and limitations on reliability and usability. May analyse and interpret statistics to point out significant differences in relationships among sources of information, and prepares conclusions and forecasts based on data summaries. May specialize in specific aspect of statistics or industrial activity reporting.

ISCO 08 Unit Group Details:

Code 2120

Title Mathematicians, Actuaries and Statisticians

2120.0500**Operation Research Analyst**

Operation Research Analyst formulates and applies mathematical modelling and other optimizing methods using a computer to develop and interpret information that assists management with decision making, policy formulation, or other managerial functions. May develop related software, service, or products. Frequently concentrates on collecting and analysing data and developing decision support software. May develop and supply optimal time, cost, or logistics networks for programme evaluation, review, or implementation. Analyses a problem in terms of management information and conceptualizes and defines the problem. Prepares model of the problem in the form of one or several equations that relates constants and variables, restrictions, alternatives, conflicting objectives and their numerical parameters. Specifies manipulative or

computational methods to be applied to a model. Evaluates implementation and effectiveness of research. Develops and applies time and cost networks to plan and control large projects. Prepares for management reports defining problem, evaluation, and possible solution. Studies information and selects plan from competitive proposals that afford maximum probability of profit or effectiveness relating to cost or risk. Defines data requirements, gathers and validates information, applying judgment and statistical tests. Designs, conducts, and evaluates experimental operational models where insufficient data exists to formulate a model. Performs validation and testing of the model to ensure adequacy, or determines need for reformulation.

ISCO 08 Unit Group Details:

Code 2120
Title Mathematicians, Actuaries and Statisticians

2120.0501 Associate-Analytics

Associate-Analytics is responsible for tracking business metrics and generating dashboards for the consumption of business managers. Individuals need to develop research protocols, analytical frameworks and crack tough business problems across verticals. Individuals also need to explore data to find new patterns and relationships by applying quantitative techniques, and build statistical models.

Qualification Pack Details:

QP NOS Reference	SSC/Q2101
QP NOS Name	Associate-Analytics
NSQF Level	7

ISCO 08 Unit Group Details:

Code 2120
Title Mathematicians, Actuaries and Statisticians

2120.9900 Mathematicians, Actuaries and Statisticians, Other

Statisticians, Other include all other statisticians not elsewhere classified.

ISCO 08 Unit Group Details:

Code 2120
Title Mathematicians, Actuaries and Statisticians

Group 213

Life Science Professionals

Life Science Professionals apply knowledge gained from research into human, animal and plant life and their interactions with each other and the environment to develop new knowledge, improve agricultural and forestry production, and solve human health and environmental problems.

Occupations in this Group are classified into the following Families:

2131 Biologists, Botanists, Zoologists and Related Professionals
2132 Farming, Forestry and Fisheries Advisors
2133 Environmental Protection Professionals

Family 2131 Biologists, Botanists, Zoologists and Related Professionals

Biologists, Botanists, Zoologists and related professionals study living organisms and their interactions with each other and with the environment, and apply this knowledge to solve human health and environmental problems. They work in diverse fields such as botany, zoology, ecology, marine biology, genetics, immunology, pharmacology, toxicology, physiology, bacteriology and virology.

2131.0100

Biologist, General

Biologist, General studies and conducts research in field or laboratory on various aspects of plant and animal life, such as their origin, development, physiology, heredity, environment, reproduction, adaptability, inter-relationship and their classification. Undertakes field study of plants or animals in their natural habitat or collects specimens for study in laboratory. Dissects and studies specimens using microscope, chemicals, photographic methods and other scientific aids. Identifies, classifies and preserves specimens for research and study purposes. Makes statistical analyses of experimental data and prepares reports on findings. May raise experimental plants or animals. May apply results of studies to evolution aspects of human life. May teach students in colleges and schools. May specialize in particular research aspect of evolution and animal or plant life.

ISCO 08 Unit Group Details:

Code 2131

Title Biologists, Botanists, Zoologists and Related Professionals

2131.0200

Marine Biologist

Marine Biologist studies plant and animal life in sea, shore, shallow and off-shore waters and their environmental conditions that affect their relative abundance and distribution. Makes periodical trips to the sea or spot of study to investigate water temperature, light acidity, amount of oxygen, and other physical conditions at various depths to determine their relation to abundance of different forms of marine at various levels and in different areas. Collects samples of water and specimens of various types of marine life including worms, snails, small plank tonic organisms upon which fish etc. feed. Conducts research in laboratory and investigates evolution of life in sea. Relates findings of research to economic exploitation of sea life, marine products, etc. May specialize in fresh water fish and be designated as LIMNOLOGIST.

ISCO 08 Unit Group Details:

Code 2131

Title Biologists, Botanists, Zoologists and Related Professionals

2131.0300

Cytologist

Cytologist studies and conducts research in plant and animal cells in relation to their functions, formation, growth behaviour, physical and chemical reactions, disease, etc. Selects and cuts sections of minute parts of animal or plant tissues for microscopic study and employs stain techniques to make self-structures visible or to differentiate parts for study. Studies component parts and details about division of cells. Relates findings to breeding and reproduction of plants and animals carrying particular characteristics or hereditary characters. Determines

physical and chemical factors for growth of cells. Raises different plants in experimental farm for breeding and hybridization. Observes behaviour of hybrids with reference to chromosome pairing, cause of sterility etc., and effects of physical and chemical agents like X-rays, gamma rays, chemical solutions etc. Introduces desirable characters from wild relatives of crop plants into cultivated plants. May be designated as CYTOGENETICIST if specialized in transfer of genetic characters and as PLANT CYTOLOGIST or ANIMAL CYTOLOGIST according to the field of specialization. May teach students.

ISCO 08 Unit Group Details:

Code 2131

Title Biologists, Botanists, Zoologists and Related Professionals

2131.0400

Botanist, General

Botanist, General studies origin, development, structure, physiology, reproduction, economic values, etc., of plants for use in such fields as agriculture, forestry and horticulture. Undertakes field trips for study of basic aspects of plant life in natural environments. Collects specimens of plants and of rare species or phenomena for study in the laboratory. Cuts sections and studies formation of cells and tissues in plants using microscope, special staining techniques and scientific equipment. Identifies and classifies plants. Studies effect on plant growth of environment factors such as rainfall, temperature, climate, soil etc. Devises new methods and measures for growing of plants and other crops useful to human and animal life. Reports on medicinal value of plants and evolves measures for its economic exploitation.

Preserves plants and other plant parts in special preservatives or in herbarium sheets. Maintains experimental botanical garden for study and research purposes. May teach students. May conduct research in special fields of study such as ecology, mycology, algology, embryology, etc. May specialize in experiment and research of particular crops like rice, sugarcane, cotton etc. and be designated as RICE SPECIALIST, SUGARCANE SPECIALIST, COTTON SPECIALIST etc.

ISCO 08 Unit Group Details:

Code 2131

Title Biologists, Botanists, Zoologists and Related Professionals

2131.0500

Economic Botanist

Economic Botanist specializes in study of plants yielding food, fibre, medicines, essential oil, resin, gum, dyes etc., for economic and industrial purposes and determines conditions necessary for their growth, development and utilization. Collects various types of plants of economic value and grows them under controlled conditions to determine best climatic soil and other essentials. Selects, tests and cross fertilizes (breeds) plants to obtain optimum qualities and quantities of plants for use as food, drugs, fibre, and other economic purposes. May specialize in such fields as oil bearing trees, resins, food, condiment, forage crops etc.

ISCO 08 Unit Group Details:

Code 2131

Title Biologists, Botanists, Zoologists and Related Professionals

2131.0600

Plant Breeder

Plant Breeder conducts experiments in fields and under controlled conditions to breed improved varieties of plants in relation to size, quality, yield, resistance to frost and diseases etc. Studies different characteristics of plants, such as their growth, yield etc. of both imported and indigenous varieties. Grows plants in selected areas under controlled climatic conditions. Compares characteristics of indigenous varieties with foreign or imported varieties to select best breed for local propagation. Breeds or cross-breeds plants of one variety with another to evolve strain of improved yield, height, size, resistance to diseases etc. Grows nucleus seeds in experimental farms to multiply them under controlled conditions of soil, fertility, climate, irrigation etc. Breeds new varieties by inducing artificial mutation by use of light rays, chemicals and radio-active isotopes. Conducts sample check of yield, quality, quantity etc. Handles plants after the variety is released. May specialize in breeding particular crop plants, such as cotton, millets, pulses, oil seeds, paddy, sugarcane, etc. May teach students.

ISCO 08 Unit Group Details:

Code 2131

Title Biologists, Botanists, Zoologists and Related Professionals

2131.0700

Mycologist

Mycologist conducts research on identification, structure, growth, dissemination and classification of fungi and evolves methods to apply findings in fields of agriculture medicine and industry. Obtains specimen of fungi and prepares cultures in selected media. Conducts microscopic observations of specimens under laboratory conditions to

study their structure, growth and multiplication and identifies and classifies chosen specimens. Studies relationship between fungi and other plants and animals. Evolves techniques of control of fungi by chemical and other methods. Extracts, analyses and tests use of by-products of fungus activity and evolves new strains of fungi for similar studies. Conducts experiments for medical and industrial application of such by-products. May specialize and conduct research and development in fields of antibiotics, preservation of stores and improved methods of propagating and growing edible fungi.

ISCO 08 Unit Group Details:

Code 2131

Title Biologists, Botanists, Zoologists and Related Professionals

2131.0800

Algologist

Algologist studies, identifies and classifies algae plants for use as edibles and soil manure. Visits areas such as sea-sides, river-sides, swamps for the study of algae on natural surroundings. Collects specimens of different varieties of algae for study in laboratory. Studies nitrogen content, food value, etc. of algae for economic exploitation. Propagates methods for growing particular type of algae to enrich nitrogen content of soil for paddy cultivation. May specialize in the study of fresh water algae or marine algae and control the growth of algae in water circulation system.

ISCO 08 Unit Group Details:

Code 2131

Title Biologists, Botanists, Zoologists and Related Professionals

2131.0900**Zoologist, General**

Zoologist General studies animal life in relation to origin, evolution, classification, structure, behaviour, life processes, disease, environment, growth, development, genetics, mutations, etc. and relates findings to problems affecting human, animal and plant life. Undertakes field trips to collect data and observe animal life in natural habitat on land and in water and collects specimens for study in the laboratory. Dissects specimens and studies structure and functioning of organs, diseases of organs, cells, etc. of nervous, reproduction and circulatory systems, anatomy of body cells etc. under the microscope and other scientific equipment. Prepares microscopic slides of special features for future study and research. Preserves rare species of animals in special preservatives and gets large animals mounted by Taxidermist. Studies characteristics of living organisms. Analyses findings and interprets data giving possible or probable causes that affect human life. Collects, rears and breeds various kinds of animals and birds such as mice, monkeys, fowls, pigeons, etc. in artificial condition in captivity for experimental purpose and knowledge of wild life management. May specialize in particular branches of Zoology such as study of embryos, birds, mammals, etc. and be designated as EMBRYOLOGIST, ORNITHOLOGIST, HISTOLOGIST, VIROLOGIST, BIOLOGIST, CYTOLOGIST, MAMMALOGIST, etc. May teach students in institutions.

ISCO 08 Unit Group Details:

Code 2131

Title Biologists, Botanists, Zoologists and Related Professionals

2131.1000**Entomologist**

Entomologist conducts research on different species of insects, non-insects and pests and experiments with different insecticides to devise economic and practical methods to eliminate or control harmful pests which cause damage to trees, crops, fruits etc. and to develop growth of beneficial insects. Makes field visits to collect, identify and classify different types of insects and pests. Maintains museum of insects and pest collections in special mounts. Studies nature and extent of damage caused to crops by insects, pests, rats etc. Conducts research in laboratory on insects, their life history and other features. Aids in control and elimination of harmful pests by developing new and improved insecticides and biological methods including use of birds, insects and other enemies which prey upon destructive pests. Propagates methods of lac culture, storage of grains, eradication of crop pests, etc. among farmers and others. May specialize in bee or silk worm rearing and be designated as APICULTURIST and SERICULTURIST respectively. May specialize in plant protection, storing of grains etc. May teach students.

ISCO 08 Unit Group Details:

Code 2131

Title Biologists, Botanists, Zoologists and Related Professionals

2131.1100**Parasitologist**

Parasitologist conducts research on animal or human parasites such as protozoans, liver flukes, round-worms, tape-worms etc. and evolves measures for control and treatment of parasitic

infection. Collects parasites from different areas and beings such as vertebrates and invertebrates, external parts, arterial cavities, alimentary canal, blood and from other tissue and conducts research in laboratory to study characteristics, habits, life cycles etc. to determine their manner of attack on human beings and animals and effects produced. Investigates modes of transmission from host to host. Develops methods and agents with which to combat parasites or treat infections. May specialize in particular variety of parasites or in the development of drug and chemical agents for parasite control. May be designated as PROTOZOOLOGIST, if specialized in study and control of unicellular microscopic parasites causing diseases in men and animals; NEMATOLOGIST, if engaged in study and control of nematodes (round-worms) that are plant parasitic.

ISCO 08 Unit Group Details:

Code 2131

Title Biologists, Botanists, Zoologists and Related Professionals

2131.1200

Bacteriologist

Bacteriologist; Micro-biologist conducts research and laboratory experiments on occurrence, growth, development, control and utilisation of bacteria and other microorganisms (including viruses) affecting plant, animal and human life, and industrial processes. Prepares cultures of bacteria by placing samples in suitable nutritive media. Examines samples of isolated bacteria under microscopes for identification. Observes reactions of bacteria to contact with various kinds of chemical substances and effects of changes in physical environment. Studies action of

microorganisms on living tissues of higher animals and dead organic matter; analyses organic substances produced by bacteria while acting on organic matter to determine nature of by-product. Evolves and prepares weakened strains of harmful bacteria for utilization in vaccination, immunization and serological application. Studies methods of stimulating and retarding activity of micro-organisms and their utilization in the industry. Records and report's findings. May specialize in any particular branch of bacteriology, such as dairy, food, soil or public health bacteriology, mycology, etc. and may be known as DAIRY BACTERIOLOGIST, FOOD BACTERIOLOGIST, INDUSTRIAL BACTERIOLOGIST, VETERINARY BACTERIOLOGIST, etc.

ISCO 08 Unit Group Details:

Code 2131

Title Biologists, Botanists, Zoologists and Related Professionals

2131.1300

Chemist, Biological

Chemist, Biological; Biochemist conducts tests and studies metabolic processes in plants and animals to determine their nutrition requirements, their ability to detect and separate poisons from materials and composition of their biological fluids in order to develop and produce antibiotics, serum, vaccines and drugs. Performs basic tasks similar to Chemist General by applying modern techniques like chromatography, electrophoresis, spectrophotometry radioactive tracers and Warburg manometry for analysis of biological compounds under both normal and pathological conditions. Isolates enzymes and other active principles from tissues and studies their action and properties

both at cultural stage and by actual application. Analyses and studies plant, animal and microbial materials to determine their composition of fat, proteins, carbohydrates, vitamins, trace elements etc. Studies biological fluids and materials such as blood, urine cerebrospinal fluid, lever tissue and hormones and co-relates findings to normal or pathological conditions. Conducts studies for separation and qualitative detection of poison in body for pathological and other purposes. May specialize in a particular field of work.

ISCO 08 Unit Group Details:

Code 2131

Title Biologists, Botanists, Zoologists and Related Professionals

2131.1400

Chemist, Food

Chemist, Food conducts research and analysis concerning chemistry of foods to develop and improve food and beverages. Experiments with natural and synthetic materials or by-products to develop new foods, additives, preservatives, anti-adulteration agents, and related products. Studies effects of various methods of processing, preservation, and packaging on composition and properties of food, such as colour, texture, aroma, taste, shelf life, and nutritive content. Tests food and beverage samples, such as starch, sugar, cereals, beer, canned and dehydrated food products, meats, vegetables, dairy foods, and other products to ensure compliance with food laws, and standards of quality and purity. May perform, or supervise workers performing, quality control tests in food processing, canning, freezing, brewing or distilling.

ISCO 08 Unit Group Details:

Code 2131

Title Biologists, Botanists, Zoologists and Related Professionals

2131.1500

Plant Pathologist

Plant Pathologist conducts research on nature and cause of plant diseases and decay of plant products, to evolve methods for their control and prevention. Examines and compares healthy and diseased plants to determine symptoms of diseased condition by means of microscope and other instruments. Inoculates healthy plants with culture of suspected organisms from diseased plants to determine organism responsible for disease. Studies growth, habit and life cycle of disease causing organisms and devises methods for destroying or controlling it. Tests possible control measures in laboratory and field conditions for effectiveness, economy etc. Observes growth of plant under different conditions of soil, climate, temperature etc. Relates findings of prevention of diseases for use of disease resisting seeds, fumigation or spraying fungicides over stem and leaves for killing fungus, etc. and propagates plant protection methods. May specialize according to type of affected plants on which worked, such as cereal crops, fruit, forest trees etc. or type of diseases, such as bacterial, virus, nematode or fungus.

ISCO 08 Unit Group Details:

Code 2131

Title Biologists, Botanists, Zoologists and Related Professionals

2131.1800

Plant Physiologist

Plant Physiologist studies functional activities in living plants and determines factors affecting them. Conducts field and laboratory experiments to determine effects of environmental conditions such as temperature, humidity, light, mineral nutrients etc. on plants. Corrects deficient symptoms in rate of growth, colour of leaves, quantum of yield etc. by administering nutrients such as nitrogen, phosphorus, iron, magnesium sulphur and other chemicals in soil or by folio spraying of plants, or pre-soaking seeds with stimulant prior to planting. Studies effects of environmental conditions on storage life of fruits and vegetables. Studies life history of resistant species of plants and conducts research on physiological problems of Indian plants for land reclamation, sand dune fixation and desert and semi desert conditions, metabolism of parasitic plants of India, special excretion of roots which controls plant growth, physiological study of germination of seeds and photoperiodism of Indian plants Prepares and co-ordinates reports of physiological; studies for use by Agronomists, Horticulturists, Plant Breeders and other specialists in a particular field of study such as agriculture crops, forest trees, fruit trees, flowers, fruits, seeds etc.

ISCO 08 Unit Group Details:

Code 2131
Title Biologists, Botanists, Zoologists and Related Professionals

2131.9900

Biologists, Botanists, Zoologists and Related Professionals, Other

Biologists, Botanists, Zoologists and Related Professionals, Other include all other biologists and related scientists

engaged in research and special fields not elsewhere classified.

ISCO 08 Unit Group Details:

Code 2131
Title Biologists, Botanists, Zoologists and Related Professionals

Family 2132

Farming, Forestry and Fisheries Advisors

Farming, Forestry and Fisheries Advisers study and provide assistance and advice on farm, forestry and fisheries management, including cultivation, fertilization, harvesting, soil erosion and composition, disease prevention, nutrition, crop rotation and marketing. They develop techniques for increasing productivity, and study and develop plans and policies for land and fisheries management.

2132.0100

Agronomist

Agronomist conducts research in field crop culture; soil fertility and farm management to develop better scientific methods of cultivation and irrigation for securing increased yield and better quality. Studies problems relating to field crop culture. Plans and conducts experiments in fields or plots involving techniques and methods relating to manure, irrigation, sowing, sowing time, culture practices, fertilizer application, physiology of crops and plants, control of weeds etc., taking into consideration chemical and physical composition of soil, temperature, rainfall and regional topography which have direct or indirect bearing on qualitative and quantitative crop yield. Analyses research results and

formulates crop rotation, cropping pattern, manuring schedules, water requirements of crops, irrigation practices etc., for improved production. Conducts different physiological experiments on crops in glass houses under controlled conditions of moisture, humidity and temperature and suggests improved agronomical practices for better crop. May look after or advise on storage of produce and farm management.

ISCO 08 Unit Group Details:

Code 2132

Title Farming, Forestry and Fisheries

2132.0200

Horticulturist

Horticulturist conducts experiments to develop methods of breeding and cultivating improved varieties of fruits, flowers, vegetables, ornamental bushes, trees etc. Preserves fruits and vegetables and prevents damage during storage, transportation, processing and marketing. Studies soil composition in relation to plant requirements. Conducts experiments under controlled conditions to determine factors beneficial to plant growth. Selects best varieties of seeds for cross-breeding to develop resistant and improved varieties. Develops methods of propagation of plants and maintenance of nurseries. Conducts experiments to develop better methods of sowing, manuring, processing, irrigation and spraying. Carries out experiments for mechanical, biological and chemical pest control. Applies findings to save crops from pests or fungus in fields and stores. Suggests methods for improving quality and increasing quantity of production of vegetables and flowers. May advice regarding location of farms, sowing time, preparation and layout of beds, etc. May

arrange flower and vegetable shows. May be engaged in training or research work. May assist on planting of trees in town planning. May be designated as Pomologist, Olericulturist, Floriculturist, Fruit Technologist and Vegetable Technologist etc. according to specialisation in culture of fruits, vegetables and flowers respectively.

ISCO 08 Unit Group Details:

Code 2132

Title Farming, Forestry and Fisheries

2132.0300

Soil Scientist

Soil Scientist studies soil characteristics, classifies, determines land capabilities and applies findings to problems connected with agriculture, forestry, horticulture and construction of dams, roads, buildings, etc. Studies genesis and fertility of soil by examining their various layers. Examines particle size and porosity of soil to determine its physical characteristics. Conducts chemical analysis and constitution of inorganic and organic constituents of various soil layers. Conducts experiments to determine micro-biological nutrition in soil for optimum plant growth and recommends appropriate fertilizer doses. Develops methods for control of erosion, alkalinity, salinity, acidity etc. of soil and conducts soil survey and soil classification and indicates them on a map. Investigates problems relating to stabilisation of roads, dams, buildings, etc. May specialize in one or more branches such as Soil Biology, Soil Physics, Soil Chemistry, etc.

ISCO 08 Unit Group Details:

Code 2132

Title Farming, Forestry and Fisheries

2132.0400**Soil Conservationist**

Soil Conservationist specializes in the study of soil for formulating and developing plans to control soil erosion and to maintain and raise soil fertility by correcting soil defects, application of manures and fertilizers, proper crop rotations, reforestation, drainage, etc. Examines soil properties and their characteristics by studying topography and climatic conditions. Investigates magnitude and causes of erosion, such as rainfall and its distribution, drainage, floods etc. Conducts soil consecration surveys. Looks after maintenance of anti-soil erosion, soil structures, bunds, terraces, waste water weir. Introduces measures towards more efficient land managements and higher crop yields. Develops barren land into productive fields by use of suitable corrective measures for removing salinity and alkalinity of soils or proper drainage conditions. Suggests methods for improvement of pastureland such as enclosures, rotational grazing and reseeding. Suggests proper land use patterns. May do research or training work.

ISCO 08 Unit Group Details:

Code 2132

Title Farming, Forestry and Fisheries

2132.0500**Silviculturist**

Silviculturist conducts research in care and development of forests and evolves more efficient methods of cultivation, propagation and management of forests and utilization of forest products. Studies vital statistics concerning forests, indicating rate of growth, yield and

general behaviour of different kinds of trees. Conducts experiments in nurseries, gardens and demonstrations in sample plots regarding seeding time, seed vitality, viability, seed collection, growth increment, plantation methods, natural and artificial regeneration and other items concerning crop replacement; reforestation and development. Conducts research on effects of climate, soil, physiographic and biotic factors upon growth, character and development of forest lands. Determines adaptability of different species to new environmental conditions. Examines composition of different types of forests and investigates relationship between various components of forest community such as trees, climbers, shrubs, herbs, bushes, grasses and various micro-organisms etc. Deals with forest influences on soil, climate as well as floods and combination of forestry with agricultural and pastoral farming, land management and soil conservation and farming of forest products other than wood. Studies silvicultural characters and requirements of indigenous trees including important exotics and determines factors necessary for their introduction. Suggests suitable species for roadside avenues, canal bank strips, water logged areas and for ornamental purposes etc. Works out standardisation of techniques of field research and analysis of statistical and sample plot data as well as techniques of partial enumeration for estimation of growing stock for working plan purposes. Compiles volume and yield tables for timber by various processes like impregnation with resins, lamination, etc. and examines suitability of indigenous timbers for; various purposes, such as furniture making, construction and for specific uses in various industries. Investigates problems connected with seasoning of wood for use as scantlings, sleepers, veneers etc. Designs operation

of timber seasoning kilns and studies formation, measurements and removal of drying trees in timber during kiln or air drying. Conducts experiments on samples of timber of different gardens for durability and hardness and to evolve more economic and effective methods of preservation in transit or storage against insects, decay, fire fungi and marine organisms. Develops and suggests improved methods of converting wood into charcoal, veneer, plywood, etc. and for collection, exploitation, utilization of wood by products such as oils, gums, resins, dyes, waxes, fibres, camphor, etc. Develops adhesives from indigenous material like coconut shell, cashew-nuts and conducts experiments to produce building material from bamboo and wood wastes. Maintains xylarium (collection of specimens). May specialize in seasoning, preservation, composite wood, chemical wood and mechanical wood.

ISCO 08 Unit Group Details:

Code 2132

Title Farming, Forestry and Fisheries

2132.0600

Wood Anatomist

Wood Anatomist studies anatomical structure of wood in relation to its properties and uses for identification and classification of different types of timbers and determines factors responsible for growth and development of trees. Examines different types of cells of wood, their arrangement and variation using microscopes to determine its structure. Estimates properties of different types of woods based on their anatomy. Prepares slides and photomicrographs of important indigenous timbers. Explores and collects research anatomical data for writing accurate descriptions, identification and

classification of timbers. Investigates defects and causes of failure in wood. Suggests suitable indigenous substitutes for imported timbers for industrial purposes and detects fraud and adulteration by correctly identifying timber and plant products. Maintains collection of specimens and helps Archaeologists, Geologists and Paleobotanists in exploring past vegetation and explains ancient culture.

ISCO 08 Unit Group Details:

Code 2132

Title Farming, Forestry and Fisheries

2132.0700

Dairy Scientist

Dairy Scientist conducts research in selection, breeding, feeding, and management of dairy cattle: Studies feed requirements of dairy animals and nutritive value of feed materials. Carries out experiments to determine effects of different kinds of feed and environmental conditions on quantity, quality, and nutritive value of milk produced. Develops improved practices in care and management of dairy herds and use of improved buildings and equipment. Studies physiology of reproduction and lactation, and carries out breeding programmes to improve dairy breeds.

ISCO 08 Unit Group Details:

Code 2132

Title Farming, Forestry and Fisheries

2132.0800

Poultry Scientist

Poultry Scientist conducts research in breeding, feeding, and management of poultry. Examines selection and breeding practices to increase efficiency of

production and improve quality of poultry products. Studies nutritional requirements of various classes of poultry. Develops improved practices in incubation, breeding, feeding, rearing, housing, artificial insemination, and disease and parasite prevention and control. Studies effects of management practices and processing methods on quality of eggs and other poultry products. May specialize in artificial insemination.

ISCO 08 Unit Group Details:

Code 2132

Title Farming, Forestry and Fisheries

2132.0900 Pisciculturist

Pisciculturist, Fish Culturist; Fishery Expert specializes in fish culture and directs measures connected with development of fisheries and breeding and rearing of fish by artificial methods. Conducts experiments on fish culture to obtain data concerning their habits migration, growth, food, enemies, places of breeding and spawning so that conditions of artificial hatching may be made to closely resemble those of natural hatching. Devises methods and directs work of collecting, fertilizing and incubating fish eggs. Supervises care of spawn and directs rearing of fish. Supervises sorting, transferring, distribution and release of seeds, fingerlings etc. in streams, ponds and wells for restocking them. Directs constructions of reservoirs, ponds, dams etc. and supervises general maintenance of hatcheries. May specialize in fresh water or salt-water fish culture. May supervise catching of fish preservation or marketing. May cultivate oysters in specially prepared oyster see-beds, observe growth of pearl oyster and chanks

and introduce artificial process for pearl formation. May supervise works of Divers.

ISCO 08 Unit Group Details:

Code 2132

Title Farming, Forestry and Fisheries

2132.1000

Farm Overseer, Crop Production

Farm Overseer, Crop Production supervises operations in connection with growing, harvesting and marketing of agricultural produce, fruits, etc., Maintains machinery, implements and live-stock under directions of Manager, Agricultural Farm. Assists manager in examining soil, irrigational facilities, marketing, etc. in determining type of fruit or crop to be grown. Helps in selection and purchase of seeds, fertilisers and equipment and storing them. Guides operations of ploughing, manuring, sowing, watering, weeding and hoeing. Supervises making of channels for irrigation, preparing manure, grafting and budding of plants, harvesting, threshing, winnowing, etc. Looks after bagging, storing and transportation of produce to market. Controls field staff. Assists Manager in preparation of cost and production statements, payment of wages, etc. and attends to any other task assigned by him. May specialize in growing any particular type of crop or fruit. May demonstrate improved methods of cultivation.

ISCO 08 Unit Group Details:

Code 2133

Title Farming, Forestry and Fisheries

2132.9900

Agronomists and Related Professionals, Other

Agronomists and Related Professionals, Other include all other Agronomists and related Scientists engaged in research in particular fields for practical application of results thereof, not elsewhere classified.

ISCO 08 Unit Group Details:

Code 2132

Title Farming, Forestry and Fisheries

Family 2133

Environmental Protection Professionals

Environmental Protection Professionals study and assess the effects of human activity on environment such as air, water and noise pollution, soil contamination, climate change, toxic waste and depletion and degradation of natural resources. They develop plans and solutions to protect, conserve, restore, minimize and prevent further damage to the environment.

2133.0100

Ecologist

Ecologist studies effects of environmental influence of growth, development, distribution etc. of plant or animal life. Undertakes field trips to study plants or animals in their natural habitat. Observes environmental influence, such as temperature, rainfall, altitude, type and quantity of food etc. and their effects on plant or animal growth and development. Classifies or catalogues drought resistant areas and type of fodder and pastures suitable for those areas. Propagates or introduces special varieties of plants, grass, weed etc. to suit local climatic conditions. Runs experimental farms or laboratories under natural and artificial conditions to watch effect of climatic

condition on crops, plants or animals. Studies geographical distribution of different species and genera of Indian flora and role of plants as indication of special types of soil and chemicals. Conducts research on suitable plants from different parts of India or from similar climates outside India for regeneration of swamps and deserts. Is designated as PLANT ECOLOGIST or ANIMAL ECOLOGIST according to field of specialization.

ISCO 08 Unit Group Details:

Code 2133

Title Environmental Protection Professionals

2133.0200

Environment Scientist (Including Health)

Environment Scientist (Including Health) conducts research or performs investigation for the purpose of identifying, abating, or eliminating sources of pollutants or hazards that affect either the environment or the health of population. Utilising knowledge of various scientific disciplines may collect, synthesize, study, report, and take action based on data derived from measurements or observations of air, food, soil, water, and other sources. Analyses data to determine validity, quality, and scientific significance, and to interpret correlations between human activities and environmental effects. Collects, synthesizes, and analyses data derived from pollution emission measurements, atmospheric monitoring, meteorological and mineralogical information, and soil or water samples. Conducts environmental audits and inspections, and investigations of violations. Designs and directs studies to obtain technical environmental

information about planned projects. Determines data collection methods to be employed in research projects and surveys. Develops methods to minimize the impact of production processes on environment, based on the study and assessment of industrial production, environmental legislation, and physical, biological, and social environments. Evaluates violations or problems discovered during inspections to determine appropriate regulatory actions or to provide advice on the development and prosecution of regulatory cases. Investigates and reports on accidents affecting the environment. Monitors effects of pollution and land degradation, and recommends means of prevention or control. Monitors environmental impacts of development activities.

ISCO 08 Unit Group Details:

Code 2133
Title Environmental Protection Professionals

2133.0300

Taxonomist

Taxonomist, studies, identifies and classifies plants and animals under standard nomenclatures. Undertakes excursions and field trips to collect various kinds of animals or plants with roots, flowers, fruits etc. as necessary. Studies, dissects and mounts slides for examination. Examines slides and minute parts under microscope and relates findings for correct identification of parts and classifies them giving standard nomenclature indicating genus and species they belong to. Preserves specimens in special preservatives or in herbarium sheets as appropriate. May specialize in particular field and be designated as TAXONOMIST, ANIMAL or

TAXONOMIST, PLANT according to field of study.

ISCO 08 Unit Group Details:

Code 2133
Title Environmental Protection Professionals

2133.0400

Paleobotanist

Paleobotanist, studies fossilized remains of plants found in geological formations to trace evolution and development of past life and identify geological formations according to nature and chronology. Undertakes field trips and recovers fossilised specimens from dug out layers of earth or rock and notes their positions. Assembles and studies specimens using microscope, chemicals, photographic methods and other scientific aids. Identifies and classifies specimens according to botanical family, probable age, etc. Makes statistical analysis and constructs experimental data to trace history of modern vegetation or to locate natural resources such as petroleum bearing formations and prepares reports on findings. May organize scientific expeditions and supervise removal of fossils from fossil deposits and material rock formations. May specialize in Geochronology (General history of earth), Coal Paleobotany, oil Paleobotany etc.

ISCO 08 Unit Group Details:

Code 2133
Title Environmental Protection Professionals

Group 214

Engineering Professionals (excluding Electro technology)

Engineering Professionals (excluding Electro-technology) design, plan and organize the testing, construction, installation and maintenance of structures, machines and their components, and production systems and plants, and plan production schedules and work procedures to ensure engineering projects are undertaken safely, efficiently and in a cost effective manner.

Occupations in this Group are classified into the following Families:

2141 Industrial and Production Engineers
2142 Civil Engineers
2143 Environmental Engineers
2144 Mechanical Engineers
2145 Chemical Engineers
2146 Mining Engineers, Metallurgists and Related Professionals
2149 Engineering Professionals, Not Elsewhere Classified

Family 2141 Industrial and Production Engineers

Industrial and Production Engineers conduct research and design, organize and oversee the construction, operation and maintenance of process plants and installations. They establish programmes for the co-ordination of manufacturing activities; and assess cost effectiveness and safety.

2141.0100 Works Inspector, Engineering/Inspection Engineer

Works Inspector, Engineering; inspects and tests raw materials and finished products in factory or institution, using

various testing and measuring equipment and ensures that raw materials and finished goods conform to specified standards. Conducts physical tests of raw materials and gets it chemically tested by Chemists to see that it conforms to prescribed standards of quality and quantity. Rejects materials not conforming to required specification. Carries out stage inspection of finished and semi-finished goods. Enforces quality control methods in load test, durability, flexibility, hardness and other tests depending upon value of components or goods and importance of products. Supervises and controls production work to keep percentage of rejection at minimum. Stops operations when percentage of rejection is high and informs superiors for rectification of machines or tools. Maintains record of work indicating type of product checked, percentage of rejections, reasons for rejection etc. Certifies passed articles or goods conforming to prescribed standards. Is designated as Boiler Inspector if engaged in inspecting boilers or ensuring production of boilers to required specifications. May specialize in particular types of components or products.

ISCO 08 Unit Group Details:

Code 2141
Title Industrial and Production Engineers

2141.0200 Instrument Engineer/Instrumentation Engineer

Instrument Engineer, designs and supervises operation and maintenance of electrical, mechanical and thermal instruments and control equipment necessary for safe and efficient operation

of industrial plants. Studies plant layout and process requirements to determine type and number of items needed; writes specifications for selection of stock or special instruments from supplies. Directs installation, calibration, and testing of equipment. Supervises application, inspection, and maintenance of instruments in operation.

ISCO 08 Unit Group Details:

Code 2141
Title Industrial and Production Engineers

2141.0300

Industrial Engineer

Industrial Engineer performs variety of engineering work in planning and overseeing utilisation of production facilities and personnel in development or other sub-division of industrial establishment. Studies and plans equipment layout, work flow, and accident prevention measures to maintain efficient and safe utilisation of plant facilities. Plans and supervises work study and training programmes to promote efficient manpower utilisation. Develops and ensures quality control, cost control, inventory control, and production record systems. May study manner in which particular tasks are performed and suggests improved methods. May work independently as consultant to any organization needing advice and assistance.

ISCO 08 Unit Group Details:

Code 2141
Title Industrial and Production Engineers

2141.0301

Industrial Engineer Executive

Industrial Engineer is responsible for determining most effective ways to create a product or service in sewing line. Their work includes analysis of the sewing method and process, machine and supervision of production floor for efficiency improvement.

Qualification Pack Details:

QP NOS Reference	AMH/Q2001
QP NOS Name	Industrial Engineer
	(IE) Executive
NSQF Level	6

ISCO 08 Unit Group Details:

Code 2141
Title Industrial and Production Engineers

2141.0400

Packaging Engineer

Packaging Engineer plans and directs activities concerned with design and development of protective packaging containers. Analyses engineering drawings and specifications of products to determine physical characteristics of items, special-handling and safety requirements, and type of materials required for container. Consults with establishments' purchasing and production departments to determine costs and feasibility of producing proposed packaging. Develops or directs development of sketches, specifications, samples, and written analysis of proposed packaging in order to present design for approval. May confer with customers or sales representatives to draw up contracts. May advise employer or customers on efficient packing procedures, innovations in packaging materials, and utilization of sealing and fastening devices.

ISCO 08 Unit Group Details:

Code 2141
 Title Industrial and Production Engineers

2141.0500**Planning Engineer**

Planning Engineer, Development Engineer plans and directs activities for increasing operational efficiency in production of articles using appropriate machines at a lesser cost. Studies work orders, availability of raw materials, production methods and production capacity of machines. Examines plans, sketches, diagrams etc. of articles to be produced and decides on type of machine to be used and sequence of production operations. Assesses and arranges quantum of raw materials required for production of articles. Arranges the layout of plants. Decides use of special tools or equipment to ensure quick and continuity of work operations. Prepares work schedules and instructs section heads to complete work orders. Co-ordinates work of different sections and eliminates delays or removes difficulties. Supervises work of subordinates and ensures that finished products conform to prescribed standard and specifications, and are turned out within time targets. Adjusts work load of men and machines to achieve optimum results. May supervise construction and erection of machines and equipment.

ISCO 08 Unit Group Details:

Code 2141
 Title Industrial and Production Engineers

2141.0501**Production Planning & Control Engineer**

Production Planning and Control (PPC) Engineer is also called, ‘Production Planner’. The PPC Engineer prepares a weekly or monthly manufacturing plan based on interaction with the production, sales and marketing team of the organization. The individual at work receives monthly demand data from the sales team. Based on the demand data, the PPC Engineer plans procurement of raw material and production schedules for the month.

Qualification Pack Details:

QP NOS Reference ELE/Q6201
 QP NOS Name PPC Engineer
 NSQF Level 5

ISCO 08 Unit Group Details:

Code 2141
 Title Industrial and Production Engineers

2141.0600**Methods Engineer**

Methods Engineer plans sequences of operations to be followed for manufacture of articles. Examines blueprints, sketches, and specifications of products to be made. Lays out steps to be followed in the process, using knowledge of materials, machine operations, plant layout and mathematics to select least expensive and most efficient production methods. Specifies machines and kinds of cutting tools and set ups to be used. Writes technical reports. May co-ordinate activities with design, production and other departmental personnel.

ISCO 08 Unit Group Details:

Code 2141
 Title Industrial and Production Engineers

2141.0800**Engineering Estimator/Estimation Engineer**

Engineering Estimator prepares cost and work completion estimates for engineering works. Compiles itemized materials and price lists from blueprints and specializations and itemizes equipment readily available or to be purchased from outside sources. Computes cost and estimates of raw material, purchased equipment and labour required for work and decides delivery dates. Keeps in touch with market conditions regarding price of commodities, raw materials, fluctuations in prices, labour hiring charges etc. May compute percentage profits and add to cost estimates. May consult with engineering departments concerning cost problems.

ISCO 08 Unit Group Details:

Code 2141

Title Industrial and Production Engineers

2141.0900**Agricultural Engineer**

Agricultural Engineer, applies engineering principles to solve related agricultural problems. Designs, develops and supervises manufacturing of agricultural machinery, such as pumps and irrigation equipment, tractors, cultivators, sprayers, dusters and harvesters. Lays out and supervises construction of farm buildings and utilities, crop processing plants and rural electric power distribution systems. Conserves soil and water by installation of irrigation, drainage, flood and soil erosion control systems. May specialize in such fields as farm management, pest control, rural roads and farm fire protection.

ISCO 08 Unit Group Details:

Code 2141

Title Industrial and Production Engineers

2141.1000**Textile Technologist**

Textile Technologist conducts research in chemistry of textiles and institutes methods to control processes for scouring, bleaching, mercerising, sizing, and dyeing textiles. Prepares formulae for various phases of processing. Controls variables, such as temperature, sequence of operation, and concentration of chemicals, for treatment of silk, cotton, wool, rayon, and other fabrics during processing. Experiments with synthetic and re-generated fibres, animal hair, feathers, cellulose products, and other materials to develop new textiles. Investigates problems relating to textile chemistry, such as treatment of fabrics to impart water, fire, mildew, or insect resistant qualities, to reduce fabric shrinkage, or to develop qualities of shape retention and abrasion resistance in textile. May analyse dyes, alkalis, acids, bleaches, and finishes for conformance to specifications. May design, erect and patent new textile machinery.

ISCO 08 Unit Group Details:

Code 2141

Title Industrial and Production Engineers

2141.1100**Nuclear Engineer**

Nuclear Engineer conducts research into problems of nuclear energy systems. Designs and develops nuclear equipment and monitors testing, operation, and maintenance of nuclear reactors.: Plans

and conducts nuclear research to discover facts or to test, prove, or modify known nuclear theories concerning release, control, and utilisation of nuclear energy. Evaluates findings to develop new concepts of thermonuclear analysis and new uses of radioactive processes. Plans, designs, and develops nuclear equipment such as reactor cores, radiation shielding, and associated instrumentation and control mechanisms. Studies nuclear fuel cycle to define most economical uses of nuclear material and safest means of waste products disposal. Monitors nuclear tests and examines operations of facilities which process or utilize radioactive or fissionable material to ensure efficient functioning and conformance with safety specifications, regulations, and laws. Prepares technical reports, utilising knowledge obtained during research and development activities and inspectional functions. May direct operating and maintenance activities of operational nuclear facilities.

ISCO 08 Unit Group Details:

Code 2141
Title Industrial and Production Engineers

2141.1200

Jute Technologist

Jute Technologist conducts research and improves standards and quality of jute fibre and jute products. Carries out research in physical, chemical and testing laboratories and suggests measures for increasing agricultural yield of jute by scientific sowing, rearing and harvesting. Devises better facilities for separating fibre from plant stem and protecting jute crops from pests and diseases. Identifies various chemical components and compositions of fibre structure; checks

chemical reaction on fibre to modify or change its original chemical properties and characteristics, improves and produces fibre of better quality with increased stiffness, toughness, rigidity and resilience. Evolves tests and develops new processing techniques and equipment, and supervises their proper installation and maintenance.

ISCO 08 Unit Group Details:

Code 2141
Title Industrial and Production Engineers

2141.1300

Fibre Technologist

Fibre Technologist conducts research in extraction and utilisation of vegetable (animal or synthetic) fibres such as jute, moonj, ganja, etc., and develops techniques for spinning and weaving of fibres, and for pulping fibre for making utility goods, like paper, card-board and allied materials. Sets raw material for decomposition by bacterial action to identify fibre. Conducts physical and chemical tests for identification of fibre and fibre damage and also to assess presence of non-fibrous impurities and content of hygroscopic nature, tensile strength, elasticity, elongation, staple length, frictional characteristics, fineness, diameter etc. of fibre. Supervises workers engaged in extraction and processing and guides and trains them on proper lines. May find substitute for rare fibres and direct adulteration. May mix together various fibres to form ultimate product by chemical and microscopic examination.

ISCO 08 Unit Group Details:

Code 2141
Title Industrial and Production Engineers

2141.1400

Spinning Master

Spinning Master organizes, controls and supervises various processes in spinning yarn from various fibres, such as wool, jute, cotton etc. Directs mixing and blending of different grades of fibre to produce yarn of required quality. Supervises cleaning, carding and combing of fibre and drawing spinning of yarn. Ensures that required degree of temperature and humidity in various spinning sections is maintained. Visits spinning sections constantly to check continuity of operations. Gets machines repaired or replaced for restoration of work. Controls staff and ensures that quantity and quality of production are maintained. Keeps machinery and equipment in good working order for optimum efficiency. May advise management to introduce new methods or devices to improve quality and quantity of yarn production. May conduct research to evolve better methods of production.

ISCO 08 Unit Group Details:

Code 2141
Title Industrial and Production Engineers

2141.1500

Weaving Master

Weaving Master organizes, controls and supervises weaving of clothes, calendering and process preparatory to weaving such as winding, warping, sizing, etc. Instructs Jobbers for proper winding, warping and sizing of yarn. Ensures that required degree of temperature and humidity in various weaving sections is maintained. Visits sections periodically and supervises work of men in charge. Ensures that quality of cloth produced conforms to

prescribed standard and suggests alterations and improvements wherever necessary. Gets machines repaired or replaced as necessary for restoration of work. Maintains quality and quantity of production and keeps machines, looms and equipment in good working order. Controls staff and maintains discipline. May introduce new methods and devices to improve quality of cloth. May conduct research for better methods of production.

ISCO 08 Unit Group Details:

Code 2141
Title Industrial and Production Engineers

2141.1600

Dyeing and Bleaching Master

(Textiles)

Dyeing and Bleaching Master, (Textile) organizes, controls and supervises dyeing and bleaching of yarn and cloth. Controls costing of all incidental processing of dyeing, bleaching etc. and determines dyes and their proportions for dyeing yarn and cloth to required colour and shade. Supervises mixing of dyes according to predetermined formula, and its heating to required temperature. Tests sample of dye solution on textiles to get desired colour and shade. Visits sections periodically and supervises various operations, such as bleaching of yarn or cloth in kier, washing and dyeing them in special dyeing machines and ensures quality of production. Tests sample of dyed cloth in laboratory to check fastness of colour, etc. Maintains machines and equipment in perfect working condition. Keeps record of batches of colours mixed, quantity of yarn and cloth bleached and dyed etc. May specialize in processes of dyeing or in bleaching of yarn and cloth and be designated as Dyeing Master or

Bleaching Master according to nature of work performed. May conduct research for evolving better methods of production and different colour combinations. May train new workers in the department.

ISCO 08 Unit Group Details:

Code 2141
Title Industrial and Production Engineers

2141.1700

Printing Master (Textile)

Printing Masters (Textile) organize, direct and supervise printing of cloth in various designs ensuring quality, output and smooth running of printing department. Arrange for supply of necessary chemicals and dyes. Check mixing of colours in required proportions for printing purpose. Examine printed sample to check its quality and carries out chemical tests to ensure its fastness. Ensure regular supply or required quantity of cloth for printing in their department. Get printing rollers with required engraving of pattern fitted in printing machines. Supervises work of Printers, Textile to ensure quality output. Maintains record of job orders completed, and batches of colours used. May check operations of printing machines to ensure optimum output and may make arrangements for repair of defects in machines or replacements of parts.

NATIONAL CLASSIFICATION OF OCCUPATIONS.

ISCO 08 Unit Group Details:

Code 2141
Title Industrial and Production Engineers

2141.1800

Sugar Technologist

Sugar Technologist conducts research and devises improved methods and processes for manufacture of high quality sugar and other by-products such as molasses, power alcohol etc. Studies physical and chemical properties of raw cane-juice, conducts alkaline and acidity test of juice, and determines type of equipment needed for boiling juice, and quantity of lime or sulphur to be added in the chemical process. Sets up a pilot plant and studies its working under given conditions. Designs or manufactures latest machinery and equipment or suggests changes or alterations to existing machinery or equipment. Studies corrosive actions on metals, formation of scales on pans, loss of heat to pans etc. and suggests use of proper metal to eliminate corrosion on metal for increased production. Tests and examines various by-products and advises on their maximum utilisation or conversion into commercial products such as making alcohol from molasses, commercial, cylindering of gases like Oxygen, Carbon dioxide, etc. Supervises erection of plants and renders guidance in set up.

ISCO 08 Unit Group Details:

Code 2141
Title Industrial and Production Engineers

2141.1900

Dairy Technologist

Dairy Technologist applies principles of bacteriology, chemistry, physics, engineering and economics to develop new and improved methods in production, preservation, and utilisation of milk, cheese, ice cream, and other dairy products. Conducts experiments in such problems as preventing bacterial increase in milk during handling and processing,

improving pasteurisation methods, and designing better packaging materials, dairy equipment, or supplies. May specialize according to product, as ice cream or cheese, or according to functional activity, as sanitation research or storage problems.

ISCO 08 Unit Group Details:

Code 2141
Title Industrial and Production Engineers

2141.2000

Wood Technologist

Wood Technologist conducts experiments and investigates problems connected with seasoning, preservation and utilisation of timber and its by-products and evolves methods for curing timber, testing it for strength, converting it into charcoal, plywood, etc. Studies physical properties of wood such as hardness, pliability, moisture, shrinkage, stress during drying, etc. Devices scientific and economical methods of improving properties of ready use, maintains ledger files, containing collection of tropical and other forestry literature and gives technical advice to interested parties on matters connected with the subject. May co-ordinate procurement and supply of seeds of various species between agencies concerned. May co-ordinate activities of different state units, for promoting mensuration research all over the country. May study different types of soil erosion, its causes and determine suitable preventive remedial measures. May impart advance training on subjects to State Forest Officers and students of Forest College and maintain the Silviculture museum.

ISCO 08 Unit Group Details:

Code 2141
Title Industrial and Production Engineers

2141.2100

Leather Technologist

Leather Technologist conducts research for developing tanning processes for manufacture of leather, conforming to prescribed standards. Examines hides and skins for structural defects. Studies preservative methods practiced by Tanners and suggests improvement in existing methods of preservation and drying for making better leather. Evolves new method of vegetable and chrome tanning of skins, hides, sole leathers, etc. to reduce cost of tanning. Analyses various chemicals such as salts, dyes, oils and other chrome compounds used in leather industry to determine properties. Tests tanned and finished leather at every stage for conformity to prescribed standards of quality. Conducts research on utilisation of by-products, treatment of obnoxious odours and tannery effluents, use of waste products for manufacture of leather boards, gut and surgical sutures, gelatine etc. Plans, designs and installs new equipment and machines. Demonstrates correct and economical methods of vegetable or chrome tanning of leather and skins, use of machine and manufacture of industrial and fancy leather to guide Tanners. May specialize in particular branches of study like vegetable or chrome tanning, utilisation of by-products, manufacture of industrial or fancy leathers, sports goods leather, garments leather, dyeing and finishing of leather etc.

ISCO 08 Unit Group Details:

Code 2141

Title Industrial and Production Engineers

2141.2200 Glass Technologist

Glass Technologist conducts experiments in chemistry of glass and develops and controls processes involved in manufacture of glass products. Devises and installs laboratory and batch-control systems. Selects formulae to be used in compounding standard type of glass and develops new formulae to produce special purpose glass such as optical glass, glass oven-wear, or coloured glass products. Directs activities of operating crew engaged in compounding ingredients and charging melting furnaces. Ascertains furnace temperature periodically and makes necessary temperature adjustments. Determines characteristics of glass samples by subjecting them to chemical and physical tests.

ISCO 08 Unit Group Details:

Code 2141
Title Industrial and Production Engineers

2141.2300 Ceramic Technologist

Ceramic Technologist conducts research, develops processing techniques and supervises technical work concerned with manufacture of ceramics products. Supervises testing of physical, chemical and heat-resisting properties of materials such as clays and silica. Analyses result of test to determine combinations of materials which will include quality of products. Conducts research into methods of processing, forming and firing of clays to develop new ceramic products, such as refractories for air craft, and for using

glass and steel furnaces. Designs equipment and apparatus for forming, firing and handling products. Co-ordinates testing activities of finished products for characteristics, such as texture, colour, durability, blazing and refactoring properties. May specialize in any branch of ceramic production, such as brick, glass, crockery, tile, pipe or refractories. May specialize in developing heat-resistant and corrosion-resistant material for use in nuclear energy field.

ISCO 08 Unit Group Details:

Code 2141
Title Industrial and Production Engineers

2141.2400 Printing Technologist

Printing Technologist conducts research and develops better and economical printing processes for use in printing industry. Evolves processes of letterpress printing, off-set printing (lithography), gravure printing (reserve of letter printing), and screen printing. Conducts research for utilizing electronic and magnetic devices in printing processes e.g. composing, electro typing, stereo typing, photo composition, photo engraving, oil-type composition. Develops rapid and accurate methods of composing matter; evolves better and economical processes of printing to serve different printing purposes or specific processes. Experiments with different links, papers and machines to improve ultimate printed matter. May supervise printing processes in printing press.

ISCO 08 Unit Group Details:

Code 2141
Title Industrial and Production Engineers

2141.2500

Safety Engineer

Safety Engineer inspects industrial plants for hazards, suggests measures preventing or reducing industrial accidents for diseases, or for correcting other injurious environmental conditions which creates hazards to life and property or reduce workers' morale and efficiency. Examines plans and specifications of new premises, plant or equipment and ensures that adequate precautions have been taken to avoid hazards. Inspects buildings, equipment and processes to locate hazardous work places, determines amount of weights that can be placed on plant floor with safety and advises on selection and use of goggles, safety belts, protective clothing, extractor fans, ventilators and similar safety equipment. Inspects fire-fighting equipment and advises on preparations to be taken against risk of fire. Designs and supervises manufacture and installation of machine guards and other devices to prevent accidents. Investigates cause of accidents and introduces measures to prevent their recurrence. Plans, organizes and carries out educational programmes on accident prevention, using lectures, products, films and other means.

ISCO 08 Unit Group Details:

Code 2141
Title Industrial and Production Engineers

2141.2600

Occupational Health and Safety Specialist

Occupational Health and Safety Specialist reviews, evaluates, and analyses work environments and design programmes

and procedures to control, eliminate, and prevent disease or injury caused by chemical, physical, and biological agents or ergonomic factors. May conduct inspections and enforce adherence to laws and regulations governing the health and safety of individuals. May be employed in the public or private sector. Investigates adequacy of ventilation, exhaust equipment, lighting, and other conditions which may affect employee health, comfort or efficiency. Conducts evaluations of exposure to ionizing and nonionizing radiation and to noise. Collects samples of dust, gases, vapours, and other potentially toxic materials for analysis. Recommends measures to ensure maximum employee protection. Collaborates with engineers and physicians to institute control and remedial measures for hazardous and potentially hazardous conditions of equipment. Participates in educational meetings to instruct employees in matters pertaining to occupational health and prevention of accidents. Prepares reports including observations, analysis of contaminants, and recommendation for control and correction of hazards. Reviews physicians' reports and conducts worker studies to determine if diseases or illnesses are job related. Prepares and calibrates equipment used to collect and analyse samples. Prepares documents to be used in legal proceedings and gives testimony in court proceedings.

ISCO 08 Unit Group Details:

Code 2141
Title Industrial and Production Engineers

Family 2142

Civil Engineers

Civil Engineers conduct research, advice on design, and direct construction; manage the operation and maintenance of civil engineering structures; or study and advise on technological aspects of particular materials.

2142.0100

Civil Engineer, General

Civil Engineer, General plans, organizes and supervises construction and repair of buildings, highways, dams, bridges, tunnels, canals, aerodromes, towers, laying of pipe lines, railway tracks etc. with or without assistance of Architect or other specialized Civil Engineers. Prepares or gets sketches, plans etc. of project prepared by Architect according to the requirements of the authority concerned. Visits area(s) for preliminary survey, selection of size, and collection of necessary data such as measurements, soil condition, availability of materials, labour etc. with or without assistance of specialized Civil Engineers, Overseer and Estimator. Prepares designs, detailed drawings and estimates of cost with assistance of Draftsmen, Civil or themselves and gets them approved by their client or authority concerned. Arranges for required materials, machinery, labour and commencement of work at site. Ensures correct execution of work according to specifications at every stage of progress. Checks at site, measurements taken by overseer for preparation and payments of bill. Inspects and examines structure, completion of work to ensure its conformity with prescribed specification. May draw sketches and plans. May call for tenders and award work to one or more contractors. May undertake maintenance, development or remodelling work.

ISCO 08 Unit Group Details:

Code 2142

Title Civil Engineers

2142.0200

Civil Engineer, Building

Civil Engineer, Building plans, organizes and supervises construction and repair of buildings etc. for office or residential purposes with or without assistance of the Architect. Visits sites to ascertain soil condition, availability of labour, materials, etc. and decides type of structure to be built, and materials to be used. Prepares detailed drawings and estimates according to requirements of authority concerned with assistance of Draftsmen, Civil and Estimators; lays specifications of various components finishing, flooring and architectural features or gets them done by Architects. Arranges materials, labour, machinery etc. Gets concrete cured (sprayed with water) and gets cubes tested in laboratory as work progresses to ensure design strength. Gets roofing, flooring, terracing and distempering or white-colour washing done according to specification. Checks measurements carried out by Overseer from time to time for payment of bills. May call for tenders and award work to one or more contractors. NATIONAL CLASSIFICATION OF OCCUPATIONS

ISCO 08 Unit Group Details:

Code 2142

Title Civil Engineers

2142.0300

Civil Engineer, Structural

Civil Engineer, Structural plans, organizes and supervises construction and repairs of bridges, factories, towers and other structures to meet specific requirements

with assistance of Civil Engineer, Building; Mechanical Engineer, Structural; Draftsmen, Civil; Estimator, etc. as necessary. Receives instructions and available sketches and data from authority concerned. Undertakes preliminary survey to collect necessary information about soil condition, area available etc. Collects further information on drainage, maximum water level, flow of water, neighbouring habitation, permanent course of water, pressure of communication etc. required for bridge construction. Calculates and prepares or gets it prepared by Architect or Draftsman design details on estimated cost and detailed drawings with complete specifications of trusses, foundation, height, movement space, light and ventilation etc. and gets them approved by client. Supervises drilling operations and gets samples of underground geological strata tested to divide suitable type of foundation and length of spans for bridge construction. Arranges for men, material, machinery and appliances. Gets work commenced on scheduled plan under their direct or authorised supervision. Gets coffer dam, dewatering, dredging, well foundation and concreting done and tiers and abatement constructed over the foundation. Gets sub and superstructure of bridge, factory building, or other structure constructed by stages according to design in consultation with Mechanical Engineer, Structural; Civil Engineer, Building; etc., as necessary. Ensures execution according to specifications and directs preparation and payment of bills. May invite tenders and get part or parts of work done by contractors or other specialized persons. May undertake construction of staff quarters, approach roads, etc.. if required.

ISCO 08 Unit Group Details:

Code 2142

Title Civil
Engineers

2142.0301

Plumbing Site Engineer

Plumbing Site Engineer is responsible for carrying out technical, organizational and supervisory role in plumbing construction projects.

Qualification Pack Details:

QP NOS Reference	PSC/Q0115
QP NOS Name	Plumbing Site Engineer
NSQF Level	7

ISCO 08 Unit Group Details:

Code 2142
Title Civil Engineers

2142.0400

Civil Engineer, Irrigation

Civil Engineer, Irrigation plans, organizes and supervises construction and maintenance of dams, barrages, canals, tunnels etc. with assistance of Geologist and other engineers where necessary. Visits site to collect necessary data such as course of water, topography, nearby villages, agricultural lands, availability of labourers, materials etc. Selects suitable site in consultation with Geologist. Draws out preliminary sketches and detailed drawings and general financial implications, estimate of materials, required machinery etc. with assistance of Draftsman, Civil and Estimator. Arranges for material, labour and machinery. Gets cofferdams or other devices for diverting water constructed and gets dewatering and excavation work commenced. Supervises laying of concrete in foundation, construction of other concrete or masonry work and digging of

canals. Controls quality of concrete by getting cubes tested at every stage of construction. Gets sluice gates erected, in case of barrage, with assistance of Mechanical and Civil Engineer, Structural. Gets pipe line of power house laid and machinery installed with assistance of Mechanical and Electrical Engineer. Checks work to ensure conformity with specifications. May call tenders and award work to Contractors. May also undertake construction of staff quarters, office buildings, approach roads etc.

ISCO 08 Unit Group Details:

Code 2142

Title Civil Engineers

2142.0500

Hydraulic Engineer

Hydraulic Engineer designs and directs construction of power and other hydraulic engineering projects for control and use of water. Computes and estimates rates of water flow. Specifies type and size of equipment, such as conduits, pumps, turbines, pressure valves, and surge tanks, used in transporting water and converting waterpower into electricity. Directs, through subordinate supervisors, activities of workers engaged in dredging, digging cut-offs, placing jetties, and constructing levees to stabilise streams or open water ways. Designs and co-ordinates construction of artificial canals, conduits, and mains to transport and distribute water, and plans reservoirs, pressure valves, and booster stations to obtain proper water pressure at all levels. Frequently builds laboratory models to study construction and flow problems.

ISCO 08 Unit Group Details:

Code 2142

Title Civil Engineers

2142.0501

Fire Protection Systems Design Engineer

Fire Protection Systems Design Engineer is responsible for the design of a hydraulic fire-fighting system in a building or structure.

Qualification Pack Details:

QP NOS Reference PSC/Q0205

QP NOS Name Fire Protection
Systems Design
Engineer

NSQF Level 7

ISCO 08 Unit Group Details:

Code 2142

Title Civil Engineers

2142.0600

Civil Engineer, Highways and Roads

Civil Engineer, Highways and Roads plans, organizes and supervises construction and repair of roads, as well as culverts and bridges to connect cities, towns and important places within the town. Undertakes reconnaissance and topographical surveys to gather information regarding villages, towns and cities to be connected, river, nullah and railway crossings in route, soil data etc. to decide suitable route for road construction. Prepares or gets prepared by Draftsman Civil detailed drawing with complete specifications such as width of road, foundation, drainage system, bridges culverts etc. Arranges for labour, machinery and materials and commences work under their direct or authorised supervision. Constructs culverts and bridges in route or entrusts them to Civil Engineer, Structural. Checks work from time to time to ensure proper

consolidation of earth work and prevention of sinking of roads. Checks measurements taken by Overseer (Civil) for payment of bill. Inspects completed work and hands over completed project to the client. May invite tenders and assign road construction to approved Contractors. May maintain road making machinery like road rollers, concrete mixers, etc. in working order. May arrange road side plantation and their maintenance.

ISCO 08 Unit Group Details:

Code 2142

Title Civil Engineers

2142.0700

Civil Engineer, Railways

Civil Engineer, Railways plans, organizes and supervises maintenance and laying of railway tracks, and construction of bridges, roads, buildings, sheds etc. for railways according to prescribed specifications. Surveys area(s) with assistance of Surveyors to collect necessary details such as soil condition, rivers, drains, course of water, localities and villages in route, etc. Designs work on basis of collected data, estimates cost and submits them to authority concerned for approval. Prepares or gets detailed drawings prepared by Architect and plans execution of work. Arranges for labour, material, machinery, appliances etc. and commences work under their personal or authorised supervision. Gets embankment consolidated, levelled and ballasted. Gets sleepers and rails laid in position and fish plates screwed to join rails. Inspects track during and after construction to ensure conformity of gradients, inclinations etc. with prescribed standards. Supervises construction, repair and maintenance of buildings, railway stations, bridges,

platforms and other railway structures by performing similar functions as those of Civil Engineer, Building, Civil Engineer, Structural, etc. Takes special safety measures to protect track and bridges during floods and landslides, etc. May construct tunnels and lay tracks through them. May invite tenders and allot work to approved Contractors.

ISCO 08 Unit Group Details:

Code 2142

Title Civil Engineers

2142.0800

Airport Engineer

Airport Engineer plans and lays out airports and landing fields and directs construction work involved in levelling fields, laying out and surfacing runways, and providing drainage. Designs runways based on weight and size of aircraft and prepares material and construction specifications. Directs or participates in surveying to lay out installations and establish reference points, grades, and elevations to guide construction. Estimates costs to provide basis for payments to contractor. Observes progress of construction to ensure work is in conformity with specifications and advises SUPERINTENDENT, CONSTRUCTION regarding necessary corrections. May serve as an employee of the contractor and study plans and specifications to recommend special equipment or procedures to reduce time and cost of construction. May schedule delivery of materials, analyse costs, and provide technical advice for the solution of construction problems.

Qualification Pack Details:

QP NOS Reference

QP NOS Name

NSQF Level

ISCO 08 Unit Group Details:

Code 2142

Title Civil Engineers

2142.0900**Civil Engineer, Public Health**

Civil Engineer, Public Health plans, organizes and supervises installing of water supply, pipelines and accessories and construction of drains, sewers and other sanitary workers in Municipal Corporation, township or specified area(s). Visits site to conduct topographical survey with assistance of Surveyor to collect necessary information such as source of water, drains, localities, and villages etc. in route. Designs and prepares drawings and estimates of project ensuring scope for future development. Arranges for labour, machinery and materials. Starts digging of respective areas for drainage or embedment of pipes under their personal or authorised supervision. Gets culverts, sewers, sewage plants, pump houses, cannels, and reservoirs etc. constructed. Ensures correct execution of work according to specifications at every stage of progress. Checks at site, measurements taken by Overseer for preparation and payment of bills. May undertake removal of silt, construction of approach road etc., if required. May invite tenders and award work to Contractors.

ISCO 08 Unit Group Details:

Code 2142

Title Civil Engineers

2142.0901**Public Health System Design Engineer**

Public Health Systems Design Engineer is responsible for design of public health systems in a/city or township.

Qualification Pack Details:

QP NOS Reference PSC/Q0206

QP NOS Name Public Health
System Design
Engineer

NSQF Level 8

ISCO 08 Unit Group Details:

Code 2142

Title Civil Engineers

2142.1000**Engineer, Waterworks**

Engineer, Waterworks plans and directs activities concerned with water utility systems installation, operation, maintenance, and service. Directs activities of Engineers engaged in preparing designs and plans to construct, enlarge, and modify such facilities as water treatment plants, watersheds, and dams, hydroelectric stations, pumping stations, and to install water mains, and other appurtenances. Provides engineering and technical direction for planning and designing of water utility projects. Reviews plans and specifications prior to instituting projects to ensure that they meet organizational requirements. Analyses and compiles data received from engineers to prepare budget estimates. Directs and co-ordinates with engineers in conducting studies, such as economics of systems operation, water distribution, and water treatment plants or relative equipment performance to determine most feasible approach to overcome organizational and technical problems. Confers with municipal authorities concerning budget requirements, changes in organizational policies, regulation of

water rates and plumbing requirements or other problems affecting the community.

ISCO 08 Unit Group Details:

Code 2142

Title Civil Engineers

2142.1001

Ground Water Engineer

Groundwater Engineer is responsible for designing groundwater extracting and recharging systems such as bore wells, etc. in a region.

Qualification Pack Details:

QP NOS Reference PSC/Q0202

QP NOS Name Ground Water
Engineer

NSQF Level 7

ISCO 08 Unit Group Details:

Code 2142

Title Civil Engineers

2142.1002

Waste Water Systems Design Engineer

Wastewater Systems Design Engineer is responsible for design of wastewater/or sewerage systems of a city, township or large housing/commercial/institutional setups.

Qualification Pack Details:

QP NOS Reference PSC/Q0207

QP NOS Name Waste Water
Systems Design

NSQF Level 8

ISCO 08 Unit Group Details:

Code 2142

Title Civil Engineers

2142.9900

Civil Engineers, other

Civil Engineers, Other specialize in designing, constructing and maintaining other civil engineering works such as those engaged in designing and constructing docks, harbours, light houses, aerodromes, runways, etc. and include those specialists not elsewhere classified.

ISCO 08 Unit Group Details:

Code 2142

Title Civil Engineers

Family 2143

Environmental Engineers

Environmental Engineers conduct research, advise on design and direct implementation of solutions to prevent, control or remedy of negative impacts of human activity on the environment utilizing a variety of engineering disciplines. They conduct environmental assessments of construction and civil engineering projects and apply engineering principles for pollution control, recycling and waste disposal.

2143.0100

Solar Energy System Designer

Solar-Energy-Systems Designer designs solar domestic hot water and space heating systems for new and existing structures, applying knowledge of energy requirements of structure, local climatological conditions, solar technology, and thermodynamics. Estimates energy requirements of new or existing structures, based on analysis of utility bills of structure, calculations of thermal efficiency of structure, and

prevailing climatic conditions. Determines type of solar power system, such as water, glycol, or silicone, which functions most efficiently under prevailing climatic conditions. Calculates on-site heat generating capacity of different solar panels to determine optimum size and type of panels which meet the structure's energy requirements. Arranges location of solar power system components, such as panel, pumps, and storage tanks, to minimize length and number of direction changes in pipes and reconstruction of existing structures. Studies engineering tables to determine size of pipes and pumps required to maintain specified flow rate through solar panels. Specifies types of electrical controls, such as differential thermostat, temperature sensors, and solenoid valves, compatible with other system components, using knowledge of control systems. Completes parts list, specifying components of system. Draws wiring, piping, and other diagrams, using drafting tools. May inspect structures to compile data used in solar system design, such as the structure's angle of alignment with sun and temperature of incoming cold water. May inspect construction of system to ensure adherence to design specifications.

ISCO 08 Unit Group Details:

Code	2143
Title	Environmental Engineers

2143.0200

Bio-Medical Engineer

Biomedical Engineer conducts research on biological aspects of humans or other animals to develop new theories and facts, or test, prove, or modify known theories of life systems, to design life-support apparatus, utilising principles of engineering and bio-behavioural sciences.

Plans and conducts research concerning behavioural, biological, psychological, or other life systems. Studies engineering aspects of bio-behavioural systems of humans, utilising knowledge of electrical, mechanical, chemical, or other engineering principles and knowledge of human anatomy and physiology. Develops mathematical models to simulate human bio-behavioural systems in order to obtain data for measuring or controlling life processes, utilising knowledge of computer, graphics, and other related technologies. Designs and develops instruments and devices, such as artificial organs, cardiac pacemakers, or ultrasonic imaging devices, capable of assisting medical or other health-care personnel in observing, repairing, or treating physical ailments or deformities, using knowledge of materials compatible with body tissues, energy exchanges within the body, and instrumentation capable of measuring and controlling body functions. May specialize in design and development of biomedical equipment used by medical faculties and be known as Clinical Engineer.

ISCO 08 Unit Group Details:

Code	2143
Title	Environmental Engineers

2143.0300

Radiation Protection Engineer

Radiation-Protection Engineer supervises and co-ordinates activities of workers engaged in monitoring radiation levels and condition of equipment used to generate nuclear energy to ensure safe operation of plant facilities. Evaluates water chemical analysis data in primary and supportive plant systems to determine compliance with radiation content and corrosion control regulations. Investigates problems, such as radioactive

leaks in reactors and auxiliary systems, or excessive radiation or corrosion of equipment, applying knowledge of radiation protection techniques and principles of chemistry and engineering to correct conditions. Confers with departmental supervisors, manufacturing representatives, and regulatory agency staff to discuss problems, to develop tests to detect radioactive leaks, and to design plans in order to monitor equipment and safety programmes. Directs workers in testing and analysing water samples and monitoring processing systems. Prepares reports, such as environmental monitoring operation report, radioactive waste releases, and shipping reports for review by administrative personnel and submission to regulatory agencies. May prepare employee performance reviews and related reports.

ISCO 08 Unit Group Details:

Code	2143
Title	Environmental Engineers

2143.0400

Waste Management Engineer, Radioactive Materials

Waste-Management Radioactive Materials Engineer, designs, implements, and tests systems and procedures to reduce volume and disposal of nuclear waste materials and contaminated objects. Identifies objects contaminated by exposure to radiation, such as trash, workers' clothing, and discarded tools and equipment. Analyses samples of sludge and liquid effluents resulting from operation of nuclear reactors to determine level of radioactivity in substances and potential for retention of radioactivity, using radioactivity counters and chemical and electronic analysers. Refers to state and

federal regulations and technical manuals to determine disposal methods recommended for prevention of leakage or absorption of radioactive waste. Compares costs of transporting waste to designated nuclear waste disposal sites and reducing volume of waste and storing waste in the plant site. Confers with equipment manufacturers' representatives and plant's technical and management personnel to discuss alternatives and to choose most suitable plan on the basis of safety, efficiency, and cost-effectiveness. Designs and draws plans for systems to reduce volume of waste by solidification, compaction, or incineration. Oversees construction, testing, and implementation of waste disposal systems, and resolves operational problems. Develops plans for modification of operating procedures to reduce volume and radioactive level of effluents, and writes manuals to instruct workers on changes in work procedures. Advises management on selection of land suitable for use as nuclear waste disposal sites and on establishment of effective safety, operating, and closure procedures.

ISCO 08 Unit Group Details:

Code	2143
Title	Environmental Engineers

2143.0500

Pollution Control Engineer

Pollution-Control Engineer plans and conducts engineering studies to analyse and evaluate pollution problems, methods of pollution control and methods of testing pollution sources to determine physiochemical nature and concentration of contaminants. Reviews data collected from pollution emission sources. Performs engineering calculations to determine pollution emissions from various industrial

sources and to evaluate effectiveness of pollution control equipment. Reviews compliance schedules and inspection reports to ensure compliance with pollution control regulations. Recommends issuance or denial of permits for industries to construct or operate facilities. Advises enforcement personnel of noncompliance or unsatisfactory compliance with regulations. Develops or modifies techniques for monitoring pollution. Calibrates and adjusts pollution control monitors to ensure accurate functioning of instruments.

ISCO 08 Unit Group Details:

Code	2143
Title	Environmental Engineers

Family 2144 Mechanical Engineers

Mechanical Engineers conduct research; advise on design, and direct production of machines, aircraft, ships, machinery and industrial plant equipment and systems; advise on and direct their functioning, maintenance and repair; or study and advise on mechanical aspects of particular materials, products or processes.

2144.0100 Mechanical Engineer, General

Mechanical Engineer, General plans, designs and supervises installation, operation, production and maintenance of machines and equipment. Prepares drawings with specifications showing details of construction and directs installation of machinery and equipment. Studies performance of existing machinery and suggests improvements to obtain optimum efficiency. Supervises technical side of production. Inspects

work in the workshop at different stages of production to ensure maintenance of correct standards. Conducts method studies, time and motion studies and determines efficient and economical way of production. Directs repairs and maintenance of workshop tools, equipment and accessories to ensure efficient operation. Ensures safety measures and observance of factory laws and statutory provisions. Examines indents and directs checking of outgoing and incoming stores according to specifications. May specialize in manufacture and erection of oil engines, turbines, machines, tools, earth moving equipment, concrete mixers, etc. May teach in engineering institutions.

ISCO 08 Unit Group Details:

Code	2144
Title	Mechanical Engineers

2144.0101 Process Design Engineer

Process Design Engineer needs to design, develop, and evaluate integrated systems for achieving QCD of the production process.

Qualification Pack Details:

QP NOS Reference	ASC/Q6404
QP NOS Name	Process Design Engineer L6
NSQF Level	6

ISCO 08 Unit Group Details:

Code	2144
Title	Mechanical Engineers

2144.0102 Process Try-out Engineer

Process Try-out Engineer needs to conduct process trials for achieving QCD of the production process

Qualification Pack Details:

QP NOS Reference	ASC/Q6406
QP NOS Name	Process Try-out Engineer L4
NSQF Level	4

ISCO 08 Unit Group Details:

Code	2144
Title	Mechanical Engineers

2144.0103
Process Try-out Technician

Process Try-out Technician needs to conduct process trials for achieving QCD of the production process

Qualification Pack Details:

QP NOS Reference	ASC/Q6409
QP NOS Name	Process Try-out Technician
NSQF Level	3

ISCO 08 Unit Group Details:

Code	2144
Title	Mechanical Engineers

2144.0104
Process Validation Executive

Process Validation Executive needs to validate the manufacturing processes by planning for the activity, conducting the trials for the new process and suggest modifications in order to improve the QCT targets.

Qualification Pack Details:

QP NOS Reference	ASC/Q6408
QP NOS Name	Process Validation Executive
NSQF Level	5

ISCO 08 Unit Group Details:

Code	2144
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Title	Mechanical Engineers
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2144.0105
Manager, Process Engineering

Manager, Process Engineering needs to develop and implement manufacturing processes by planning, conducting techno commercial feasibility analysis and procuring the facilities, tools, gauges and equipment required. They are also responsible for process review of new processes and suggest modifications in order to improve the QCT targets.

Qualification Pack Details:

QP NOS Reference	ASC/Q6407
QP NOS Name	Manager, Process Engineering
NSQF Level	7

ISCO 08 Unit Group Details:

Code	2144
Title	Mechanical Engineers

2144.0106
Manager-Product Lifecycle Management

Manager-Product Lifecycle Management needs to understand and manage the information flow pertaining to lifecycle of different products from the R&D department of the organization.

Qualification Pack Details:

QP NOS Reference	ASC/Q6505
QP NOS Name	Manager-Product Lifecycle Management
NSQF Level	6
	6

ISCO 08 Unit Group Details:

Code	2144
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Title Mechanical Engineers

2144.0200

Designer, Machine

Designer, Machine; Mechanical Engineer, Designs; Machine Designer plans and designs various types of machines, tools and equipment for manufacture or experiment. Studies details and performance of existing machinery. Examines manufacturing process, production cost, wastage, etc. for preparing improved designs. Calculates data and develops new designs of machines, tools and equipment involving manufacture, repairs, replacement or modification to effect improvement. Prepares sketches, drawings etc. showing new features, dimensions, specifications, working details, limits (accuracy) and all other necessary information for accurate, easy and economical production. Advices party and management on various technical (Mechanical) problems with regard to construction, erection and installation of machinery, production methods, alteration and modification of machines, tools and equipment purchase of plants and materials, machine and building lay out, etc. May prepare designs for submitting tenders for machines and equipment. May specialize in preparing a design of a particular type of machinery in any specific industry.

ISCO 08 Unit Group Details:

Code 2144

Title Mechanical Engineers

2144.0201

Designer-Mechanical

Designer-Mechanical understands the customer's requirement with respect to the mechanical engineering equipment.

Establishes a design brief, further allocate responsibilities and resources to each activity, and ensures that the designing process is completed within agreed deadlines complying with all relevant regulations, identifying design options, evaluation of design options and their presentation in suitable formats, creating detailed designs and models using 2D and 3D software for design and obtaining design validations from production and maintenance considerations.

Qualification Pack Details:

QP NOS Reference CSC/Q0405

QP NOS Name Designer-
 Mechanical

NSQF Level 6

ISCO 08 Unit Group Details:

Code 2144

Title Mechanical Engineers

2144.0300

Tool Engineer

Tool Engineer; Tool Designer; Mechanical Engineer, Tools designs and supervises manufacture of tools, jigs, fixtures, gauges, cutters and other mechanical equipment and get those already used and reconditioned, if possible, for further use. Studies production methods, feed and speed of tools and machines used, required hardness and finish of products prescribed and standard of accuracy desired. Calculates size of tools from drawings or samples. Determines materials, tools and machines to be used, hardness and tempering temperatures etc. Prepares sketches or drawings with complete specifications, accuracy required and relevant instructions for manufacture. Observes work and checks it at different stages of production such as machining, feeling, hardening, tempering, grinding,

lapping etc. with precision instruments such as micrometres, Vernier, slip gauges, sine-bar shadow-graph, hardness testing machine etc. to ensure that work is being done to required accuracy. Inspects finished product, observes performance to ensure required accuracy and certifies conformity to precision standards. Examines used tools, gauges, fixers, cutters etc., determines if they can be further used with prescribed accuracy by minor repairs, such as for replacement of component, hardening, tipping (brazing or welding required type of steel cutting edge on tool) etc. and gets them reconditioned, if possible. May check tools and cutters periodically and ensure their proper maintenance. May specialize in designing particular type of tools such as press-tools, form cutters, hammer dies etc.

ISCO 08 Unit Group Details:

Code	2144
Title	Mechanical Engineers

2144.0301 Equipment Designer

Equipment Designer is also known as Tool Designer. Individuals at this job need to design details of the equipment mechanisms, fixtures, tools, gauges and other instruments for manufacturing and measuring the quality standards of the production process.

Qualification Pack Details:

QP NOS Reference	ASC/Q6405
QP NOS Name	Equipment Designer
	L5
NSQF Level	5

ISCO 08 Unit Group Details:

Code	2144
Title	Mechanical Engineers

2144.0401

Mechanical Engineer, Production

Mechanical Engineer, Production; Production Engineer, Mechanical plans processes and directs manufacture of products by efficient methods at economical cost and according to time schedule. Studies drawings or blue-prints to ascertain various specifications of products to be manufactured. Plans manufacture, sequence of operations and machines to be used according to work load. Maintains loading (work load) figures of all machines and ensures that loads are balanced and within prescribed capacity of the plant and equipment. Considers estimated cost, devises time saving and economical method of production. Checks work by sight and with measuring instruments at different stages of production, or supervises Viewers in this activity to ensure conformity with prescribed standards and tolerances (limits). Arranges collection and storing of manufactured articles, rejected components and cut pieces for reuse or sale as appropriate. Issues work orders to different shops (sections) and follows progress and production control system to time schedule. Devises alternative methods of production in case of breakdown or other delay. Advises Maintenance Engineer regarding repairs and overhauling of machines when required or according to schedule. May specialize in production of particular type of product. May advise Tool Engineer to change design of tool to suit production requirements. May specialize in process planning and be designated as Process Engineer.

Qualification Pack Details:

QP NOS Reference	ASC/Q5103
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QP NOS Name	Product Conceptualization Manager
NSQF Level	7

ISCO 08 Unit Group Details:

Code	2144
Title	Mechanical Engineers

2144.0402**Product Conceptualization Engineer**

Product Conceptualization Engineer is responsible for broad level idea generation, collecting data for performing sensitivity, trend, economic etc. analysis. Collating information for conducting internal and external benchmarking, supporting the Product Conceptualization Manager in creation of SQFD, understanding regulatory environment and also further supports in assimilation of Cross Functional Teams

Qualification Pack Details:

QP	NOS	Reference
ASC/Q5101		

QP NOS Name	Product Conceptualization Engineer
NSQF Level	6

ISCO 08 Unit Group Details:

Code	2144
Title	Mechanical Engineers

2144.0403**Production Engineer**

Production Engineers apply their skills and knowledge at a specialist level. The range of production processes could include manufacturing operations, such as machining, fabrication, welding, material finishing or manufacture, assembly,

joining or other activities, such as performance and process improvement.

Qualification Pack Details:

QP NOS Reference	CSC/Q1201
QP NOS Name	Production Engineer
NSQF Level	5

ISCO 08 Unit Group Details:

Code	2144
Title	Mechanical Engineers

2144.0500**Mechanical Engineer, Structural**

Mechanical Engineer, Structural; Structural Engineer plans, designs and supervises construction and erection of steel structures. Prepares tentative plans, sketches and diagrams of structures to be erected giving details of steel or metal parts to be used, elevation to be given etc. Visits site of construction to familiarize with conditions and problems involved. Decides type of materials to be used, size of structures required, load requirements, etc. Designs structure and prepares final drawings indicating size, shape, strength and type of materials required. Supervises construction of structures and renders spot advice while foundations are dug or during construction. Conducts tests on strength of materials, physical and chemical properties of metals used, etc. Inspects existing structures and devises suitable measures for repairs and replacements of worn out or defective parts. May specialize in designing and erection of ship structure, steel bridges, multi-storeyed buildings, trusses, water tanks, etc.

Qualification Pack Details:

QP NOS Reference	
QP NOS Name	
NSQF Level	

ISCO 08 Unit Group Details:**Code 2144**

Title Mechanical Engineers

2144.0600**Mechanical Engineer, Maintenance**

Mechanical Engineer, Maintenance plans repairs, undertakes overhauling of machines and equipment and maintains them in proper working order. Observes working of machines and equipment to determine their capacity and maximum efficiency. Plans and draws up programme of running repairs and periodic overhauling of machines, plants and equipment avoiding disruption to work schedule as far as possible. Prepares maintenance instruction charts indicating special care and precautions to be taken during servicing and overhauling work, particularly of machines meant for precision work. Ensures that all moving parts of machinery are properly oiled and greased. Undertakes periodical inspection of plants, machinery, equipment, belting, etc., recommends repairs or replacements as necessary and condemns unserviceable ones. Supervises maintenance team and Mill Wright Fitters and enforces placing of covers, guards, fencing, etc. for safety as prescribed by factory laws. Checks repaired under overhauled plants and machinery to ensure correct performance, efficiency and accuracy and certifies them as fit for operation. Attends to breakdowns, undertakes immediate repairs or makes alternative arrangements, as appropriate, to avoid hindrance to production as far as possible. May install and erect new machines.

Qualification Pack Details:

QP NOS Reference

QP NOS Name

NSQF Level

ISCO 08 Unit Group Details:

Code 2144

Title Mechanical Engineers

2144.0601**Service Engineer-Breakdown Service**

Service Engineer-Breakdown Service deliver breakdown service for a range of mechanical equipment. It also involves identifying customer requirements, decision making on the need for repair, replacement or modification, communication with the customer on the course of action required, applying maintenance engineering techniques to equipment or component modification or repair, planning for spares based on probability of failure/wear and tear and criticality of the component/machine for production and carrying out Root Cause Analysis for repeated/long breakdowns to find out a permanent solution.

Qualification Pack Details:

QP NOS Reference CSC/Q0503

QP NOS Name Service Engineer-Breakdown Service

NSQF Level 5

ISCO 08 Unit Group Details:

Code 2144

Title Mechanical Engineers

2144.0700**Mechanical Engineer, Automobile**

Mechanical Engineer, Automobile; Automobile Engineer designs new models and plans manufacture and repairs of cars, trucks and other motor vehicles. Studies performance of different type and models of automobiles and designs new models or types of vehicles by application of engineering data, formulae and

principles of heat engines and thermodynamics to give better performance, appearance and durability according to current demand in market or customers' needs. Plans manufacture or repairs, prepares estimates and makes arrangement of supply of necessary spares. Supervises assembly or repair work, arranges necessary modifications and replacements of parts, gets tuning and adjustments done and checks completed vehicle for efficiency and roadworthiness. May specialize in designing or repairs of particular types of petrol or diesel vehicle. May undertake motorcycle and scooter repairs. May be designated as Service Engineer, Service Manager or Works Manager if placed as in charge of motor transport workshop.

Qualification Pack Details:

QP NOS Reference

QP NOS Name

NSQF Level

ISCO 08 Unit Group Details:

Code 2144

Title Mechanical Engineers

2144.0701

Prototyping Engineer

Prototyping Engineer ensures that assembly line fitters are assembling the prototype electrical and mechanical components as per the New Product requirement and the machine shop/casting shop/forging shop are preparing various aggregates through different machining operations

Qualification Pack Details:

QP NOS Reference ASC/Q8301

QP NOS Name Prototyping

Engineer

NSQF Level 6

ISCO 08 Unit Group Details:

Code 2144

Title Mechanical Engineers

2144.0800

Automobile Designer

Automobile Designer designs and drafts working layouts and master drawings of automobile components, assemblies, and systems from specifications, sketches, models, prototype or verbal instructions, applying knowledge of automotive vehicle design, engineering principles, manufacturing processes and limitations, and conventional and computer drafting techniques and procedures, using drafting instruments and computerised work aids. Analyses specifications, sketches, engineering drawings, ideas and related design data to determine critical factors affecting design of components based on knowledge of previous designs and manufacturing processes and limitations. Draws rough sketches and performs mathematical computations to develop design and work out detailed specifications of components. Applies knowledge of mathematical formulas and physical laws and uses conventional and computerized work aids to make calculations. Performs preliminary and advanced work in development of working layouts and final master drawings adequate for detailing parts and units of design. Makes revisions to size, shape and arrangement of parts to create practical designs. Confers with AUTOMOBILE ENGINEER and others on staff to resolve design problems. Specializes in design of specific type of body or chassis components, assemblies or systems, such as door panels, chassis frame and supports, or braking system.

Qualification Pack Details:

QP NOS Reference
QP NOS Name
NSQF Level

ISCO 08 Unit Group Details:

Code 2144
Title Mechanical Engineers

2144.0801

Product Design Engineer

Product Design Engineer. The role is largely responsible for understanding the product requirements and all inputs fixed by the product conceptualization team. Supports in fixing the necessary specifications of product design through use of CAD & CAE systems. The role is further responsible for transformation of functional architecture to physical architecture keeping in view FMEA indicators, telematics, human machine interface, ergonomics, parameters for reliability and validity etc. PLM Product Design Engineer is broadly responsible designing the product using CAD & CAE systems by understanding all the product requirements. The role is also responsible for supporting the manager in ensuring that the designed product includes aspects related to telematics, human machine interface, ergonomics and design FMEA.

Qualification Pack Details:

QP NOS Reference ASC/Q8103
QP NOS Name Product Design Manager
NSQF Level 7

ISCO 08 Unit Group Details:

Code 2144
Title Mechanical Engineers

2144.0802

Modeller

Modeller is broadly responsible for visualization of the final product; develop clay model from the design, transforming the sketch into digital data i.e., three dimensional shape and building mock-up which is as close as possible to the real object. A modeller's working characteristics include rapid generation of styling ideas, flexibility in combining existing alternatives and creating aesthetically appealing representations.

Qualification Pack Details:

QP NOS Reference ASC/Q8101
QP NOS Name Modeller
NSQF Level 6

ISCO 08 Unit Group Details:

Code 2144
Title Mechanical Engineers

2144.0803

Product Design Engineer

Product Design Engineer is broadly responsible for designing the product using CAD & CAE systems by understanding all the product requirements. The role is also responsible for supporting the manager in ensuring that the designed product includes aspects related to telematics, human machine interface, ergonomics and design FMEA

Qualification Pack Details:

QP NOS Reference ASC/Q8102
QP NOS Name Product Design Engineer
NSQF Level 6

ISCO 08 Unit Group Details:

Code 2144
Title Mechanical Engineers

2144.0804

Prototyping Manager

Prototyping Manager needs to stay abreast of technology advancements in CAD/CAM/CAE hardware and software, constantly striving to apply technology which will help to reduce development lead times. He also needs to work with the Managers of Engineering and Testing to evaluate and recommend improvements to the product development process in accordance with corporate market.

Qualification Pack Details:

QP NOS Reference	ASC/Q8302
QP NOS Name	Prototyping Manager
NSQF Level	7

ISCO 08 Unit Group Details:

Code	2144
Title	Mechanical Engineers

2144.0900

Mechanical Engineer, Aeronautical

Mechanical Engineer, Aeronautical; Aircraft Maintenance Engineer develops and modifies designs of aircraft structural and missile systems and maintains their air-worthiness. Analyses comprehensive or incomplete engineering sketches, drawings and notes to evaluate manufacturing and functional practicability of proposed design. Draws preliminary sketches and applies mathematical formulae, physical laws and fundamental aerodynamics theory to develop detailed drawings and specifications of structures or systems such as rib assemblies, struts, landing gear, weight, strength etc. Designs components to be cast or machined from metal stock. Selects standard components such as gears, motors, relays etc. for incorporation in drawing and drafts

complete layout drawings. Compiles stress analysis data resulting from testing of experimental component and prepares reports, charts and graphs for use by engineering personnel in making design decisions. Inspects various units and components of aircraft such as engine, airframe, landing gear, electrical system, various instruments, generator, starters, auto-pilot mechanism etc. before and after flight according to chart and gets necessary repairs, replacement and adjustments done by respective aircraft mechanics. Issues daily certificate of safety for flight after checking and ensuring airworthiness and signals Pilot for taking off. May specialize in aero-engine or airframe and conduct their overhaul. May conduct air crash enquiries to find out cause of crash and suggest remedial measures.

ISCO 08 Unit Group Details:

Code	2144
Title	Mechanical Engineers

2144.1000

Mechanical Engineer, Marine

Mechanical Engineer, Marine; Marine Engineer plans, designs and supervises construction and erection of all mechanical equipment of ships, boats, tugs, dredgers etc., installs and maintains motors, engines, boilers and auxiliaries and carries out their periodic overhaul. Inspects ships and other marine vessels to assess type and nature of repairs required, prepares estimate of costs and seeks approval from the owner. Examines and approves parts, equipment and materials to be used for additional work or replacement of worn parts and draws programme of work to be done. Supervises and controls subordinates attending to repairs on erection work.

Watches performance and ensures efficiency of mechanical equipment fitted to ships. May devise new or effect improvement in existing equipment. May specialize in erection and installation of electric motors or special heating and ventilating system of ships.

Qualification Pack Details:

QP NOS Reference

QP NOS Name

NSQF Level

ISCO 08 Unit Group Details:

Code 2144

Title Mechanical Engineers

2144.1100

Architect, Naval

Architect Naval designs and oversees construction and repair of marine craft and floating structures. Studies design proposals and specifications to establish basic characteristics of craft, such as size, weight, speed, propulsion, armament, cargo, displacement, draft, crew and passenger compliments, and fresh or salt water service. Supervises construction and testing of prototype in model basin and develops sectional and water line curves of hull to establish centre of gravity, ideal hull form and buoyancy and stability data. Designs complete hull and superstructure according to specifications and tests data, in conformity with standards of safety, efficiency and economy. Designs layout of craft interior including cargo space, passenger compartments, ladder wells and elevators. Confers with Marine Engineer to establish arrangements of boiler room equipment and propulsion machinery, heating and ventilating systems, refrigeration equipment, piping, and other functional equipment. May be known as Architect Marine; Naval Designer.

NATIONAL CLASSIFICATION OF OCCUPATIONS

ISCO 08 Unit Group Details:

Code 2144

Title Mechanical Engineers

2144.1200

Mechanical Engineer, Air-Conditioning

Mechanical Engineer, Air Conditioning; Mechanical Engineer, Refrigeration; Refrigeration Engineer designs, assembles, installs and maintains air conditioning, refrigerating or ventilating plants and accessories in buildings, mills, storage rooms, mines, etc., for obtaining and maintaining required degree of temperature, relative humidity and air motion, or for exhaust and supply of fresh air. Surveys premises or rooms for installation of equipment. Works out technical details of erection of machinery, alteration of existing structures etc., prepares estimate of costs and gets it approved. Installs unit or machinery by assembling various parts like refrigerant pressure pipe, refrigerant condensers, compressors, etc. by welding chilled water piping, setting thermal insulation, connecting pipe for supply of water, etc. Ensures that the premise or room is airtight so that cooled air does not escape and that meters indicating pressure, temperature, etc. record correct readings. Ensures that various electric motors, pumps, steam boilers and ammonia and Freon compressor units work satisfactorily. Tests temperature and humidity controls (electric and pneumatic type). Records temperature produced by machines and makes necessary settings and adjustments to produce desired temperature. Supervises work of mechanics engaged in repairing and

overhauling of refrigeration machines and other accessories. May specialize in a particular branch of refrigeration or air conditioning.

ISCO 08 Unit Group Details:

Code	2144
Title	Mechanical Engineers

2144.1301

Layout Engineer

Layout Engineer needs to design, develop and implement the integrated facility layouts for the organization by planning and positioning employees, materials, machines, equipment, and other manufacturing supports and facilities for minimization of waste and material handling cost; thereby providing smooth flow of work, material, and information throughout the organization

Qualification Pack Details:

QP NOS Reference	ASC/Q6403
QP NOS Name	Layout Engineer
	Level 5

ISCO 08 Unit Group Details:

Code	2144
Title	Mechanical Engineers

2144.1302

Industrial Engineer (Workstation Design)

Industrial Engineer (Workstation Design) needs to design develop and implement the layout of the workstations used for manufacturing processes by positioning the tools, equipment and manpower along with the alignment of

material flow accordingly in order to minimize both human and machine movement and ensure optimal efficiency of the human-machine combination.

Qualification Pack Details:

QP NOS Reference	ASC/Q6402
QP NOS Name	Industrial Engineer (Workstation Design)
NSQF Level	4

ISCO 08 Unit Group Details:

Code	2144
Title	Mechanical Engineers

2144.1401

Service Engineer-Installation

Service Engineer-Installation job involves technical ability to understand various machine/foundation drawings, surveying the site, checking of foundation wherever required, facilitating foundation load tests if required, taking necessary clearances organizing the movement of equipment to be installed, including safe unloading of machine parts near the site, and performing the levelling, aligning and coupling the connection of sub-assemblies, and the alignment and connection to external units, such as power supplies, hydraulic and pneumatic assemblies, etc. Carrying out tests (wherever required) as per standards prescribed.

Qualification Pack Details:

QP NOS Reference	CSC/Q0501
QP NOS Name	Service Engineer-Installation
NSQF Level	4

ISCO 08 Unit Group Details:

Code	2144
Title	Mechanical Engineers

2144.1402**Service Engineer-Installation and Commissioning**

Service Engineer-Installation and Commissioning job involves obtaining clearance to carry out the commissioning activities, running equipment at reduced power and speed/flow to check for leaks, etc. and checking for correct functioning, loading incrementally, making dry runs, making the machine ready for actual job prove out and making any necessary adjustments to achieve the specification parameters.

Qualification Pack Details:

QP NOS Reference	CSC/Q0502
QP NOS Name	Service Engineer – Installation and Commissioning
NSQF Level	4

ISCO 08 Unit Group Details:

Code	2144
Title	Mechanical Engineers

2144.9900**Mechanical Engineers, Other**

Mechanical Engineers, Other include all other Mechanical Engineers, such as those engaged in research, testing of equipment, rendering technical advice or mechanical engineering problems, such as installing machine foundations, erecting structural steel, transportation facilities etc. not elsewhere classified.

ISCO 08 Unit Group Details:

Code	2144
Title	Mechanical Engineers

Family 2145**Chemical Engineers**

Chemical Engineers conduct research and develop advice and direct commercial-scale chemical processes and production of various substances and items, such as crude oil, petroleum derivatives, food and drinks, medicines, or synthetic materials. They direct maintenance and repair of chemical plants and equipment and study and advise on chemical aspects of particular materials, products or processes.

2145.0100**Chemical Engineer, General**

Chemical Engineer, General; Process Engineer, Chemical Engineering directs and supervises operations of chemical plants and equipment for dissolving, filtration, evaporation, dehydration, reduction, concentration, combination, crystallization, and all other unit operations for manufacture of heavy chemicals, fine chemicals, etc., according to specifications. Studies existing processes or equipment used, their efficiency and production level. Conducts research into principles of chemistry, physics, thermodynamics etc., to develop new process and to improve design of equipment for increasing efficiency of production. Directs and supervises operations, dehydration, reduction, concentration, combination, crystallization, etc. for manufacture of heavy chemicals, fine chemicals according to specifications. Supervises installation of equipment for production on commercial scale. Studies chemical characteristics of chemicals or chemical products, such as acids, rayon and dyes developed in the laboratory and devises processes and equipment for their manufacture. Designs, constructs and studies operation of pilot plants to test efficiency of process before construction of full-size

equipment. Plans layout of plants to obtain maximum operating efficiency and supervises installation of equipment. Supervises and co-ordinates activities of workers, operating grinders, mixers, vats, stills reactors and other equipment to ensure efficient treatment of raw materials by chemical, mechanical and other means. May specialize in a particular phase of chemical engineering, such as supervision of construction or operation of plants and works and be designated accordingly.

ISCO 08 Unit Group Details:

Code 2145
Title Chemical Engineers

2145.0200

Designer, Chemical Engineering

Designer, Chemical Engineering designs and plans lay-out and supervises installation of chemical plants and equipment for manufacture of heavy and fine chemicals, paper pulps, cements rayon, oils, soaps, coke, coke oven by-products etc. Prepares plans, diagrams and sketches for new chemical plants to be erected. Prepares project reports, selects processes based on techno economic study; studies working of existing plants, production processes, economics of costs etc. Undertakes basic costing in relation to cost of products manufactured. Conducts research to develop new and improved chemical manufacturing processes or to obtain additional information in commercial production possibilities. Designs full size plant after determining the kind of equipment required and ascertaining optimum conditions and other essential factors. Estimates capital cost for installation of plants and cost of plant operation and co-ordinates activities of

workers operating grinders, mixers, vats, stills, reactors, evaporators and other equipment to ensure efficient treatment of raw materials by chemicals, mechanical and other means. Establishes and enforces standards for testing and inspecting machinery and equipment. Tenders technical service to maintain output or performance and equipment at a most favourable economic point. May draw out specifications for procuring equipment and machinery for specific duties. May inspect and supervise erection of plants. May specialize in any engineering field such as consulting, technical sales and service, testing, purchasing and teaching at the University level.

ISCO 08 Unit Group Details:

Code 2145
Title Chemical Engineers

2145.0300

Chemical Engineer, Paints and Varnish

Chemical Engineer Paints and Varnish develops new or improved techniques for manufacturing paint and varnish by various chemical processes. Selects raw materials for manufacture of paint or varnish and determines proportion of ingredient such as zinc oxide, baryte, colour pigments, natural resins, synthetic resins and solvents, linseed oil, etc., according to quality and type of paint, such as stiff paints, industrial paints, etc., to be manufactured. Tests viscosity, film, drying time, covering capacity, durability of paint under manufacture by applying it on surface of a wall or a metal sheet. Develops techniques for improved and economical productions. May advice and look after packing of paints and varnish. May indent and stock sufficient raw

materials to meet daily requirements. May work out cost of manufacture for new products. May be designated as Chemical Engineer, Dyes if engaged in manufacturing dyes.

ISCO 08 Unit Group Details:

Code 2145
Title Chemical Engineers

2145.0400 **Chemical Engineer, Drugs and Acids**

Chemical Engineer, Drugs and Acids develops new or improved techniques for manufacturing drugs and acids according to prescribed formulae. Studies details of products producing methods employed in existing processes or in laboratory. Undertakes process research to check details and to obtain additional information on possible improvements in process. Supervises installation of new equipment or alterations to existing equipment. Supervises and co-ordinates activities of workers operating grinders, mixers vats, stills, heaters, condensers and other equipment to ensure efficient treatment of raw materials by chemical, mechanical and other means. Checks and controls temperature, water feed, cooling limits etc., in the plant. Sends samples of products to laboratory to ensure required standard of product. Directs adjustments to plant according to results of laboratory tests or quality requirements. Develops new and improved processes at economic cost. Maintains equipment and machinery in perfect working condition and at optimum level of efficiency. May specialize in specific fields of manufacture of particular drugs and undertake research in such subjects. May teach students in chemical engineering.

ISCO 08 Unit Group Details:

Code 2145
Title Chemical Engineers

2145.0500 **Chemical Engineer, Petroleum**

Chemical Engineer, Petroleum; Petroleum Refining Engineer develops new or improved techniques for treatment and refining of petroleum, extracts by-products, designs and supervises construction, installation and operation of equipment, plant, and works for such refining. Conducts test runs and surveys refining equipment and plant operations. Works out material and energy balances as well as economic evaluation of balances. Prepares process designs, cost estimates, technical reports and records on operating and technical data. Observes and records day to day refining operating data for analysing plant performance and recommends measures to improve operating efficiency, reduce cost and increase production capacity. Checks product quality, deviation and follows up difficulties in blending, viscosity, vapour pressure and other specifications. Analyses all losses such as oil, fuel, gas, chemical, utilities and catalyst, deduction of flare gas etc., calculates material and energy balance for given refinery unit and decides or recommends product pattern after studying market requirements. Prepares drawings of process designs and other engineering drawings as required. May prepare process designs and assist in preparation of complete designs.

ISCO 08 Unit Group Details:

Code 2145
Title Chemical Engineers

2145.0600 **Chemical Engineer, Fertilizers**

Chemical Engineer, Fertilizers plans, designs and installs various types of chemical plants, equipment and machinery for manufacture of fertilizers. Prepares plans showing layout of plant equipment for manufacture of fertilizers. Supervises erection of plant and various ancillary machinery and equipment. Test-runs and surveys on equipment and plant operations and works out material and energy balance as well as economic evaluation of balances. Instructs subordinates in charging plant with prescribed quantity of raw materials like phosphates, bone meal, acids, etc. Controls pressure, temperature, acid feed, cooling limits etc. of plant and sends samples of finished or semi-finished product to chemist for analysis. Checks that bones are properly cooked, dried and ground to prescribed fineness. Develops new and improved processes at economic cost. Maintains plant and equipment at optimum level of efficiency. May prepare process designs and assist in preparation of complete designs. May design new equipment. May specialize in particular branch of manufacture of fertilizers. May undertake research and teach students in universities.

ISCO 08 Unit Group Details:

Code 2145
Title Chemical Engineers

2145.0700 **Chemical Engineer, Food**

Chemical Engineer, Food develops new or improved methods and techniques of food processing in manufacture of Vanaspati, dairy and other food products. Studies and checks details of products producing methods employed in existing process or in laboratory to obtain additional information on possible

improvements in process or in commercial production possibilities. Directs and supervises various processes to get maximum efficiency, consistent with quality and statutory obligations. Supervises installations of new equipment or alterations to existing equipment and co-ordinates activities of workers engaged in preparation of food material such as dairy products, baby-foods, dehydration of vegetables, canning of food, etc. May undertake process research or report to research division for proper investigation any inexplicable and exceptional phenomenon.

ISCO 08 Unit Group Details:

Code 2145
Title Chemical Engineers

2145.0800 **Technologist, Food/Chemical Engineer**

Technologist, Food devises new or improved technique for processing, conservation, preservation, utilisation and evaluation of content of new food stuffs generated from plant and animal life and suitable for human consumption and animal breed. Conducts research processes to create new foods, improves existing techniques to economise processing and also to impart better values and taste to food, such as cold storage of perishable, meat, fish, etc., canning, pickling, dehydration of fruits and vegetable etc. evolves measures, such as infestation control, fungicidal treatment and insecticidal storage to protect foods from spoilage and damage. Examines food stuff contamination, adulteration, food value, etc. by biochemical and nutrition tests and quality control measures. Develops through research, new methods and

processes for recovering useful and utilisable by-products from industrial and domestic wastes of food stuffs. May control and guide transformation process, such as blending, anti-oxidisation and microbiological and sanitary measures.

ISCO 08 Unit Group Details:

Code	2145
Title	Chemical Engineers

2145.0900

Technologist, Fuel

Technologist, Fuel analyses physical and chemical properties of fuels (solid, liquid and gaseous) in laboratories and plants, and develops improved processes and techniques for optimum utilisation of their heating capacity. Undertakes coal surveys in field stations for quantitative and qualitative assessment of fuel resources. Determines wash ability characteristics, nature and utilisation potentialities of different kinds of fuel. Investigates properties of low-grade coals by experiments to determine their suitability for producing domestic and metallurgical coke required for recovery of by-products, like tar, gas etc. and extraction of chemicals from them by low-temperature carbonisation (heating in absence of air). Organizes and conducts experimental studies on high-temperature carbonisation in relation to optimum utilisation of superior coking coal, upgrading inferior coal, blending sub-standard coking coal with prime coking coal, adoption of improved iron and steel melting techniques, etc. for purposes of production of metallurgical coke and conservation of coking coal reserves. Determines briquetting potentialities of fine coal, coke dust and lignite and develops improved methods of briquetting, by experimental studies, for

their efficient utilisation as domestic fuel. Studies coal gasification by conducting tests on by-product fuels and inferior coal for evolving improved and purified process of manufacturing domestic and industrial gas and of utilising gas for synthesis of chemicals and oils, undertakes combustion studies in respect of by-products fuels, middling and rejects their utilisation in power generation for developing suitable small boiler pulverised coal burners and for developing economical combustion techniques. Determines nature of crude petroleum and related correlation indices for developing processes of upgrading kerosene fractions of crude, producing diesel oil from coal tar fractions and utilising surplus motor spirit production etc. Conducts investigations on recovery and utilisation of by-products like gas, tar, benzole and liquor for extraction of industrially useful chemicals and acids, and on conversion coal, coal dust and slacks and other colliery and washery rejects into soil conditioners and organic nitrogenous fertilizers. Undertakes studies on evolving methods of briquetting lignite, their carbonisation and preparation of coke from them, development of coil products from coal and other raw indigenous materials, improving, developing and standardizing methods of sampling, analysis and testing of coal, coke and other fuels, synthesis of liquid fuels like petroleum diesel, kerosene, etc. from coal by direct and indirect methods of hydrogenation, statistical analysis, and programming and survey of scientific and industrial data. Undertakes fundamental studies in different fields; designs high and low-pressure gas storage and distribution system, and appliances for utilizing fuel gas, of varying characteristics. May render technical assistance to industries and other agencies on problems of fuel, and

specialize in particular kind of fuel: solid, liquid and gaseous fuel.

ISCO 08 Unit Group Details:

Code	2145
Title	Chemical Engineers

2145.1000

Oil Technologist

Oil Technologist conducts research to develop new or improves processes for manufacture of oil, soap, Vanaspati, paints, varnish, perfumes, essential oils and allied products etc. Studies physical and chemical properties of raw materials of oils, fats, oil products, e.g., oil seeds. Observes extraction of oil by machine under different conditions and devises methods, techniques and process for analysis and better results. Designs and fabricates chemical plants, tests refined oil and other by-products by chemical examination. Ensures that finished products like Vanaspati and other edibles conform to prescribed standards. Advises utilisation of by-products and waste products in manufacturing other commercial products like soap, scents, cylindering of oxygen, etc. and guides and supervises operation of plants and processes to improve rates of output, product quality etc.

ISCO 08 Unit Group Details:

Code	2145
Title	Chemical Engineers

2145.1100

Technologist, Paper

Technologist, Paper evolves and supervises chemical and technological processes for production of quality paper. Conducts research in laboratories for maximum utilisation of indigenous raw

materials and reduction of industrial wastage; evolves new production techniques and improves old ones for production of varieties of quality paper at economic and competitive cost. May supervise installation, operation and maintenance of machinery and equipment for production of paper.

ISCO 08 Unit Group Details:

Code	2145
Title	Chemical Engineers

2145.1200

Technologist, Alcohol

Technologist, Alcohol conducts research for manufacturing industrial and beverage alcohols, rectified spirits and by-products. Receives cultures of different varieties of yeast from distilleries, documents them into different varieties, tests them in laboratory, formulates results and sanctions its use by public. Conducts technical instruction of distilleries to maintain efficiency at high level. Keeps technical control on fermentation, grinding and distillation and advises distilleries and pharmacies in day to day technical problems. Advises excise department and Government on technical matters connected with fermentation industries. Inspects petrol mixing depots to examine their procedure for preparation of petrol mixture. Initiates research problems connected with fermentation industries and with properties of liquid fuels. Analyses products (intermediate and final) drawn by various excise inspectors and examines technical efficiency data furnished by various distilleries. Examines tools and equipment and premises periodically and considers cases for extension. Builds up researches for development purpose, recommends new application of alcohol

and suitable denaturants and preserves samples.

ISCO 08 Unit Group Details:

Code	2145
Title	Chemical Engineers

2145.1300

Technologist, Rubber

Technologist, Rubber develops production processes for manufacture of rubber products such as tyres, tubes, sports goods, rubber gloves and hot bags. Analyses physical and chemical properties of raw materials such as crude rubber, zinc oxide, acids, anti-oxidants, oil softeners, colour pigments, etc. and evolves formulae for mixing raw materials in different proportions for manufacturing different types of rubber products like tyres, tubes, industrial and domestic rubber goods etc. Conducts various tests in laboratory by mixing various chemicals with rubber compounds and studying their properties to determine new formulae of production processes. Tests rubber products at each process of production to ensure conformity to prescribed standards and improvement in quality. Develops new rubber compounds and processes. Examines finished products for quality, tensile strength, and hardness etc. using different machines. May design new machinery or equipment or make improvement in existing ones. May specialize in particular fields of rubber manufacturing.

ISCO 08 Unit Group Details:

Code	2145
Title	Chemical Engineers

2145.1400

Technologist, Plastics

Technologist, Plastics evolves, adopts and supervises various processes for manufacture of synthetic material, called plastics. Carries out research in laboratories to determine chemical composition and physical qualities of various raw materials and substances, such as coal, petroleum, wood, cotton, and evolves and adopts various processes, viz. comparison, heat moulding, lamination, calendaring, vacuum forming, fabrication, and spreading for production of synthetic materials called plastics. Tests finished products. May supervise and guide production processes in factories.

ISCO 08 Unit Group Details:

Code	2145
Title	Chemical Engineers

2145.9900

Chemical Engineers and Technologists, Other

Chemical Engineers and Technologists, Other include all other Chemical Engineers who specialize in designing and installing chemical plants, developing techniques of production processes, sales of plants and equipment and manufacture of bricks, pottery, glassware, plastics, paper, oil, fat, soaps, cosmetics, coal tar products, dye stuffs, etc. not elsewhere classified.

ISCO 08 Unit Group Details:

Code	2145
Title	Chemical Engineers

Family 2146

Mining Engineers, Metallurgists and Related Professionals

Mining Engineers, metallurgists and related professionals conduct research on and, design, develop and maintain

commercial-scale methods of extracting metals from their ores, or minerals, water, oil or gas from the earth and of developing new alloys, ceramic and other materials, or study and advise on mining or metallurgical aspects of particular materials, products or processes.

2146.0100

Mining Engineer, General

Mining Engineer, General plans, organizes and supervises work of extracting metallic and non-metallic minerals from earth and their treatment prior to direct use or further processing. Studies geological and topographical surveys to determine location, size, inclination, etc. of mineral deposits. Decides upon most effective and economic techniques to be used. Prepares working and development plans for mining operation including plans for roadways, railways and power supply. Supervises and co-ordinates various mining surveying and related operations such as preparation for entrance into mine by driving of shaft or otherwise, transport, ventilation, roofing by providing supports etc. and arranges storage of explosives, blasting, haulage, sampling of mined materials, sand stowing, valuing and related operations. Ensures safe extraction and efficient working. Supervises operations in treatment of minerals at mine or quarry such as washing, crushing and re-dressing. Enforces safety measures and checks unauthorised exploitation of minerals. Supervises rescue operations when required. Maintains records and statistical data and prepares reports for Government and other authorities. May advise Government regarding leasing of mineral properties and may collect rent and royalty from lessees. May undertake research in mining engineering. May be

known as Inspector of Mines; Mining Officer; Conservator, Mines; depending on specialisation.

ISCO 08 Unit Group Details:

Code 2146

Title Mining Engineers, Metallurgists and Related Professionals

2146.0200

Mining Engineer, Non-metals

Mining Engineer, Non-Metals plans, organizes and supervises extracting of stratified deposits of solid non-metal minerals like coal, fire clay, gypsum, mica, precious stones etc. from earth by various mining processes. Performs basic tasks similar to those of Mining Engineer, General but specializes in extraction of coal, stone clay, diamond and other solid non-metallic minerals by underground or surface operations and in their preliminary treatment such as washing, ore dressing, etc.

ISCO 08 Unit Group Details:

Code 2146

Title Mining Engineers, Metallurgists and Related Professionals

2146.0300

Mining Engineer, Metal

Mining Engineer, Metals plans, organizes and supervises extraction of metallic ores like gold, silver, copper, iron, manganese, etc. and their preliminary treatment for further processing; performs basic tasks similar to those of Mining Engineer, General but specializes in extraction of gold, silver, copper and other metallic minerals by underground or surface operations and in their preliminary treatment by crushing and other means.

ISCO 08 Unit Group Details:

Code 2146
 Title Mining Engineers, Metallurgists and Related Professionals

Engineer, Petroleum; Reservoir Engineer, Crude Oil; Mud Engineer, Petroleum according to attainments and experience gained.

2146.0400**Mining Engineer, Petroleum and Gas**

Mining Engineer, Petroleum and Gas plans, organizes and supervises work of extracting, storing and transporting petroleum and natural gas. Supervises geographical and geophysical surveys and studies earth samples and other data. Recommends appropriate techniques for drilling oil and gas wells, and for testing flow, pressure etc. of petroleum or gas. Advises on spacing and locating of wells, position and size of casing, location of cementing points, etc. Devises well completion methods on basis of test results and sub-surface engineering features. Calculates reserves of petroleum and gas by studying core and fluid samples. Recommends optimum production methods consistent with conservation practices and later exploitation of field. Utilises suitable surface and subsurface equipment and maintains it in working order. Treats well by various physical and chemical means to maintain production. Dehydrates oil by various physical and chemical processes. Formulates and controls compositions of drilling fluids and guards against contamination or lost circulation of oil or gas. Obtains core and subsurface sampling of reservoir fluids. Injects gas or fluids to maintain production pressure. Initiates and supervises regulations regarding safety and fire protection. Maintains accurate records of oil, gas and water production for engineering, royalty, tax and other purposes. May be known as Production Superintendent or Production

ISCO 08 Unit Group Details:

Code 2146
 Title Mining Engineers, Metallurgists and Related Professionals

2146.0500**Metallurgist, Extractive**

Metallurgist, Extractive; Production Metallurgist; Process Metallurgist plans, organizes and controls extraction of metals from ores, their conversion into industrially useful products and production of alloys. Analyses ore and determines methods of extraction of metals to be employed such as pyrometallurgy (dry method, carried on at elevated temperature in furnace), hydrometallurgy (wet method, dissolving ore in suitable solvent and then precipitating or depositing metal by suitable substance or electrolysis) or electrometallurgy (carried out at high temperature and tapping metal in fused condition) depending on type, quality and quantity of ore. Ensures maximum economic extraction of metal or alloy of best possible prescribed grade. Prescribes temperatures, proportions of ingredients and chemicals to be added, solvents to be used, voltage required and controls them at all stages of production. Supervises production, and controls all operations such as smelting, calcining, roasting, oxidising, flux, charging fusibility of compounds, distillation, precipitation, current, voltage, and deposition of metal. Analyses samples at regular intervals, records observations and makes needed adjustments according to furnace and bath (large lined metal trays) condition to

ensure that metal or alloy produced confirms to prescribed quality and quantity. May design and supervise construction or repairs of furnace, bath, etc. May test physical properties of metal or alloy produced for quality control and identify area of improvement.

ISCO 08 Unit Group Details:

Code 2146

Title Mining Engineers, Metallurgists and Related Professionals

2146.0501

Manager Heat

Treatment/Metallurgist

Manager Heat Treatment/Metallurgist is responsible for supervising the various heat treatment operations like Carburizing, Tempering, Nitriding, Induction Hardening and Quenching, maintaining process and output parameters viz. Temperature, cycle time, bath concentrations and hardness, strength, microstructure,, guiding operatives and technicians to complete the assigned task, maintaining a safe and healthy working environment and maintaining records related to production, rejections, material movement and manpower productivity for a line/shift.

Qualification Pack Details:

QP NOS Reference ASC/Q3903

QP NOS Name Manager Heat Treatment /Metallurgist

NSQF Level 6

ISCO 08 Unit Group Details:

Code 2144

Title Mechanical Engineers

2146.0600

Metallurgists, Adaptive

Metallurgist Adaptive; Metallurgist, Physical; Metallurgist, Mechanical investigates properties and treatment of metals and supervises production of basic metals and alloys. Conducts microscopic (both low and high magnification), spectroscopic, X-Ray, and other studies of metals and alloys to determine their physical characteristic such as crystalline structure, dispersion of alloy particles through basic metal and presence of impurities, fractures and other defects in metal samples. Develops techniques for rolling, alloying, casting, forging, drawing (metal drawing), spinning, die casting, welding, heat-treating etc. to obtain desired characteristics, such as ductility, malleability, elasticity, plasticity, toughness, hardness, strength, etc. Tests samples at different stages of production, adopting pressure and other suitable devices and apparatus to determine their compliance with prescribed standards. Undertakes designing of mills and assists Electrical and Mechanical Engineers in repairs and maintenance.

ISCO 08 Unit Group Details:

Code 2146

Title Mining Engineers, Metallurgists and Related Professionals

2146.9900

Mining Engineers, Metallurgists and Related Professionals, Other

Mining Engineers, Metallurgists and Related Professionals, Other include all other Mining Engineers and metallurgists, such as those engaged in developing new types of alloys, supervising construction and repair of metallurgical furnaces, testing physical properties of metals and alloys etc. and consultation for planning and extraction of mineral product,

conducting research in sampling of precious metals, fumes and ores etc. not elsewhere classified.

ISCO 08 Unit Group Details:

Code 2146

Title Mining Engineers, Metallurgists and Related Professionals

Family 2149 Engineering Professionals, Not Elsewhere Classified

This unit group covers Engineering Professionals not classified elsewhere in minor group 214, Engineering professionals (excluding electro-technology) or in minor group 215, Electro-technology Engineers. For instance, the group includes those who conduct research, advise on or develop engineering procedures and solutions concerning workplace safety, biomedical engineering, optics, materials, nuclear power generation and explosives.

2149.0100 Engineers and Related Technologists, other

Architects, Engineers and Related Technologists, Other include all other engineers and technologists, such as those engaged in proper utilisation of machine and manpower, safety devices and other industrial problems, research work in laboratories and application of results thereof to manufacture and solve practical problems, not elsewhere classified.

ISCO 08 Unit Group Details:

Code 2149

Title Engineering Professionals, n.e.c

Group 215

Electro-technology Engineers

Electro-technology Engineers conduct research and design, advise, plan and direct the construction and operation of electronic, electrical and telecommunications systems, components, motors, and equipment. They organize and establish control systems to monitor the performance and safety of electrical and electronic assemblies and systems.

Occupations in this Group are classified into the following Families:

2151 Electrical Engineers
2152 Electronics Engineers
2153 Telecommunication Engineers

Family 2151 Electrical Engineers

Electrical Engineers conduct research and advice on, design, and direct the construction and operation of electrical systems, components, motors and equipment, and advise on and direct their functioning, maintenance and repair, or study and advise on technological aspects of electrical engineering materials, products and processes.

2151.0100 Electrical Engineer, General

Electrical Engineer, General plans, designs and supervises manufacture, installation, testing, operation and maintenance of various types of electrical wiring, machinery and equipment. Plans layout of work and equipment and prepares or directs preparation of sketches, detailed drawings and writing diagrams. Specifies

method of construction materials to be used and standard of workmanship required. Prepares or checks estimates of cost of materials, construction, installation and labour charges. Supervises construction and installation or erection work and gives necessary technical advice at every stage of progress. Inspects completed work to ensure efficient operation according to prescribed specifications and safety standards. Directs repairs and maintenance of electrical apparatus and equipment. May specialize in designing and manufacturing of any particular item e.g., transformers, switchgears, simple electronic equipment, etc., other applications of electrical energy or in generation and transmission of electricity. May examine economical aspects of schemes to be undertaken. May be designated as Project Engineer, Electrical if engaged in electrical construction or installation project work.

ISCO 08 Unit Group Details:

Code	2151
Title	Electrical Engineers

2151.0200

Designer, Electrical Engineering

Designer, Electrical Engineering; Electrical Engineer, (Design) plans and designs various types of electrical plants and equipment using available research data. Prepares plans, diagrams and sketches of electrical plants and equipment for manufacture, indicating construction details, material specifications and production methods. Supervises production, tests and observes performance and designs additional or alterations to effect improvements or to suit particular requirements. Studies consumer's needs and develops design for manufacture of new devices and

products. Prepares detailed plant instructions and maintains manuals and diagrams illustrating operation details, circuits, connections, etc. Conducts research and experiments on efficiency, performance etc. of existing machines and equipment to effect improvement. May inspect assembly and installation of electrical equipment and machinery. May prepare designs and estimate cost of production for submitting tenders.

ISCO 08 Unit Group Details:

Code	2151
Title	Electrical Engineers
2151.0201	
Design Engineer	

Design Engineer assists on research and development of new products and systems and creates the initial drawings. The individual at work is responsible for assisting R&D Engineers in undertaking research on new products, and working with Systems Designer to create initial drawings.

Qualification Pack Details:

QP NOS Reference	ELE/Q8703
QP NOS Name	Design Engineer
NSQF Level	4

ISCO 08 Unit Group Details:

Code	2151
Title	Electrical Engineers

2151.0202

Electrical Design Developer

Electrical Design Developer also called, 'Design Engineer', Electrical Design Developer creates or modifies electrical system drawings of appliances for both new and existing products. The individual at work develops electrical system drawings based on new product or

modifications in modules of existing products. This drawing is then used for prototype development or by the production team to assemble the modified modules in the appliance.

Qualification Pack Details:

QP NOS Reference	ELE/Q3801
QP NOS Name	Electrical Design Developer
NSQF Level	4

ISCO 08 Unit Group Details:

Code	2151
Title	Electrical Engineers

2151.0300

Electrical Engineer, Generation and Supply

Electrical Engineer, Generation and Supply; Power House Superintendent, Mains Engineer; Maintenance Superintendent installs, operates and maintains power generating stations and power transmission and distribution systems. Calculates details and prepares sketches and drawings with necessary instructions for erection of power generating station, sub-station, transmission lines, etc., or gets them prepared under their guidance. Supervises assembly and erection of generation and transformer equipment. Surveys area to determine installation of power lines and directs erection of distribution lines to carry power to consumers. Attends to breakdowns and restores power supply within least possible time. Tests meters, transformers, relays and other sensitive instruments for calibration, accuracy and stipulated performance. Estimates unit cost of power production and calculates suitable tariff rates for supply of power to consumers and other supply authorities. Inspects premises having electrical

equipment and ensures compliance with statutory requirements. May invite tenders, compare them and suggest purchases to be made. May supervise construction of powerhouses and substations. May be designated as Generation Engineer, Distribution Engineer, Operation Engineer, etc. according to nature of work performed.

ISCO 08 Unit Group Details:

Code	2151
Title	Electrical Engineers

2151.0400

Illumination Engineer

Illumination Engineer designs and directs installation of illuminating equipment and systems for buildings, plants, streets, stadia, tunnels, and outdoor displays. Studies lighting requirements of clients to determine lighting equipment and arrangement of lamps that provide optimum illumination with economy of installation and operation. Designs lamps of required light intensity and output, light control reflectors and lenses and lamp arrangement required to meet illuminating standards. Plans and prepares drawings for installation of lighting system in accordance with clients' specifications and municipal codes. Directs installation of systems to ensure conformance with engineering specifications and compliance with electrical codes.

ISCO 08 Unit Group Details:

Code	2151
Title	Electrical Engineers

2151.0403

LED Light Design Engineer

LED Light Design Engineer is responsible for LED product conceptualization and

designing. The individual at work conducts research, designs and develops LED driver and light engine system to create final LED product prototype for production.

Qualification Pack Details:

QP NOS Reference	ELE/Q9101
QP NOS Name	LED Light Design Engineer
NSQF Level	5

ISCO 08 Unit Group Details:

Code	2151
Title	Electrical Engineers

2151.0404

LED Light Design Validation Engineer

LED Light Design Validation Engineer is responsible for verification testing of LED light product prototype created by LED light designer. The individual at work performs various tests on LED light product prototype for validating its design and performance as per pre-set parameters.

Qualification Pack Details:

QP NOS Reference	ELE/Q9102
QP NOS Name	LED Light Design Validation Engineer
NSQF Level	5

ISCO 08 Unit Group Details:

Code	2151
Title	Electrical Engineers

2151.0601

System Analyst (PCB Design)

Systems Analyst (PCB Design) analyses the customer requirement verifying that the design is feasible to develop and finalise. The individual at work is responsible for

understanding the customer requirement and verifying that the design is feasible to develop, and co-ordinates with the Design Engineer to finalise it.

Qualification Pack Details:

QP NOS Reference	ELE/Q8701
QP NOS Name	System Analyst (PCB Design)
NSQF Level	5

ISCO 08 Unit Group Details:

Code	2151
Title	Electrical Engineers

2151.0602

Systems Designer (PCB Design)

Systems Designer (PCB Design) uses software tools to develop schematics and create PCB layout, converting them to Gerber format for end manufacturer user, for the PCB assembly and fabrication process. The individual at work is responsible for developing schematics and creating PCB layout and convert them to Gerber format with detailed instructions and information, using CAD and other software tools, for the manufacturing and assembly process.

Qualification Pack Details:

QP NOS Reference	ELE/Q8702
QP NOS Name	Systems Designer (PCB Design)
NSQF Level	5

ISCO 08 Unit Group Details:

Code	2151
Title	Electrical Engineers

2151.0701

Design-for-Manufacture Engineer

Design-for-Manufacture Engineer is responsible for converting electrical design drawings into a format that is used by technicians during manufacture of the product. The individual at work converts the electrical design drawing to wiring and assembly instructions that are easily understood by Assembly Technicians.

Qualification Pack Details:

QP NOS Reference	ELE/Q1601
QP NOS Name	Design-for-Manufacture Engineer
NSQF Level	5

ISCO 08 Unit Group Details:

Code	2151
Title	Electrical Engineers

2151.9900

Electrical Engineers, Other

Electrical Engineers, Other include all other Electrical Engineers such as those specialized in inspecting or testing systems of electrical equipment, carrying out research work, giving technical advice in electrical engineering problems, etc., not classified elsewhere.

Qualification Pack Details:

QP NOS Reference	
QP NOS Name	
NSQF Level	

ISCO 08 Unit Group Details:

Code	2151
Title	Electrical Engineers

Family 2152

Electronics Engineers

Electronics Engineers conduct research on, design, and direct the construction

functioning, maintenance and repair of electronic systems and study and advise on technological aspects of electronic engineering materials, products or processes.

2152.0200

Electronic Engineer

Electronics Engineer researches, develops, designs, and tests electronic components, products, and systems for commercial, industrial, medical, and scientific applications, applying principles and techniques of electronic engineering. Designs electronic circuits, components and integrated systems, utilising ferroelectric, nonlinear, dielectric, phosphorescent, photo-conductive, and thermoelectric properties of materials. Designs test control apparatus and equipment, determines procedures for testing products, and directs engineering personnel in fabrication of test control apparatus and equipment. Develops new applications of conductive properties of metallic and non-metallic materials used in components, and in application of components to products or systems. May direct field operations and maintenance of electronic installations. May evaluate operational systems and recommend design modifications to eliminate causes of malfunctions or changes in system requirements. May specialize in development of electronic principles and technology in fields, such as telecommunications, telemetry, aerospace guidance, missile propulsion control, counter-measures, acoustics, nucleonic instrumentation, industrial controls and measurements, high-frequency heating, computers, radiation detection, encephalography, electron optics, and biomedical research. May use computer-assisted engineering and design

software and equipment to perform engineering tasks.

Qualification Pack Details:

QP NOS Reference

QP NOS Name

NSQF Level

ISCO 08 Unit Group Details:

Code 2152

Title Electronics Engineers

2152.0301

Stress Analyst/Computer Aided Test Executive

Stress Analyst conducts stress analysis on engineering designs for electronic components, systems, and products, using mathematical formulas and computer-aided engineering (CAE) systems. Analyses engineering designs, schematics, and customer specifications to determine stress requirements on products. Formulates mathematical model or three-dimensional computer graphic model of products, using calculator or CAE system. Analyses ability of product to withstand stress imposed by conditions, such as temperature, loads, motion, and vibration, using mathematical formulas and computer simulation. Builds product model of wood or other material, performs physical stress tests on model, and evaluates test results. Consults with ELECTRONICS-DESIGN ENGINEER to recommend design modifications of products based on results of stress analysis. Prepares stress analysis reports.

Qualification Pack Details:

QP NOS Reference ASC/Q5102

QP NOS Name Computer Aided Test Executive

NSQF Level 6

ISCO 08 Unit Group Details:

Code 2152

Title Electronics Engineers

2152.0400

Electro-Optical Engineer

Electro-Optical Engineer conducts research and plans development and design of gas and solid state lasers, masers, infrared, and other light emitting and light sensitive devices. Designs electronic circuitry and optical components with specific characteristics to fit within specified mechanical limits and to perform according to specifications. Designs suitable mounts for optics and power supply systems. Incorporates methods for maintenance and repair of components and designs, and develops test instrumentation and test procedures. Confers with engineering and technical personnel regarding fabrication and testing of prototype systems, and modifies designs as required. May conduct application analysis to determine commercial, industrial, scientific, medical, or other use for electro-optical devices. May assist with the development of manufacturing, assembly, and fabrication processes.

Qualification Pack Details:

QP NOS Reference

QP NOS Name

NSQF Level

ISCO 08 Unit Group Details:

Code 2152

Title Electronics Engineers

2152.0501

Design Engineer

Design Engineer is also called 'VLSI Design Engineer', the Design Engineer is

responsible for designing the functions of modules of the System-On-Chip (SOC) as per input and output specifications given. The individual at work designs SOC-module function using software and design tools and as per specifications. The individual is also responsible co-ordinating with other design teams involved in the SOC design.

Qualification Pack Details:

QP NOS Reference	ELE/Q1201
QP NOS Name	Design Engineer
NSQF Level	5

ISCO 08 Unit Group Details:

Code	2152
Title	Electronics Engineers

2152.0502

Design-for-Test Engineer

Design-for-Test (DFT) Engineer is responsible for developing logic to detect faults in the circuit and, enable faster and effective testing on chips after fabrication. The individual at work reads the IC design, develops the test logic for the chip to detect faults in the circuit and to improve testing features in the chip after fabrication process.

Qualification Pack Details:

QP NOS Reference	ELE/Q1402
QP NOS Name	Design-for-Test Engineer
NSQF Level	5

ISCO 08 Unit Group Details:

Code	2152
Title	Electronics Engineers

2152.0601

Quality Engineer

Quality Engineer designs and implements methods and procedures for inspecting, testing and evaluating the finished products of medical devices. The individual at work is responsible for ensuring compliance to quality regulations during product design, identifying and implementing system evaluation and product assessment procedures in order to ensure conformance to standards and specifications.

Qualification Pack Details:

QP NOS Reference	ELE/Q7901
QP NOS Name	Quality Engineer
NSQF Level	5

ISCO 08 Unit Group Details:

Code	2152
Title	Electronics Engineers

2152.0801

Electronic Hardware Design Engineer

Electronic Hardware Design Engineer receives new product specifications from the customer and develops the PCB design based on the specifications. The individual at work is responsible for undertaking research on new products, work with R&D on developing the schematics, converting them to PCB layout using CAD and other software and generating the Gerber file to pass on to PCB manufacturers.

Qualification Pack Details:

QP NOS Reference	ELE/Q6102
QP NOS Name	Electronic Hardware Design Engineer
NSQF Level	5

ISCO 08 Unit Group Details:

Code	2152
Title	Electronics Engineers

2152.0901**Verification Engineer**

Verification Engineer also known as 'Functional Verification Engineer' is responsible for performing checks to ensure functionality of the design conforms to the input output specification. The individual at work studies the design specifications, develops test cases and runs a verification program on the module's function-design using software and specific tools to validate the results with the specification. The individual is also responsible for co-ordinating with other departments involved in system-on-chip (SOC) design development for effective design implementation.

Qualification Pack Details:

QP NOS Reference	ELE/Q1301
QP NOS Name	Verification
	Engineer

NSQF Level

5

ISCO 08 Unit Group Details:

Code	2152
Title	Electronics Engineers

2152.0902**Testing and Validation Engineer**

Testing and Validation Engineer is responsible for testing the structural and functional quality of the fabricated chip. The individual at work performs structural and functional tests using tools and software to ensure that the component is defect-free and meets the end users' requirement.

Qualification Pack Details:

QP NOS Reference	ELE/Q1601
QP NOS Name	Testing and
	Validation Engineer

NSQF Level

5

ISCO 08 Unit Group Details:

Code	2152
Title	Electronics Engineers

2152.9900**Electronics Engineers, Other**

Electronics Engineers, Other include all other Electronic Engineers such as those specialized in inspecting or testing systems of electronic equipment, carry out research work, give technical advice in electronic engineering problems, etc., not classified elsewhere.

Qualification Pack Details:

QP NOS Reference	
QP NOS Name	
NSQF Level	

ISCO 08 Unit Group Details:

Code	2152
Title	Electronics Engineers

Family 2153**Telecommunication Engineers**

Telecommunications Engineers conduct research and advise on, design, and direct the construction, functioning, maintenance and repair of telecommunication systems and equipment. They study and advise on technological aspects of telecommunication engineering materials, products or processes.

2153.0100**Telecommunication Engineer, General**

Telecommunication Engineer, General; designs, manufactures, installs, operates

and maintains telegraph and telephone telex systems, radio, radar, special microwave and other telecommunication instruments. Surveys areas for installation of telegraph and telephone equipment. Prepares plans and gets drawing made with necessary details. Installs suitable telecommunication equipment like teleprinters, signalling equipment, transmitters, radio receivers etc. Supervises laying of overhead and underground cables. Conducts periodical checks of stations and units and attends to breakdowns to remove faults in telephone and telegraph systems. Maintains telecommunication equipment in working order. May specialize in designing and maintaining special equipment for telegraphs, telephone, or radio broadcasting systems including servo-mechanism and tele-system controls and is designated accordingly.

Qualification Pack Details:

QP NOS Reference
QP NOS Name
NSQF Level

ISCO 08 Unit Group Details:

Code 2153
Title Telecommunication Engineers

2153.0101

Telecom Terminal Equipment Application Developer (Android)

Telecom Terminal Equipment Application Developer is responsible for creating customized Applications for Android platform that can be used by Smartphone or Tablets running on Android Operating System. Developer creates User Interfaces, writes business logics for events, activities and business logic defined by the app. The Developer also performs unit tests for the codes written and also ensures that adequate

security measures are taken to protect valuable data used in the application by unauthorized external agents.

Qualification Pack Details:

QP NOS Reference	TEL/Q2300
QP NOS Name	Telecom Terminal Equipment Application Developer (Android)
NSQF Level	4

ISCO 08 Unit Group Details:

Code 2153

Title Telecommunication Engineers

2153.0102

Telecom Terminal Equipment Application (Native Applications)

Native Mobile Application Developer is responsible for creating customized Applications for any Mobile platform that can be used by Smartphone or Tablets running on iOS, Android, Blackberry and Windows 8x Operating Systems. Application Developer creates User Interfaces, writes business logics for events, activities and value added services for applications. The Application Developer also performs unit tests for the codes written and also ensures that adequate security measures are taken to protect valuable data used in the application by unauthorized external agents

Qualification Pack Details:

QP NOS Reference	TEL/Q2301
QP NOS Name	Telecom Terminal Equipment Application (Native Applications)
NSQF Level	4

ISCO 08 Unit Group Details:

Code 2153

Title Telecommunication Engineers

2153.0200**Radio Engineer,
Telecommunication**

Radio Engineer, Telecommunication plans, designs, installs and maintains equipment utilized in radio broadcasting, transmission reception and television programmes. Plans lay-out of transmission and receiving system equipment. Prepares sketches, drawings or wiring diagrams and specifies method of construction, materials to be used and other details. Estimates labour, material and other construction and installation costs. Supervises construction and installation of plant and equipment. Inspects completed work to ensure efficient operation and compliance with specification and safety standards. Tests electronic equipment, generators, alternators, motors and other components of broadcasting systems periodically to maintain performance according to prescribed specifications. Supervises necessary repairs and replacements. Maintains frequency of transmission wave length within prescribed limits. Operates critical frequency measuring equipment, decides choice of correct frequency for efficient transmission and supervises changes in system for transferring broadcast to different frequency in accordance with international agreements on frequency schedules. Maintains communication with ships at sea or aircraft in flight and land. Deciphers code messages received through wireless or other means. May specialize in designing equipment and studios or in installation and maintenance of tele-communication equipment

including transmission lines, aerials and propagation of radio waves.

Qualification Pack Details:

QP NOS Reference

QP NOS Name

NSQF Level

ISCO 08 Unit Group Details:

Code 2153

Title Telecommunication Engineers

2153.0300**Microwave Engineer,
Telecommunication**

Microwave Engineer, Telecommunication designs, installs, maintains and operates special telecommunication equipment working on microwaves, such as radar, navigational aids etc., to maintain communication between specified points. Prepares layout and supervises installation of microwave project taking into account site, accessibility, availability of power, etc. Checks functional operations of equipment and puts it into action to establish communication between specified points (between stations in service area, between ground and air etc.). Keeps regular watch and records all readings registered by instruments. Detects any faults, ascertains reasons of break downs, and sets them right either by adjusting or by getting defective components replaced. Supervises regular maintenance of equipment according to schedule, including maintenance of wave guides, distribution lines, aerials etc., keeps units in working order, and ensures proper reception and transmission of messages. May undertake research in problems connected with tele-communication engineering and carry out administrative duties.

Qualification Pack Details:

QP NOS Reference

QP NOS Name

NSQF Level

ISCO 08 Unit Group Details:

Code 2153

Title Telecommunication Engineers

2153.0400**Line Communication Engineer,
Telecommunication/Telecommunication
Engineer/Technician**

Line Communication Engineer, Telecommunication; Telephone Engineer; Telegraph Engineer plans, designs, installs and maintains telegraph, telephone and other tele-communication equipment. Installs telephone and telegraph communication equipment and supplies necessary power to them. Instructs subordinates in correct methods of laying underground cables, submarine cables, overhead lines, etc. Installs telephone equipment and gives service connections to subscribers. Plans and develops new telephone or telegraph equipment or improves existing ones to give better service facilities to customers. Maintains equipment in perfect working condition and ensures that communication circuits in telephone exchanges, telegraph offices, long distance communication lines, carrier systems for trunk services, teleprinters etc., are maintained at optimum level of efficiency. Attends to breakdowns of communication and traffic lines and restores service quickly by rectifying defects or research and develops new equipment or components to improve methods of communication. May calculate distance between nearest telephone line and subscriber's location, cost of materials required, labour charges

etc., and prepare estimates for installation of telephone connections to new subscribers. May specialize in installing manual, automatic or trunk telecom exchanges, teleprinters (voice frequency telegraph type), carrier system or wireless transmitting and receiving stations. May specialize in manufacturing of telephone and telegraph equipment and their spare parts.

Qualification Pack Details:

QP NOS Reference

QP NOS Name

NSQF Level

ISCO 08 Unit Group Details:

Code 2153

Title Telecommunication Engineers

2153.0500**Sound Engineer**

Sound Engineer designs acoustic construction and installs, operates and maintains audio systems for transmission of voice in studio broadcasting, public address systems and for recording sound for motion pictures. Sets microphone and sound recording equipment close to the artist or speaker in suitable manner to effect best results. Records sound impulses (dialogues, speeches, songs, etc.) on special media like discs, film, magnetic wire or tape (film) using sound recording equipment. Examines developed sound for clarity. Records songs, dialogues, etc., in studio from old or unsatisfactory films or new magnetic tape or wire. Plays sound recorded on magnetic tape for broadcasting or for procuring positive, films (tapes) by using special electronic equipment. Checks whether sound recorded on film meets acoustic standards and synchronizes correctly with actions. Instructs Recordist (Sound) for correct

recording and specifies developing requirements to Developer on processing of sound films. May specialize in studio design, broadcasting, recording, etc. May repair and overhaul sound recording equipment. May dub films with different sound recordings.

NATIONAL
CLASSIFICATION OF OCCUPATIONS

Qualification Pack Details:

QP NOS Reference

QP NOS Name

NSQF Level

ISCO 08 Unit Group Details:

Code 2153

Title Telecommunication Engineers

2153.0501

Sound Engineer, Media

Sound Engineer, Media is responsible for recording/mixing sound sources to create end-products that meet the quality standards and requirements of production.

Qualification Pack Details:

QP NOS Reference MES/Q3402

QP NOS Name Sound Engineer

NSQF Level 4

ISCO 08 Unit Group Details:

Code 2153

Title Telecommunication Engineers

2153.0511

Sound Designer

Sound Designer designs the sound concept for a production and selects the studios/equipment for recordings.

Qualification Pack Details:

QP NOS Reference MES/Q3401

QP NOS Name	Sound Designer
NSQF Level	5

ISCO 08 Unit Group Details:

Code 2153

Title Telecommunication Engineers

2153.0601

Core Engineer

Core Engineer is responsible for error free performance of radio and data core nodes through preventive maintenance and effective fault management in case of fault occurrence. He is also responsible for performing upgrade, configuration change activities and for carrying out Point of interconnect testing for customers.

Qualification Pack Details:

QP NOS Reference TEL/Q6201

QP NOS Name Core Engineer

NSQF Level 6

ISCO 08 Unit Group Details:

Code 2153

Title Telecommunication Engineers

2153.9900

Telecommunication Engineers, Other

Telecommunication Engineers, Other include engineers who conduct research and advise on, design, and direct the construction, functioning, maintenance and repair of telecommunication systems and equipment not elsewhere classified

Qualification Pack Details:

QP NOS Reference

QP NOS Name

NSQF Level

ISCO 08 Unit Group Details:

Code 0
Title

Group 216**Architects, Planners, Surveyors and Designers**

Architects, Planners, Surveyors and designers plan and design landscapes, building exteriors and interiors, products for manufacture and information for visual communication, publication and display. They conduct

survey work to precisely position geographical features, design, prepare and revise maps, and develop and implement plans and policies for controlling the use of land.

Occupations in this Group are classified into the following Families:

2161 Building Architects
2162 Landscape Architects
2163 Product and Garment Designers
2164 Town and Traffic Planners
2165 Cartographers and Surveyors
2166 Graphic and Multimedia Designers

Family 2161**Building Architects**

Building architects design commercial, industrial, institutional, residential and recreational buildings and plan and monitor their construction, maintenance and rehabilitation.

2161.0100
Architect

Architect prepares designs for construction of buildings, monuments, etc., estimates cost and co-ordinates functional and organizational details for execution. Collects information from party concerned about requirements and type(s) of buildings to be constructed, available funds, special features desired, if any, etc., and records points for consideration. Prepares designs, estimates cost and submits them to party for approval. Prepares detailed drawings or gets them prepared by Draughtsman, Architectural to specified scale showing location of building (s) on site plan and submits them to competent authorities. Draws up specifications regarding flooring, finish, architectural features etc., estimates quantities of materials required and other details and indicates them in drawing for correct execution of plan. May guide, supervise and inspect construction work from time to time to ensure execution according to plan. May consult engineer and specialist and get light and power fittings, sanitary fittings, etc. done by them. May specialize in landscape architecture. May approve payment on correct execution of work.

Qualification Pack Details:

QP NOS Reference

QP NOS Name

NSQF Level

ISCO 08 Unit Group Details:

Code 2161
Title Building Architects

2161.9900**Building Architects, Other**

Building Architects, Town and Traffic Planners, Other conduct research and advise on design of residential, commercial and industrial buildings,

layout of towns, landscapes and traffic systems, and plan and monitor their construction, maintenance and covers all other architects, town and traffic planners not elsewhere classified.

Qualification Pack Details:

QP NOS Reference

QP NOS Name

NSQF Level

ISCO 08 Unit Group Details:

Code 2161

Title Building Architects

Family 2162

Landscape Architects

Landscape architects plan and design landscapes and open spaces for projects such as, parks, schools, institutions, roads, external areas for commercial, industrial and residential sites, and plan and monitor their construction, maintenance and rehabilitation.

Family 2163

Product and Garment Designers

Product and Garment Designers design and develop products for manufacture and prepare designs and Specifications of products for mass, batch and one-off production.

2163.0100

Package Designer/Packaging Designer

Package Designer designs containers for products, such as foods, beverages, toiletries, cigarettes, and medicines. Confers with representatives of engineering, marketing, management, and other departments to determine

packaging requirements and type of product market. Sketches design of container for specific product, considering factors, such as convenience in handling and storing, distinctiveness for identification by consumer, and simplicity to minimise production costs. Renders design, including exterior markings and labels, using paints and brushes. Typically fabricates model in paper, wood, glass, plastic, or metal, depending on material to be used in package. Makes changes or modifications required by approving authority.

Qualification Pack Details:

QP NOS Reference

QP NOS Name

NSQF Level

ISCO 08 Unit Group Details:

Code 2163

Title Product and Garment Designers

2163.0201

Design Merchandiser

Design Merchandiser develops jewellery design concepts and plays key role in product development in the cast and diamond-set jewellery manufacturing in India. The individual at work assesses market trends by, researching the market, taking cues from exhibitions and interacting with customers and designers. The individual develops design concepts, assesses the value of inputs to price jewellery for different budgets, and presents design brief to senior management or client for finalisation.

Qualification Pack Details:

QP NOS Reference

G&J/Q2303

QP NOS Name	Design
Merchandiser	
NSQF Level	4

ISCO 08 Unit Group Details:

Code	2163
Title	Product and Garment Designers

2163.0301**Hand Sketch Designer (Basic)**

Hand Sketch Designer (Basic) uses stationery and measuring tools to create a range of basic jewellery design by hand.

Qualification Pack Details:

QP NOS Reference	G&J/Q2303
QP NOS Name	Hand Sketch Designer (Basic)
NSQF Level	4

ISCO 08 Unit Group Details:

Code	2163
Title	Product and Garment Designers

2163.0400**Furniture Designer**

Furniture Designer designs furniture line or individual pieces for manufacture according to knowledge of design trends, offerings or competition, capability of production facilities and characteristics of company's traditional market. Studies market trends and customer needs and discusses design suggestions with production management and trade channels. Evaluates proposals and prepares freehand sketches of promising designs. Obtains approval from customer, design committee or company management and originates scale drawing of approved designs, using drawing

instruments. Traces drawing on tracing cloth, preparatory to production of blue print; Prepares or directs preparation of blueprints containing manufacturing specifications, such as dimensions, kind of wood and upholstery fabrics to be used in manufacturing furniture line or article. May plan modifications for completed furniture to conform to changes in design trends and increase customer acceptance.

Qualification Pack Details:

QP NOS Reference	
QP NOS Name	
NSQF Level	

ISCO 08 Unit Group Details:

Code	2163
Title	Product and Garment Designers

2163.0500**Fashion Designer**

Fashion Designer should have the skills and knowledge to develop fashion design briefs and manage the development of design concepts for commercial production. The initial process includes conducting market research and trend analysis for the particular season and identifying a theme for the collection; then creating a mood board and colour board based on the theme, develop an entire range according to the business plan and as per the theme board. After finalization on the range with the team, create the techpack for each style. Work with different teams to create a prototype design based on the techpack. Evaluation of the sample and Documentation of the same is also done by the Designer.

Qualification Pack Details:

QP NOS Reference AMH/Q1201
 QP NOS Name Fashion Designer
 NSQF Level 5

ISCO 08 Unit Group Details:

Code 2163
 Title Product and Garment Designers

2163.0600

Textile Designer

Textile Designer develops patterns and creates designs for use in manufacture of cloth. Studies cuttings of designs brought out by other Indian as well as foreign mills. Reviews literature on textile designing and watches views literature on textile designing and watches current trends in style. Develops designs of new patterns and colour combinations. Prepares rough drawing of designs. Reproduces final designs on graph paper indicating interlacement of warp and weft. Supervises inserting of pattern on dobby or jacquard looms. Examines samples of woven pattern and corrects or amends design on graph, if necessary. Checks functioning of cards punched by Card Cutter and pegging of lattice done by Lattice Rigger.

Qualification Pack Details:

QP NOS Reference
 QP NOS Name
 NSQF Level

ISCO 08 Unit Group Details:

Code 2163
 Title Product and Garment Designers

Family 2164

Town and Traffic Planners

Town and Traffic Planners develop and implement plans and policies for the controlled use of urban and rural land and for traffic systems. They conduct research and provide advice on economic, environmental and social factors affecting land use and traffic flows.

2164.0100

Town Planner

Town Planner designs layout and coordinates development of towns, cities and colonies, taking into consideration various aspects, such as financial resources, location of residential areas, industries, schools, parks etc. Conducts town planning survey of specified area for designing layout. Collects data from State Governments, Municipal Corporation and other sources, regarding climate, soil condition, contours, rivers, transport and public health facilities, public utility services, age and condition of buildings if any, density of population, traffic, wind direction etc. Analyses this data and consults specialists as necessary, such as Engineer, Industrialist, Geologist, Sociologist, Geographer, Statistician, etc. for expert opinion. Prepares road pattern accordingly and fills in details indicating locations of open spaces, parks, school, hospital and other buildings, etc. Prepares detailed drawings of area and obtains approval of sponsoring authority. Submits copies of plan to Corporation or State authorities for their concurrence; passes on approved plan to Architect for designing and preparing estimates. May design and prepare estimates etc. if qualified as Architect.

Qualification Pack Details:

QP NOS Reference
 QP NOS Name
 NSQF Level

ISCO 08 Unit Group Details:

Code 2164
 Title Town and Traffic Planners

2164.0200**Traffic Planner**

Traffic Planner studies Vehicular-traffic conditions on urban or national highways and develops plan for altering conditions to promote safety and reduce congestion. Studies traffic condition from fixed position to detect unsafe or congested conditions and observes location of alternative routes. Evaluates statistical and physical data regarding such considerations as vehicle count per mile, load-capacity of pavement, and feasibility of widening pavement and projected traffic loads in future. Conducts experiments with alternative traffic plans on nearby routes and on same route with modification in signals, traffic directions or other controlled devices and techniques. Evaluates results of experiments and directs or recommends permanent changes to improve conditions. Confers with citizens and government officials to resolve complaints concerning traffic problems requiring cooperation of public or other jurisdiction. May prepare public information materials to enlist cooperation of public in reducing congestion and accidents. May integrate results of traffic studies with work of other agencies to develop transportation plans.

Qualification Pack Details:

QP NOS Reference
 QP NOS Name
 NSQF Level

ISCO 08 Unit Group Details:

Code 2164

Title Town and Traffic Planners

Family 2165**Cartographers and Surveyors**

Cartographers and Surveyors determine the exact position of, or prepare and revise digital, graphic and pictorial maps, charts or other visual representations of, natural and constructed features and boundaries of land, seas, underground areas and celestial bodies, applying scientific and mathematical principles.

2165.0100**Cartographer**

Cartographer prepares maps from aerial photographs, technical drawings, data etc. Checks workability and combination of air photographs to bring them to proposed scale of map. Marks streams, railways, sites, contours, vegetation and other items of aerial photographs with ink for details. Draws maps to prescribed scale ensuring correct geographical position with regard to boundary lines, latitudes and longitudes. Indicates physical, political, industrial and other details on maps using respective conventional signs. Traces ink-marked items on tracing film for use in administration, research, survey, excavation, construction, mining, exploration of minerals etc.

Qualification Pack Details:

QP NOS Reference
 QP NOS Name
 NSQF Level

ISCO 08 Unit Group Details:

Code 2165
 Title Cartographers and Surveyors

2165.0200

Surveyor, Topographical

Surveyor, Topographical surveys land to determine out line, contours and relative position of control points (land marks) on tract of land, cost, harbour, etc. for preparing topographical and other maps and records. Establishes control points and pillars to do instrumentation work on ground to prepare maps. Provides identification marks on ground for photographs taken in aerial survey. Fixes position of control points on ground in relation to some permanent position and with reference to celestial bodies using astrolabes (for lat. and long), transit telescopes (for time and longitudes), field magnate instruments (for magnetic forces and elements), theodolites and precise levels, tellurometers (electronic distance measuring instruments) barometers for atmospheric pressure, etc. Adjusts and sets theodolites, compasses, plane tables, levelling and other instruments for surveyor, observes and records measurements and angles from three determined points (triangulation), locations to scale on proper sketch. Corrects margin of error due to worn-out tapes which become incorrect, and readings on instruments which are affected by light, sound, heat, tension, environments and gravitational changes due to varying reserves underneath ground. May be known as Superintendent Surveyor Officer Surveyor or Surveyor according to degree of authority.

Qualification Pack Details:

QP NOS Reference
QP NOS Name
NSQF Level

ISCO 08 Unit Group Details:

Code 2165
Title Cartographers and Surveyors

2165.0300

Aerial-Photograph Interpreter

Aerial-Photograph Interpreter analyses aerial photographs to detect significant industrial, resource, or topographical data. Studies photographs to locate roads, industrial centres, rivers, forest areas, and to determine nature of terrain. Interprets photographs to evaluate the potentiality of resources. May draw maps for use of field officers in planning and exploitation of resources. May interpret photographs for timber evaluation, water shed management, construction, or mining. May request enlargement of photograph for more detailed analysis. May use computers and data banks to store, retrieve, and compare information.

Qualification Pack Details:

QP NOS Reference
QP NOS Name
NSQF Level

ISCO 08 Unit Group Details:

Code 2165
Title Cartographers and Surveyors

2165.0400

Surveyor, Photogrammetric

Surveyor, Photogrammetric; Surveyor, Reproduction prepares topographical and project maps from air photographs of area by determining longitude and latitude of number of points on ground by triangulation or traverse method. Connect photographs together in proper sequences aligning, features, pointing out details and information such as names of places, rivers, tracks administrative and forest boundaries and other verification data to have continuous picture of area photographed. Identifies control points

using stereoscopes and verifies points on ground if they are not clear on photographs due to different scales of photograph from point to point, distortions or otherwise. Brings photograph on same scale applying graphical methods or using Photogrammetric machine.

Qualification Pack Details:

QP NOS Reference
QP NOS Name
NSQF Level

ISCO 08 Unit Group Details:

Code 2165
Title Cartographers and Surveyors

2165.0500

Surveyor, Mine

Surveyor, Mine surveys mines and prepares maps indicating location, topographical and underground features describing outline, results of deposits, natural or other barriers, linking space for passages and seams, crevices for driving shafts for mechanical quarrying, etc. for open pit and underground mines. Performs function of Surveyor, Topographical and directs Topo-Auxiliaries or helpers in location of points and in placing of instruments, theodolites, compasses, etc. Works as Topo-Traverser for connecting points by metered chains and takes measurements. Records size, location, elevation, angles, and plots data on drawing-paper marking boundaries, showing exact location of roads structures, natural or artificial barriers, surface and underground mineral, bringing out topographical features. May specialize in survey of coalmines, metal mines or quarries.

Qualification Pack Details:

QP NOS Reference
QP NOS Name
NSQF Level

ISCO 08 Unit Group Details:

Code 2165
Title Cartographers and Surveyors

2165.0600

Surveyor, Hydrographic

Surveyor, Hydrographic; Surveyor, Marine surveys and maps areas bounded, banked or inundated by waters of rivers, lakes, sea, water-sheds, etc. indicating shore lines and including other information in chart for use of navigators and for constructing piers and light houses. Determines underwater features of sea, nature of river beds and depth of waters from several points (control points) by sounding echoes and or depth charges from survey ships for determining navigability and constructing piers and light houses. Collects details regarding behaviour of ocean currents and prepares charts. Register surfacing of rocks in chart for warning to boats chartering those waters. Incorporates tidal behaviour during different times of year in maps to add navigation. Produces charts and other ancillary publications such as 'Notices to Mariners' to inform them of changes in waters, light houses, etc. May be known as Civil Hydrographic Assistant, Civil Hydrographic Officer; Principal Civil Hydrographic Officer; Assistant Chief Hydrographic; Chief, Civil Hydrographic according to degree of responsibility.

Qualification Pack Details:

QP NOS Reference
QP NOS Name
NSQF Level

ISCO 08 Unit Group Details:

Code 2165

Title Cartographers and Surveyors

2165.9900**Cartographers and Surveyors, Other**

Cartographers and Surveyors, Other Cartographers and Surveyors apply surveying methods and techniques to determine the exact position of natural and constructed features and boundaries of land, seas, underground areas and celestial bodies, and prepare or revise digital, graphic and pictorial representations and all other Cartographers and Surveyors not classified elsewhere.

Qualification Pack Details:

QP NOS Reference

QP NOS Name

NSQF Level

ISCO 08 Unit Group Details:

Code 2165

Title Cartographers and Surveyors

Family 2166**Graphic and Multimedia Designers**

Graphic and Multimedia Designers design information content for visual and audio communication, publication and display using print, film, electronic, digital and other forms of visual and audio media. They create special effects, animation, or other visual images for use in computer games, movies, music videos, print media and advertisements.

2166.0100**Commercial Artist**

Commercial Artist prepares designs for advertising articles or draws illustrations for books, magazines, posters, charts, hoardings etc. in suitable columns. Studies specifications and discusses details and cost with client. Determines subject matter in consultation with client and draws designs and sketches with or without colour to desired effect. Executes approved design in required medium such as paints, oils, water-colour etc.

Qualification Pack Details:

QP NOS Reference

QP NOS Name

NSQF Level

ISCO 08 Unit Group Details:

Code 2166

Title Graphic and Multimedia Designers

2166.0111**Art Director**

Art Director needs to conceptualise the creative vision and style of the production and ensure all creative elements conform to it

Qualification Pack Details:

QP NOS Reference MES/Q0501

QP NOS Name Art Director

NSQF Level 5

ISCO 08 Unit Group Details:

Code 2166

Title Graphic and Multimedia Designers

2166.0201**Multi Media Artist and Animator/Animator**

Multi-Media Artists and Animators create special effects, animation, or other visual images using film, video, computers, or other electronic tools and media for use in products or creations, such as computer games, movies, music videos, and commercials. Apply story development, directing, cinematography, and editing to animation to create storyboards that show the flow of the animation and map out key scenes and characters. Assemble, typeset, scan and produce digital camera-ready art or film negatives and printer's proofs. Convert real objects to animated objects through modelling, using techniques such as optical scanning. Create and install special effects as required by the script, mixing chemicals and fabricating needed parts from wood, metal, plaster, and clay. Create basic designs, drawings, and illustrations for product labels, cartoons, direct mail, or television. Create pen-and-paper images to be scanned, edited, coloured, textured or animated by computer. Create two-dimensional and three-dimensional images depicting objects in motion or illustrating a process, using computer animation or modelling programmes. Design complex graphics and animation, using independent judgment, creativity, and computer equipment. Develop briefings, brochures, multimedia presentations, web pages, promotional products, technical illustrations, and computer artwork for use in products, technical manuals, literature, newsletters and slide shows.

Qualification Pack Details:

QP NOS Reference	MES/Q0701
QP NOS Name	Animator
NSQF Level	4

ISCO 08 Unit Group Details:

Code	2166
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Title Graphic and Multimedia Designers

2166.0202

Modeller

Modeller in the Media and Entertainment Industry is also known as a CG Modeller. Individuals at this job are responsible for creating computer generated models (characters, machines, props, objects etc.) for animation

Qualification Pack Details:

QP NOS Reference	MES/Q02501
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QP NOS Name	Modeller
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NSQF Level	6
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ISCO 08 Unit Group Details:

Code	2166
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Title	Graphic and Multimedia Designers
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2166.0203

Rigging Artist

Rigging Artist in the Media and Entertainment Industry is also known as a CG Rigger. Individuals at this job are responsible for creating computer generated controls/rigs for movements in models used for animation.

Qualification Pack Details:

QP NOS Reference	MES/Q02502
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QP NOS Name	Rigging Artist
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NSQF Level	4
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ISCO 08 Unit Group Details:

Code	2166
Title	Graphic and Multimedia Designers

2166.0204

Texturing Artist

Texturing Artist in the Media and Entertainment Industry is also known as a Shading artist. Individuals at this job are responsible to add textures to models to create photo-realistic models that can be used for animation

Qualification Pack Details:

QP NOS Reference	MES/Q02503
QP NOS Name	Texturing Artist
NSQF Level	4

ISCO 08 Unit Group Details:

Code	2166
Title	Graphic and Multimedia Designers

2166.0205

Animation Director

Animation Director needs to support the Director and guide efforts of the production team towards achieving the common creative vision.

Qualification Pack Details:

QP NOS Reference	MES/Q1302
QP NOS Name	Animation
Director	
NSQF Level	5

ISCO 08 Unit Group Details:

Code	2166
Title	Graphic and Multimedia Designers

2166.0206

Character Designer

Character Designer needs to design the character pack including the look, expressions, poses, gestures, turnarounds, personality traits of characters for a production

Qualification Pack Details:

QP NOS Reference	MES/Q0502
QP NOS Name	Character
Designer	
NSQF Level	4

ISCO 08 Unit Group Details:

Code	2166
Title	Graphic and Multimedia Designers

2166.0207

Clean-up Artist

Clean-up Artist needs to clean-up/detail-out the designs of the Character designers/Layout designers and keep them ready for production

Qualification Pack Details:

QP NOS Reference	MES/Q0506
QP NOS Name	clean-up Artist
NSQF Level	3

ISCO 08 Unit Group Details:

Code	2166
Title	Graphic and Multimedia Designers

2166.0208

Compositor

Compositor needs to merge the various layers/elements created during post-production into a final product

Qualification Pack Details:

QP NOS Reference	MES/Q3505
QP NOS Name	Compositor
NSQF Level	4

ISCO 08 Unit Group Details:

Code	2166
Title	Graphic and Multimedia Designers

VFX Editor needs to create illusionary elements/images/segments for production

2166.0209**Storyboard Artist**

Storyboard Artist needs to translate the script/story/idea/concept into a visual medium using a series of illustrated frames

Qualification Pack Details:

QP NOS Reference	MES/Q0507
QP NOS Name	Storyboard Artist
NSQF Level	3

ISCO 08 Unit Group Details:

Code	2166
Title	Graphic and Multimedia Designers

Qualification Pack Details:

QP NOS Reference	MES/Q3501
QP NOS Name	VFX Editor
NSQF Level	4

ISCO 08 Unit Group Details:

Code	2166
Title	Graphic and Multimedia Designers

2166.0210**Rendering Artist**

Rendering Artist needs to convert three-dimensional geometric models into a set of viewable images

2166.0212**Roto Artist**

Roto Artist needs to break content down into individual frames/elements and alter/re-create content in accordance to requirements

Qualification Pack Details:

QP NOS Reference	MES/Q3504
QP NOS Name	Roto Artist
NSQF Level	4

ISCO 08 Unit Group Details:

Code	2166
Title	Graphic and Multimedia Designers

Qualification Pack Details:

QP NOS Reference	MES/Q3503
QP NOS Name	Rendering Artist
NSQF Level	4

2166.0300**Web Designer**

Web Designer provides strategic and sustainable aesthetic to the web site that supports business goals, information architecture, customer service applications, and brand strategy. Drives visual recommendations and solutions to both current page type and future redesign efforts. Translates complex concepts to convincing and compelling

ISCO 08 Unit Group Details:

Code	2166
Title	Graphic and Multimedia Designers

2166.0211**VFX Editor**

visualisations. Determines look-and-feel of website, online products, and other interactive initiatives. Creates original graphics and icons for use on the site and other group projects. Defines and implements web design parameters, style guides, and visual standards. Establishes and produces graphic material for use in online advertising and promotion of services and products. Builds strong collaborative relationships with team and client. Documents strategic decisions using diagrams and text. Documents design and creation. Prepares Hand-drawings, hand-letter storyboard and design forms where needed. Manipulates images, style photos, provides art direction, and acquires photos.

Qualification Pack Details:

QP NOS Reference

QP NOS Name

NSQF Level

ISCO 08 Unit Group Details:

Code 2166

Title Graphic and Multimedia Designers

2166.0401

Designer (CAD)

Designer (CAD) uses CAD software and tools to produce a range of jewellery designs that are also practical for manufacturing. CAD drawings provide all the information that forms the basis for every stage of manufacturing the jewellery.

Qualification Pack Details:

QP NOS Reference G&J/Q2303

QP NOS Name Designer(CAD)

NSQF Level 4

ISCO 08 Unit Group Details:

Code 2166

Title Graphic and Multimedia Designers

2166.0501

Graphic Designer

Graphic Designer designs or creates graphics to meet specific commercial or promotional needs, such as packaging, displays, or logos. May use a variety of mediums to achieve artistic or decorative effects. Create designs, concepts, and sample layouts based on knowledge of layout principles and aesthetic design concepts. Determines size and arrangement of illustrative material and copy, and select style and size of type. Uses computer software to generate new images. Marks up, paste, and assemble final layouts to prepare layouts for printer. Draws and print charts, graphs, illustrations, and other artwork, using computer. Reviews final layouts and suggest improvements as needed. Confers with clients to discuss and determine layout design. Develops graphics and layouts for product illustrations, company logos, and Internet websites. Feeds information into computer to create layouts for client or supervisor. Prepares illustrations or rough sketches of material, discussing them with clients and/or supervisors and making necessary changes.

Qualification Pack Details:

QP NOS Reference MES/Q0503

QP NOS Name Layout Designer

NSQF Level 4

ISCO 08 Unit Group Details:

Code 2166

Title Graphic and Multimedia Designers

2166.0511**Colour Key Artist**

Colour Key Artist needs to conceptualise the colour keys for all elements within a production

Qualification Pack Details:

QP NOS Reference	MES/Q0505
QP NOS Name	Colour Key Artist
NSQF Level	3

ISCO 08 Unit Group Details:

Code	2166
Title	Graphic and Multimedia Designers

2166.0512**Colourist**

Colourist needs to enhance and/or correct the colour to reflect the desired creative style and mood of the production

Qualification Pack Details:

QP NOS Reference	MES/Q3502
QP NOS Name	Colourist
NSQF Level	4

ISCO 08 Unit Group Details:

Code	2166
Title	Graphic and Multimedia Designers

Sub Division 22**Health Professionals**

Health Professionals conduct research, improve or develop concepts, theories and operational methods, and apply scientific knowledge relating to medicine, nursing, dentistry, veterinary medicine, pharmacy, and promotion of health.

Tasks performed by workers in this sub-major group usually include conducting

research and obtaining scientific knowledge through the study of human and animal disorders and illnesses and ways of treating them; advising on or applying preventive and curative measures, or promoting health; preparing scientific papers and reports. Supervision of other workers may be included.

Occupations in this Sub Division are classified into the following Groups:

221	Medical Doctors
222	Nursing and Midwifery Professionals
223	Traditional and Complementary Medicine Professionals
224	Paramedical Practitioners
225	Veterinarians
226	Other Health Professionals

Group 221**Medical Doctors**

Medical Doctors study, diagnose, treat and prevent illness, disease, injury, and other physical and mental impairments in humans through the application of the principles and procedures of modern medicine. They plan, supervise and evaluate the implementation of care and treatment plans by other health care providers, and conduct medical education and research activities.

Occupations in this Group are classified into the following Families:

2211	Generalist Medical Practitioners
2212	Specialist Medical Practitioners

Family 2211**Generalist Medical Practitioners**

Generalist Medical Practitioners diagnose, treat and prevent illness, disease, injury,

and other physical and mental impairments and maintain general health in humans through application of the principles and procedures of modern medicine. They do not limit their practice to certain disease categories or methods of treatment, and may assume responsibility for the provision of continuing and comprehensive medical care to individuals, families and communities

2211.0100 Physician, General

Physician, General diagnoses and treats ailments or disorders of human body according to scientific system of medicine. Examines patients using stethoscope, blood pressure measuring instrument or any other medical instrument according to symptoms available, and makes or arranges for clinical tests, x-ray and histopathological examination for correct diagnoses of disease or disorder. Prescribes medicines based on results of examination. Consults other physicians or specialists, as necessary, in complicated and difficult cases. Gives minor surgical or other treatment and advises patients on regimen required to restore and maintain health. Administers drugs and anaesthetics, as required. Keeps records of patients examined, their ailments and treatment given or prescribed. May compound drugs and medicines.

ISCO 08 Unit Group Details:

Code	2211
Title	Generalist Medical Practitioners, Allopathic

2211.0200

Surgeon, General

Surgeon, General diagnoses and treats injuries, diseases or disorders of human

body by prescribing medicines or surgical operations. Examines patients to determine nature and extent of injury or ailments for treatment; by medicine, through local application or operation. Gets patient X-rayed or histopathologically examined in serious and complicated cases. Decides upon patient's ability to withstand surgical operation. Obtains written permission from legal heir of patient before undertaking major operation for personal safeguards against death of patient and ensures that all precautions have been taken before operation. May administer drugs and anaesthetics as required. May obtain opinion of other specialists before diagnosis and performance of major operations. May specialize in thoracic surgery, plastic surgery etc. and be designated accordingly.

ISCO 08 Unit Group Details:

Code	2211
Title	Generalist Medical Practitioners, Allopathic

2211.0300 Anatomist, Medical

Anatomist, Medical studies structure of human body and its parts to ascertain their position, function and relation to each other in order to provide basic knowledge in diagnosis and treatment of human disease. Examines organs of body and its minute structures, tissues, cell etc., using microscope wherever necessary. Prepares slides of different tissues for histological study. Studies growth and development of human and other mammalian embryo by utilizing X-ray, biochemical and cytochemical methods wherever necessary and publishes their findings in medical journals, papers, etc. May specialize in any branch of

anatomical study such as neuro-anatomy, embryology, anthropology, surgical anatomy etc. May undertake research on problems in field of biological sciences.

ISCO 08 Unit Group Details:

Code	2211
Title	Generalist Medical Practitioners, Allopathic

2211.0400

Anaesthetist

Anaesthetist administers anaesthetics to patient undergoing surgical operation according to nature of operation. Examines patients to determine their capacity to withstand shock of operation and anaesthesia selects local or general type of anaesthetic to be administered, such as ether, chloroform or cocaine according to nature of operation. Checks apparatus for operational efficiency, and administers selected anaesthetic to patient. Informs surgeon of patient's readiness for operation. Feels pulse and watches respiration and eyeballs of patient while under anaesthesia and surgery to check their general condition with particular reference to patient's heart and lungs. Examines and treats patient for ill effects and weakness after operation. May make provision for blood and fluid transfusion during operation and oxygen therapy, if necessary. May specialize in any specialized anaesthetic technique for chest or neuro-surgery.

ISCO 08 Unit Group Details:

Code	2211
Title	Generalist Medical Practitioners, Allopathic

2211.0500

Psychiatrist

Psychiatrist diagnoses and treats human mental diseases and disorders. Conducts examination of body for abnormal behaviour or mental activity and related abnormality to disease and disorder of other systems of body. Studies psychological test histo-pathological examination, X-ray observations and other clinical data along with history of diseases and other personal information and diagnoses disorder. Prescribes and conducts treatment of patient as required by ailment; by medicinal or surgical methods. Helps patient adjust self and control emotions and habits. May refer patients to other specialists to diagnose disease relating to other parts of body. May specialize in any technique of treatment and diagnosis of disorder. May conduct child guidance clinics, marriage counselling and marriage guidance clinics, genetic guidance clinic, vocational guidance clinics and vocational selection clinics.

ISCO 08 Unit Group Details:

Code	2211
Title	Generalist Medical Practitioners, Allopathic

2211.9900

Generalist Medical Practitioners, Allopathic, Other

Surgeons and Medical Specialists, Allopathic. Other diagnose and treat human ailments and include all other physicians, surgeons, and other medical specialists not elsewhere classified.

ISCO 08 Unit Group Details:

Code	2211
Title	Generalist Medical Practitioners, Allopathic

Family 2212

Specialist Medical Practitioners

Specialist Medical Practitioners diagnose, treat and prevent illness, disease, injury, and other physical and mental impairments in humans, using specialized testing, diagnostic, medical, surgical, physical and psychiatric techniques, through application of the principles and procedures of modern medicine. They specialize in certain disease categories, types of patient or methods of treatment and may conduct medical education and research in their chosen areas of specialization.

2212.0100

Neurologist

Neurologist; Nerve Specialist diagnoses and treats nervous diseases of human beings. Conducts examination of different parts of nervous system to find cause of disorder or location of defect, and relates disorder to diseases or disorder in other parts/system of body. Studies clinical tests of cerebrospinal fluid, reports of histopathological examination, X-ray of skull and spinal cords and system, along with history of disorder/disease and possibility of inheriting nervous defects and diagnoses disease. Prescribes and conducts treatment of patient, as required, adopting medicinal and surgical methods. May consult other specialists to diagnose diseases. May specialize in any technique of diagnosing and treating particular type of nervous diseases.

ISCO 08 Unit Group Details:

Code 2212
Title Special Medical Practitioners

2212.0200

Dermatologist

Dermatologist diagnoses and conducts treatment of ailment of human skin. Examines patients to locate cause of skin disorder and relate skin disorder to diseases or disorders in other parts/system of body. Conducts clinical tests, microscopic examination of scrapings of diseased part of skin, histopathological examination, patch test in case of allergic disorder along with history of disorder/disease and other relevant personal data and diagnosis disorder. Prescribes medicines for treatment of various kinds of skins diseases such as blemishes, scabies, eczema etc. May consult other specialist to diagnose disease.

ISCO 08 Unit Group Details:

Code 2212
Title Special Medical Practitioners

2212.0300

Allergy Specialist

Allergy Specialist diagnoses and treats diseases and conditions with allergic or immunologic causes: Examines patient, utilizing medical instruments and equipment, patch tests, and blood tests as diagnostic aids. Elicits and records information about patient's history. Analyses reports and test results and prescribes treatment or medication for conditions, such as bronchial asthma, dermatological disorders, connective tissue syndromes, transplantation, and autoimmunity. Refers patients to ancillary and consultant services when indicated.

Qualification Pack Details:

QP NOS Reference
QP NOS Name
NSQF Level

ISCO 08 Unit Group Details:

Code 2212
 Title Special Medical
 Practitioners

2212.0400**Ear, Nose and Throat Specialist**

Ear, Nose and Throat Specialist diagnoses and conducts treatment of diseases and disorders of ear, nose and throat. Conducts examination of ear, nose and throat for observable defect/symptoms, and relates disorder and disease to infection in other parts of body. Conducts clinical test and histo-pathological examination of diseased parts, along with other personal relevant particular and diagnoses diseases. Prescribes medicines and treats patients by medicinal or surgical methods as required. May obtain help of other specialist who diagnose disease.

ISCO 08 Unit Group Details:

Code 2212
 Title Special Medical
 Practitioners

2212.0500**Cardiologist**

Cardiologist; Heart Specialist diagnoses and conducts treatment of diseases and disorder of heart and blood circulation system of human body. Examines blood circulation system to find cause of disorder or location of defects and relates disorder to diseases or disorder in other parts of body. Conducts clinical tests of blood, histo-pathological examination, X-ray examination of heart, blood pressure, electro-cardiogram test, cardio-catheterization examination and phonocardiogram tests of heart, along with history of disorder/disease and other

relevant personal data, and diagnoses disorder. Prescribes medicines and conducts treatment of patient as required by ailment. May obtain help of other specialist for diagnoses of disease. May specialize in any technique of treating disease of blood circulatory system or diagnoses of particular kinds of blood diseases.

ISCO 08 Unit Group Details:

Code 2212
 Title Special Medical
 Practitioners

2212.0600**Radiologist**

Radiologist diagnoses diseases and disorders of human system by studying X-ray pictures of affected parts or seeing it on fluoroscopic screen and gives treatment such as therapeutic radiation of diseased part of body. Checks patients for nature of complaint and for allergy to drugs in radiation treatment. Decides on type of X-ray picture to be taken in respect of diseased or affected part of body such as ulcers, fractures, lung diseases, etc. Gives patient where necessary certain drugs orally or by injection like barium-meal, barium iodine, enema, etc. to render particular organ of body opaque to X-rays. Takes X-ray picture or directs X-RAY TECHNICIAN to take X-ray picture of affected part. Studies developed X-ray film in viewing box and assesses nature, location and magnitude of disease or injury. Advises type of therapeutic treatment to be given or gives such treatment at their own clinic. Adjusts and operates X-ray and other therapeutic machine such as deep X-ray, cobalt, Gama rays, etc. to direct rays of required intensity on affected part of body for specified period or applies radium needle when necessary. May treat ailments such

as cancer, tumour, blood diseases, skin diseases, cardio-respiratory system, etc. May operate image intensifier for study of movements of certain parts of body like heart, lungs, etc.

ISCO 08 Unit Group Details:

Code 2212
Title Special Medical Practitioners

2212.0700

Tuberculosis Specialist

Tuberculosis Specialist diagnoses and conducts treatment of ailments due to infection by tubercular disease. Conducts examination of different parts of body to locate nature of disorder and relates disorder/disease to infections in other parts of body. Administers tuberculin test and conducts clinical tests of sputum, blood, lymph, etc. Takes X-ray of chest and other parts of body, along with history of disease. Prescribes medicinal or surgical treatment. May obtain help of other specialists to diagnose disease.

ISCO 08 Unit Group Details:

Code 2212
Title Special Medical Practitioners

2212.0800

Ophthalmologist

Ophthalmologist; Eye Specialist diagnoses and conducts treatment of diseases and disorders of human eye. Conducts examination of eye ball and its related parts using ophthalmoscope to locate cause of disorder or location of defect and relates defects to disease/disorder or other system of body. Conducts clinical tests, histopathological examination, X-ray observations, history of disease along with other relevant personal data and

diagnoses disorder. Tests and prescribes spectacles, contact lenses or specialized glasses for visual defects. Tests and treats for muscular imbalances of eye. May refer patients to other specialists for consultation or advise. May specialize in any technique of treatment, medical or surgical or diagnoses of types of disorder.

ISCO 08 Unit Group Details:

Code 2212
Title Special Medical Practitioners

2212.0900

Urologist

Urologist diagnoses and treats diseases and disorders of genitourinary organs and tract. Examines patient, using x-ray machine, fluoroscope, and other equipment to aid in determining nature and extent of disorder or injury. Treats patient, using diathermy machine, catheter, cystoscope, radium emanation tube, and similar equipment. Performs surgery, as indicated. Prescribes and administers urinary antiseptics to combat infection.

ISCO 08 Unit Group Details:

Code 2212
Title Special Medical Practitioners

2212.1000

Venereologist

Venereologist; diagnoses and conducts treatment of human venereal diseases. Examines patient and makes or arranges for special test e.g. blood, urine, stool, etc., and investigates into causes of infections and social diseases acquired venereally. Considers reports of tests,

histopathological examination and prescribes medicine, both preventive and curative. May perform operation.

ISCO 08 Unit Group Details:

Code 2212
Title Special Medical Practitioners

2212.1100

Obstetrician

Obstetrician diagnoses and conduct treatment of diseases and disorder of human female reproduction system during pre-natal, natal and post-natal periods, conducts examination of pelvic organs and girdle for integrity and adequacy. Obtains blood tests for haemoglobin and blood cell contact, blood pressure and clinical tests for urine, to evaluate course of pregnancy and to control untoward pregnancy manifestation. Supervises arrangements for proper delivery of child; and arranges for blood transfusion, if necessary. Provides external manipulation and uterine massage along with administration of drugs during labour. May perform operation or use forceps for delivery of child. May prescribe and induce therapeutic abortion in case of chronic diseases.

ISCO 08 Unit Group Details:

Code 2212
Title Special Medical Practitioners

2212.1200

Gynaecologist

Gynaecologist; diagnoses and conducts treatment of disease and disorder of female genital organs. Conducts examination of body for symptoms of disease and disorder of other systems of

body. Considers clinical test, histo-pathological examination along with detailed history of ailment and diagnosis disorder. Treats ailments by medicinal or by surgical methods. May refer patient to other specialist to diagnose disease.

ISCO 08 Unit Group Details:

Code 2212
Title Special Medical Practitioners

2212.1300

Paediatrician

Paediatrician diagnoses and conducts treatment of diseases peculiar to children. Studies nature of growth and development of children and establishes form of growth. Investigates into cause of deviations by examining behaviour pattern, and conducting X-ray examination of growth of limbs and organs. Considers available hazards to normal growth and suggests preventive measures, examines body, considering clinical tests, histo-pathological examination and other necessary techniques of examination along with history of ailment and diagnoses disorder/defect. Prescribes and conducts treatment of patient, as required by ailment. May obtain help of other specialists to diagnose disease. May specialize in any field of paediatrics such as endocrinology or endocrinopathy (any disease due to disorder functions of endocrine glands).

ISCO 08 Unit Group Details:

Code 2212
Title Special Medical Practitioners

2212.1400

Orthopaedist

Orthopaedist diagnoses and conducts treatment and correction of diseases/deformities of skeletal system. Examines different parts of body structure to locate cause of disease/disorder and relates diseases or disorder to diseases of other parts/system of body. Considers clinical test of body, histopathological examination, X-ray reports of bony structure, along with history of disorder/disease and other personal data for diagnoses of disease. Corrects deformities by operation, physiotherapy or by other mechanical devices. May refer patient to other specialist for diagnoses of disease. May specialize in particular kinds of orthopaedic diseases or technique of treatment.

ISCO 08 Unit Group Details:

Code 2212
Title Special Medical Practitioners

2212.1500 Pharmacologist

Pharmacologist studies effect of drugs on human beings and animals and evolves formula for manufacture of drugs and medicines for prevention and treatment of diseases. Experiments with animals such as dogs, cats, rabbits, rats, mice, guinea pigs, etc. to determine effects of various chemical substances on their vital processes and their influence in activating and retarding various life processes such as circulation, respiration, digestion, etc. Renders assistance in evolving and standardizing techniques of synthesizing and extracting useful chemical substances used in prevention and treatment of diseases of man and animals. Standardizes dosage of drugs and methods of immunization against disease by

correlating results of experiments such as food preservatives and colouring matters to detect their toxic and non-toxic properties. Assists in detection of poisonous substances causing ill-effects, illness or death. Records and reports findings. May specialize in any branch of pharmacology such as study of effects of drugs on body, development of new drugs in treatment of particular disease of group of diseases and the like.

ISCO 08 Unit Group Details:

Code 2212
Title Special Medical Practitioners

2212.1600

Toxicologist (Pharmaceutical)

Toxicologist (Pharmaceutical) conducts research on toxic effects of cosmetic products and ingredients on laboratory animals for manufacturer of cosmetics. Applies cosmetic ingredient or cosmetic being developed to exposed shaved skin area of test animal and observes and examines skin periodically for possible development of abnormalities, inflammation, or irritation. Injects ingredient into test animal, using hypodermic needle and syringe, and periodically observes animal for signs of toxicity. Injects antidotes to determine which antidote best neutralizes toxic effects. Tests and analyses blood samples for presence of toxic conditions, using microscope and laboratory test equipment. Dissects dead animals, using surgical instruments, and examines organs to determine effects of cosmetic ingredients being tested. Prepares formal reports of test results.

ISCO 08 Unit Group Details:

Code 2212

Title Special Medical
Practitioners

2212.1700 Pathologist, Medical

Pathologist, Medical conducts chemical, microscopic and bacteriological tests in laboratory and examines blood, tissues, urine etc. of patients to find out causes of diseases. Obtains specimens of body material such as blood, tissues and other secretion of human body from patient and makes appropriate tests to determine source and nature of disease or disorder by using microscope and other instruments. Diagnoses nature of disease on basis of chemical analysis and reports findings to Physician for treatment of patient. Plans and conducts experiments on suitable animals to study pathological processes. Performs autopsies (post mortem examinations of body) to study structural changes for correlating functional disorders of body. Reports their findings in medical journals etc. may specialize in study of pathology on specific fields of human organism such as haematology, Virology, Histopathology (microscopic recognition of disease condition of tissues removed at operation or autopsy), chemical pathology etc. and may be known as Haematologist, Virologist, Histopathologist, Chemical Pathologist, etc.

ISCO 08 Unit Group Details:

Code 2212
Title Special Medical
Practitioners

2212.1800 Malariologist, Medical

Malariologist, Medical conducts research on causes and effects of malaria in human system by studies in laboratory and

directs antimalarial operations. Plans, organizes and undertakes measures for control and eradication of malaria. Studies causes and effects of malaria in laboratory by microscopic, biochemical and biological techniques in mosquitoes, mammals and other suitable animals to determine nature of disease, its pathological aspects and process of immunization as consequence of protracted attacks of malaria. Studies effects of insecticides on mosquitoes to evolve better techniques of their utilisation. Studies biology of mosquitoes, nature of its blood-meal and transference of malaria parasite to human body. Conducts surveys of malaria infested areas and arranges spraying of insecticides and treatment of malaria cases. May conduct night blood and entomological surveys and institutes suitable anti-larval and others remedial measures. May specialize in any field of malariology, filariology, chemotherapy, serology, epidemiology, protozoology, etc.

ISCO 08 Unit Group Details:

Code 2212
Title Special Medical
Practitioners

2212.1900 Physiologist, Medical

Physiologist, Medical studies normal functioning of different organs and tissue of human body and investigates effect of physical environments such as variations in altitude, speed, temperature, etc. on its vital functions. Conducts experiments on suitable animals to study effects of changing physical conditions on vital functions of body such as digestion excretions, genitals, cardiac system etc. studies limits of physical endurance and physiological reactions under extreme environmental conditions due to altitude;;

temperature, noise, nutrition, etc., using microscope or other instruments and finds cause and prevention of functional abnormality. Records and reports findings and uses them as basis for research into related problems. May specialize in study of any physiological system and be known as Neurophysiologist who specializes in physiology of human nervous system, Cardiovascular Physiologist who specializes in physiology of human circulatory systems etc. May conduct experiments to solves particular problems relating to human life.

ISCO 08 Unit Group Details:

Code 2212
Title Special Medical Practitioners

2212.9900 **Specialist Medical Practitioners,** **Other**

Pharmacologists, Pathologists and Related Professionals, Other include all other Pathologists, Pharmacologists, and related scientists engaged in research in particular fields for practical application of results thereof, and manufacture of crude vaccines, not elsewhere classified.

ISCO 08 Unit Group Details:

Code 2212
Title Special Medical Practitioners

Group 222

Nursing and Midwifery Professionals

Nursing and Midwifery professionals provide treatment and care services for

people who are physically or mentally ill, disabled or infirm, and others in need of care due to potential risks to health including before, during and after childbirth. They assume responsibility for the planning, management and evaluation of the care of patients, including the supervision of other health care workers, working autonomously or in teams with medical doctors and others in the practical application of preventive and curative measures.

Occupations in this Group are classified into the following Families:

2221 Nursing Professionals
2222 Midwifery Professionals

Family 2221 **Nursing Professionals**

Nursing Professionals provide treatment, support and care services for people who are in need of nursing care due to the effects of ageing, injury, illness or other physical or mental impairment, or potential risks to health. They assume responsibility for the planning and management of the care of patients, including the supervision of other health care workers, working autonomously or in teams with medical doctors and others in the practical application of preventive and curative measures.

2221.0100 **Nurse, Specialist**

Nurse, Specialist specializes in particular type of professional nursing in hospital, clinic, sanatorium or similar medical establishment. Performs tasks similar to those of Nurse General, but specializes in particular branch of nursing such as

obstetric, orthopaedic, paediatrics or psychiatric nursing, or in particular nursing task, such as giving anaesthetics or assisting Surgeon during operations.

ISCO 08 Unit Group Details:

Code 2221
 Title Nursing Professionals

2221.9900

Professional Nurses, Other

Professional Nurses, Other include all other Nurses engaged in treatment of patients, disabled persons and invalids, not elsewhere classified.

ISCO 08 Unit Group Details:

Code 2221
 Title Nursing Professionals

Family 2222

Midwifery Professionals

Midwifery Professionals plan, manage, provide and evaluate midwifery care services before, during and after pregnancy and childbirth. They provide delivery care for reducing health risks to women and new-born children, working autonomously or in teams with other health care providers.

Group 223

Traditional and Complementary Medicine Professionals

Traditional and Complementary Medicine Professionals prevent, diagnose and treat illness, disease, injury, and other physical and mental impairments and maintain general health in humans by applying knowledge, skills and practices acquired through extensive study of the theories, beliefs and experiences, originating in specific cultures.

Occupations in this Group are classified into the following Families:

2230 Traditional and Complementary Medicine Professionals

Family 2230

Traditional and Complementary Medicine Professionals

Traditional and Complementary Medicine Professionals prevent, diagnose and treat illness, disease, injury, and other physical and mental impairments and maintain general health in humans by applying knowledge, skills and practices acquired through extensive study of the theories, beliefs and experiences, originating in specific cultures.

2230.0100

Physician, Ayurveda

Physician, Ayurveda; examines patients by interrogation, sight, feeling pulse rate etc. to diagnose ailment and prescribes necessary medicines according to Ayurveda system of treatment. Questions patient about nature of ailment, previous history of disease and ascertains condition of bowel movement, appetite, etc. Diagnoses ailments by feeling pulse, examine abdomen, colour of skin, eyes, tongue etc. of patient. Observes urine, stool and sputum, if necessary and applies findings for diagnoses and treatment. Decides time of treatment and prescribes medicines with instructions regarding their use and precautions especially with regard to diet to be observed. May prescribe medicines for general improvement of health and prevention of diseases. May prepare and sell tonics, patent and other indigenous medicines such as 'Bhasams', Asavs (extracts of medicinal herbs), etc.

ISCO 08 Unit Group Details:

Code 2230

Title Traditional and Complementary Medicine Professionals

2230.0200**Physician, Homeopathic**

Physician, Homoeopathic examines patients to diagnose ailments and prescribes necessary medicines according to homeopathic system of treatment. Records history of disease or disorder, and patients and his family's (both paternal and maternal) past and present, mental and physical reaction to heat, cold, food etc. by careful questioning, and obtains complete subjective and objective picture of symptoms expressed. Prescribes homoeopathic medicine to treat patient for symptoms exhibited. Instructs patients on diet restrictions during course of treatment. Keeps case history of patient and treatment prescribed along with progress report. Prescribes prophylactics in course of epidemics to safeguard against spread of infectious diseases and instructs healthy persons on general hygienic principles for preservation of health. May consider results of X-ray, clinical and pathological examination for proper diagnosis. May dispense homoeopathic drugs and medicines singly and potentised form.

ISCO 08 Unit Group Details:

Code 2230

Title Traditional and Complementary Medicine Professionals

2230.0300**Physician, Bio-Chemic/Bio Chemist**

Physician, Bio-chemic examines patients to diagnose ailments and prescribes necessary medicines according to bio-chemic system of treatment. Examines

patient, records case history and studies symptoms to diagnose deficiency or imbalance of basic salt(s) in patients system. Prescribes bio-chemic medicines along with necessary instructions, regarding diet, physical precautions etc. Keeps case history of patients and treatment prescribed. May consider results of X-ray and pathological examinations for proper diagnosis.

ISCO 08 Unit Group Details:

Code 2230

Title Traditional and Complementary Medicine Professionals

2230.0400**Physician, Unani**

Physician, Unani; Hakim examines patients to diagnose ailments and prescribes necessary medicines according to unani system of treatment. Enquires patients about the nature of their ailment, habits, previous history of their diseases, hereditary factors and interrogates them about their appetite, bowel movement and any other discharges etc. Feels patients' pulse and examines their abdomen, chest, liver, spleen, urine, stool and sputum if considered necessary. Diagnoses disease and prescribes medicines according to patients' temperament. Gives necessary instructions regarding use of medicines, diet and other precaution to be taken. May prepare and sell tonics, and other medicines such as Kushtas (ashes of burnt metal) 'Maul Laul Lahm' (extracts from bird meat, fruits, etc.).

Qualification Pack Details:

QP NOS Reference

QP NOS Name

NSQF Level

ISCO 08 Unit Group Details:

Code 2230

Title Traditional and Complementary Medicine Professionals

2230.9900**Traditional Medicine Practitioners, Other**

Traditional Medicine Practitioners, other treat human ailments by herbs, medicinal plants and other techniques not elsewhere classified.

Qualification Pack Details:

QP NOS Reference

QP NOS Name

NSQF Level

ISCO 08 Unit Group Details:

Code 2230

Title Traditional and Complementary Medicine Professionals

Group 224**Paramedical Practitioners**

Paramedical Practitioners provide advisory, diagnostic, curative and preventive medical services for humans more limited in scope and complexity than those carried out by medical doctors. They work autonomously or with limited supervision of medical doctors, and apply advanced clinical procedures for treating and preventing diseases, injuries and other physical or mental impairments common to specific communities.

Occupations in this Group are classified into the following Families:

2240 Paramedical Practitioners

Family 2240

Paramedical Practitioners

Paramedical Practitioners provide advisory, diagnostic, curative and preventive medical services for humans more limited in scope and complexity than those carried out by medical doctors. They work autonomously, or with limited supervision of medical doctors, and apply advanced clinical procedures for treating and preventing diseases, injuries and other physical or mental impairments common to specific communities.

2240.0100**Laboratory Assistant, Clinical**

Laboratory Assistant, Clinical; Medical Laboratory Technician arranges and sets various instruments and apparatus in clinical laboratory for conducting pathological and bacteriological study and conducts routine tests of blood, urine, sputum etc. for medical purposes and for diagnosis of diseases. Sets in position required apparatus and equipment and makes necessary electrical connections. Prepares standard solutions, reagents, media for culture etc. by weighing, grinding, mixing and dissolving prescribed proportion of sample or chemical in water or other liquids etc. collects samples such as water, urine, blood, sputum etc. in clean and sterile containers or slides for bacteriological, pathological or biological study. Assists in conducting routine test of urine, stool, sputum or blood to determine sugar content, germs or worms or blood groups as required. Mounts and prepares slides with specimens for microscopic study by physicians and specialists. Washes, cleans and dries apparatus and equipment after use and maintains them in proper working condition. Keeps required chemicals and solutions readily available and replenishes

stock from stores. Maintains laboratory in clean and tidy condition. May maintain record of types of tests performed and stock in laboratory.

ISCO 08 Unit Group Details:

Code 2240
Title Paramedical Practitioners

2240.0400

Dresser

Dresser dresses wounds, cuts, sores, boils etc. and applies ointment, liniments, and paints and gives first aid in emergency cases. Cleans wounds, cuts, sores with antiseptic material and applies ointments, paints, gauze, lint or other sterile material as prescribed by Surgeon, or under medical advice. Touches throat with throat-paint, drops medicine, in eyes, nose or ears. Bandages wounds and other affected part of body. May massage any part of body under guidance of doctor. May prepare patients for operations and give them pre-operational care.

ISCO 08 Unit Group Details:

Code 2240
Title Paramedical Practitioners

2240.0501

Emergency Medical Technician-Basic

Emergency Medical Technician-Basic needs to provide emergency medical support and care to individuals who are critically ill or injured and transport them to a medical facility within stipulated time limits.

Qualification Pack Details:

QP NOS Reference HSS/Q2301
QP NOS Name Emergency Medical Technician-Basic

NSQF Level 4

ISCO 08 Unit Group Details:

Code 2240
Title Paramedical Practitioners

2240.0502

Emergency Medical Technician-Advanced

Emergency Medical Technician-Advanced needs to provide emergency medical support and care to individuals who are critically ill or injured and transport them to a medical facility within stipulated time limits.

Qualification Pack Details:

QP NOS Reference HSS/Q2302
QP NOS Name Emergency Medical Technician-Advanced
NSQF Level 5

ISCO 08 Unit Group Details:

Code 2240
Title Paramedical Practitioners

2240.9900

Paramedical Practitioners, Other

Paramedical Practitioners, Other include practitioners who provide advisory, diagnostic, curative and preventive medical services for humans not elsewhere classified

ISCO 08 Unit Group Details:

Code 2240
Title Paramedical Practitioners

Group 225

Veterinarians

Veterinarians diagnose, prevent and treat diseases, injuries and dysfunctions of animals. They may provide care to a wide range of animals or specialize in the treatment of a particular animal group or in a particular specialty area, or provide professional services to commercial firms producing biological and pharmaceutical products.

Occupations in this Group are classified into the following Families:

2250 Veterinarians

Family 2250 Veterinarians

Veterinarians diagnose, prevent and treat diseases, injuries and dysfunctions of animals. They may provide care to a wide range of animals or specialize in the treatment of a particular animal group or in a particular specialty area, or provide professional services to commercial firms producing biological and pharmaceutical products.

2250.0100 Animal Pathologist

Animal Pathologist conducts research in animal diseases and records findings to facilitate diagnosis and treatment of sick animals. Studies nature and causes of animal diseases. Examines tissues and others diseased parts of animals using microscope to diagnose disease. Conducts pathological, serological and bacteriological tests regarding origin and development of diseases; investigates causes of disease and effect of disease germs such as parasites, bacteria, virus etc. in animals. Conducts research on ectoparasites like mosquitos, flies, lice,

fleas, ticks etc. to assist development of insecticides. Observes action of bacteria on living tissues. Makes chemical analysis of culture solution of bacteria and determines biochemical properties of bacteria to assess its importance in causing diseases. Prepares reports on findings to be utilised for further research. Conducts post-mortem examination of dead animals to determine causes of death. May prepare serum and vaccine for prevention of various diseases. Is designated as Veterinary Bacteriologist if specialized in conducting research in miral, rickettsial and fungal disease of animals and evolving their preventive measures.

ISCO 08 Unit Group Details:

Code	2250
Title	Veterinarians

2250.0200

Veterinarian, General

Veterinarian, General Veterinary Doctor investigates and treats diseases, injuries and ailments in animals and undertakes measures to improve livestock. Examines animals for sickness, injuries and other ailments to determine course of treatment and attends to them including surgical cases where necessary. Conducts castration, artificial insemination and treatment of infertility for controlled and better breed. Inoculates domestic animals, poultry, pet animals periodically against epidemics. Investigates causes of outbreaks of infections and takes preventive measures. Advises owners of animals in correct methods of breeding, feeding, rearing and disease control. Conducts research in laboratories on such subjects as pathology, anatomy etc. Performs post-mortem of dead animals to determine causes of death. May examine

animals before and after slaughter for meat for any disease or infection. May conduct cattle and poultry shows, competition and calf rallies.

ISCO 08 Unit Group Details:

Code	2250
Title	Veterinarians

2250.0300

Veterinarian, Surgeon

Veterinary, Surgeon treats injuries and diseases of animals by surgical methods. Examines sick or injured animals to diagnose nature of injury, disability or sickness and determines course of treatment. Gives injections to animals where necessary. Operates affected part of body and prescribes necessary medicines. May take X-ray photograph of injured and affected part of body of animal. May set dislocated joints and fractured bones by applying plaster of Paris, splints of wood and bandaging them.

ISCO 08 Unit Group Details:

Code	2250
Title	Veterinarians

2250.0400

Animal Geneticist

Animal Geneticist, Animal Breeder conducts research in animal genetics and deals with problems concerning evolution of new breeds, rearing of livestock, genetically control of disease, artificial insemination, sterilization etc. Studies inherent traits in animals and analyses their causes such as environment, food, colour, growth, maturity, sterility, disease etc. Conducts experiments to develop better variety or strain of animal to resist disease, increase yield of milk, meat, egg

etc. Selects animals of required character to cross different breeds to get required strains by natural breeding or artificial insemination. Maintains charts and records of crossings and breeds of animals for several generations. May specialize in breeding particular strain of animals, birds, wild animals in zoo etc. is designated as Animal Gynaecologist, if specializes in genetic diseases and artificial inseminated sterility in animals.

ISCO 08 Unit Group Details:

Code	2250
Title	Veterinarians

2250.0500

Zoo Veterinarian

Zoo Veterinarian plans, directs, and participates in health care programme of veterinary clinic in zoo. Establishes and conducts effective quarantine and testing procedures for all incoming animals to ensure health of collection, prevent spread of disease, and comply with government regulations. Conducts regularly scheduled immunisation and preventive care programmes to maintain health of animals and guard against communicable diseases. Provides immediate medical attention to diseased or traumatised animals. Participates with other personnel in planning and executing nutrition and reproduction programmes for animals in zoo. Develops special programmes to encourage reproduction among animals designated as endangered species, based on knowledge of native habitat and instincts. Participates in employee training in handling and care of animals. Conducts post-mortem studies and analyses. Co-operates with zoo and aquarium personnel to exchange information concerning care of animals, to arrange transfer, sale, or trade of animals,

and to maintain nationwide inventory of animals of every species, including notation of live births. Acts as consultant to veterinarians in general practice seeking advice in treatment of exotic animals.

ISCO 08 Unit Group Details:

Code	2250
Title	Veterinarians

2250.0600

Veterinarian, Poultry

Veterinarian, Poultry advises individual poultry raisers on poultry problems: Gathers from owner information on care, condition, performance, and action of birds. Inspects flocks, pens, and housing. Diagnoses disease and prescribes treatment. Culls undesirable birds from flock. Suggests feed changes to increase egg production or growth of fowls.

ISCO 08 Unit Group Details:

Code	2250
Title	Veterinarians

2250.9900

Veterinarians, Other

Veterinarians, Other include all other veterinarians engaged in research and treatment of birds and animals, not elsewhere classified.

ISCO 08 Unit Group Details:

Code	2250
Title	Veterinarians

Group 226

Other Health Professionals

Other Health Professionals provide health services related to dentistry, pharmacy,

environmental health and hygiene, occupational health and safety, physiotherapy, nutrition, hearing, speech, vision and rehabilitation therapies. This minor group includes all human health professionals, except doctors, traditional and complementary medicine practitioners, veterinarians, nurses, midwives and paramedical professionals.

Occupations in this Group are classified into the following Families:

2261	Dentists
2262	Pharmacists
2263	Environmental and Occupational Health and Hygiene Professionals
2264	Physiotherapists
2265	Dieticians and Nutritionists
2266	Audiologists and Speech Therapists
2267	Optometrists and Ophthalmic Opticians
2269	Health Professionals, Not Elsewhere Classified

Family 2261

Dentists

Dentists diagnose, treat and prevent diseases, injuries and abnormalities of the teeth, mouth, jaws and associated tissues by applying the principles and procedures of modern dentistry. They use a broad range of specialized diagnostic, surgical and other techniques to promote and restore oral health.

2261.0100

Dentist

Dentist, Dental Surgeon treats surgically and medically diseases and disorders of teeth, gums and soft tissues of mouth. Examines mouth and teeth of patients by

clinical tests or arranges dental X-ray or clinical and bacteriological tests through Radiologist and pathologist, if necessary for correct diagnosis. Examines results of tests and adjacent tissues for minor diseases. Cleans teeth and cavities using scalers, excavators, dental engine, etc. as necessary. Fills cavities with cement, metal or plastic and ensures proper filling by observation and easy feel in chewing by patient. Gives local or general anaesthetics as necessary and prepares mouth for operation. Extracts loose decayed or impacted teeth using surgical instruments. Renders after care. Makes and fits artificial teeth. Advises patients on various corrective dental measures and on general dental health.

ISCO 08 Unit Group Details:

Code	2261
Title	Dental Specialists

2261.0200

Oral and Maxillofacial Surgeon

Oral and Maxillofacial Surgeon performs surgery on mouth, jaws, and related head and neck structure. Executes difficult and multiple extraction of teeth. Removes tumours and other abnormal growths. Performs pre-prosthetic surgery to prepare mouth for insertion of dental prosthesis. Corrects abnormal jaw relations by mandibular or maxillary revision. Treats fractures of jaws. Administers general and local anaesthetics. May treat patients in hospital.

ISCO 08 Unit Group Details:

Code	2261
Title	Dental Specialists

2261.0300

Orthodontist

Orthodontist examines, diagnoses, and treats abnormalities in development of jaws, position of teeth, and other dental-facial structures. Plans treatment, using cephalometric, height, and weight records, dental x rays, and front and lateral dental photographs. Designs and fabricates appliances, such as space maintainers, retainers, and labial and lingual arch wires, to alter position and relationship of teeth and jaws, and to realign teeth to produce and maintain normal function.

ISCO 08 Unit Group Details:

Code	2261
Title	Dental Specialists

2261.0400

Periodontist

Periodontist diagnoses and treats inflammatory and destructive diseases of investing and supporting tissue of teeth. Cleans and polishes teeth, eliminates irritating margins of fillings, and corrects occlusions. Performs surgical procedures to remove diseased tissue, using dental instruments. Establishes recall treatment programmes to monitor oral health practices.

ISCO 08 Unit Group Details:

Code	2261
Title	Dental Specialists

2261.0500

Prosthodontist

Prosthodontist restores and maintains oral functions. Records physiologic position of jaws to determine shape and size of dental prostheses, using face bows, dental articulators, and other recording devices. Replaces missing teeth and associated oral structures with artificial

teeth to improve chewing, speech, and appearance. Corrects natural and acquired deformation of mouth and jaws through use of prosthetic appliances.

ISCO 08 Unit Group Details:

Code	2261
Title	Dental Specialists

2261.0600

Paediatric Dentist

Paediatric Dentist provides dental care for infants, children, and adolescents. Fabricates space maintainers designed for patients. Treats primary and secondary teeth and constructs and places bridges, dentures, and obturating appliances suitable for growing arches. Manages patients with behavioural problems or handicapping conditions. Counsels and advises patients and family on growth and development of dental problems of patient. Provides preventive services through use of fluorides and sealants and instructs patient and family members on dental care.

ISCO 08 Unit Group Details:

Code	2261
Title	Dental Specialists

2261.9900

Dental Specialists, Other

Dental Specialists, Other include all other dental specialists who apply medical knowledge in the field of dentistry not elsewhere classified.

ISCO 08 Unit Group Details:

Code	2261
Title	Dental Specialists

Family 2262

Pharmacists

Pharmacists store, preserve, compound, and dispense medicinal products and counsel on the proper use and adverse effects of drugs and medicines following prescriptions issued by medical doctors and other health professionals. They contribute to researching, testing preparing, prescribing and monitoring medicinal therapies for optimising human health.

2262.0100

Chemist, Pharmaceuticals

Chemist, Pharmaceutical; directs and supervises manufacture of drugs and other pharmaceutical products such as tablets, syrups, ointments etc. according to prescribed formulae. Assembles various chemical ingredients in required quantities to prepare medical compounds according to prescription of Physicians, Dentists and Veterinarians, and analyses them if necessary, to ascertain their conformity to prescribed standards. Mixes ingredients according to standard formulae either manually or by mechanical devices. Conducts analysis at different stages of production and of final products to ensure that they conform to specifications. Performs experiments to formulate new pharmaceutical combinations, develops new products and studies their stability. Supervises production and carries out investigation to improve manufacturing process for syrups, drugs, antibiotics, vitamins, vaccines etc. Procures pharmaceutical products and ensures their proper storing in specified conditions. May work as Medical Representative by explaining composition and uses of drugs to customers in order to increase sales.

ISCO 08 Unit Group Details:

Code 2262
Title Pharmacists

2262.0101 Chemist, Pharmaceuticals

Chemist, Pharmaceuticals prepare directions for factory workers, supervise production process to ensure that the desired product yield is achieved. Analyse raw material samples and finished products, record planned deviations and co-ordinate with QA and QC team for reports. Provide feedback to the Production Operators and assists in developing new methods to work in a more efficient manner.

Qualification Pack Details:

QP NOS Reference LFS/Q0202
QP NOS Name Production Chemist
NSQF Level 5

ISCO 08 Unit Group Details:

Code 2262
Title Pharmacists

Family 2263

Environmental and Occupational Health and Hygiene Professionals

Environmental and Occupational Health and Hygiene Professionals assess, plan and implement programmes to recognize, monitor and control environmental factors that can potentially affect human health, to ensure safe and healthy working conditions, and to prevent disease or injury caused by chemical, physical, radiological and biological agents or ergonomic factors.

2263.0100 Health Officer

Health Officer plans, organizes and executes curative and preventive measures against epidemics and infectious disease, maintains sanitary conditions according to prescribed standards within specified area and promotes community efficiency of physical, mental and social health standards. Supervises medical facilities provided through hospitals, dispensaries, child welfare and maternity centres. Regulates, restricts and controls sale of eatables, location and working condition of cinemas, factories and other establishments affecting public health and sanitation through licenses and by prescribing health and sanitation standards. Conducts regular and periodical inspection of public eating houses, premises and public conveniences. Checks food adulteration and prosecutes offenders. Organizes anti-epidemic measures for prevention and control of outbreaks of epidemics and infectious diseases such as Cholera, smallpox, typhoid, measles, etc. and maintains vital statistics. Ensures safe water supply for drinking and other uses and disposal of refuse and excreta. Supervises and checks disposal of dead bodies by cremation or burial or grants permission for their removal outside corporation areas. Conducts publicity campaigns periodically to disseminate knowledge of health and hygiene. Organizes school health service and public health laboratories. May initiate and conduct special campaigns against mosquitoes, flies, insects, and rodents etc. to prevent spread of infectious diseases. May participate in town planning activities of local body.

ISCO 08 Unit Group Details:

Code 2263
Title Environmental and Occupational Health and Hygiene Professionals

2263.0200

Administrator, Hospital

Administrator, Hospital directs administration of hospital, nursing home, or other health care facility within authority of Governing board. Administers fiscal operations, such as budget planning, accounting, and establishing rates for health care services. Directs hiring and training of personnel. Negotiates for improvement of and additions to buildings and equipment. Directs and co-ordinates activities of medical, nursing, and administrative staff and services. Develops policies and procedures for various establishment activities. May represent establishment at community meetings and promote programmes through various news media. May develop or expand programmes or services for scientific research, preventive medicine, medical and vocational rehabilitation, and community health and welfare promotion.

ISCO 08 Unit Group Details:

Code 2263
Title Environmental and Occupational Health and Hygiene Professionals

2263.9900

Environmental and Occupational Health and Hygiene Professionals, Other

Safety, Health and Quality Inspectors, Other include associate professionals who are engaged in occupational safety, and safety of production processes, or of goods produced, used or sold, and ensure compliance with health and environment protection rules and regulations, as well as with the quality standards and specifications of manufacturers not elsewhere classified.

ISCO 08 Unit Group Details:

Code 2263
Title Environmental and Occupational Health and Hygiene Professionals

Family 2264

Physiotherapists

Physiotherapists assess, plan and implement rehabilitative programmes that improve or restore human motor functions, maximize movement ability, relieve pain syndromes, and treat or prevent physical challenges associated with injuries, diseases and other impairments. They apply a broad range of physical therapies and techniques such as movement, ultrasound, heating, laser and other techniques.

2264.0100

Physiotherapist

Physiotherapist treats patients suffering from metabolic diseases, body injuries, stiffness, paralysis, neuritis, etc. by massage, exercise and use of heat, light, water, electricity and special therapy machines and techniques. Assists and instructs patients on performance of corrective, reducing and other physical exercises.

ISCO 08 Unit Group Details:

Code 2264
Title Physiotherapists

2264.0200

Occupational Therapist

Occupational Therapist helps general treatment and recovery of patients suffering from tuberculosis, rheumatism, industrial accidents, blood pressure, heart trouble, etc. by engaging them as guided

by doctor in creative, vocational and manual pursuits as craft work, gardening, physical exercises, games, music, etc.

ISCO 08 Unit Group Details:

Code	2264
Title	Physiotherapists

2264.0300

Chiropodist

Chiropodist; Pedicurist treats foot disabilities and abnormalities. Removes cams, bunions, blisters, etc. using surgical instruments. May also give warm foot baths, remove hard skin from under heel and sole and give foot massage.

ISCO 08 Unit Group Details:

Code	2264
Title	Physiotherapists

2264.0400

Masseur

Masseur; Masseuse massages by hand or machine various parts of body to remove stiffness, sprains and pains or to generally tone up muscles by improving blood circulation or stimulating nervous system.

ISCO 08 Unit Group Details:

Code	2264
Title	Physiotherapists

2264.0401

Sports Masseur

Sports Masseur is also known as sports therapist or massage therapist or sports massager. The responsibilities of the Sports Masseurs include manipulating muscle tissues to release tension, reduce pain, restore range of movement, ensure timely recovery and promote good body

condition usually under the supervision of a medical doctor or a physiotherapist

Qualification Pack Details:

QP NOS Reference	SPF/Q1103
QP NOS Name	Sports
Masseur	
NSQF Level	4

ISCO 08 Unit Group Details:

Code	2264
Title	Physiotherapists

2264.9900

Physiotherapists and Related Associate Professionals, Other

Physiotherapists and Related Associate Professionals, Other include all other associate professionals who treat disorders of bones, muscles and parts of the circulatory or the nervous system not elsewhere classified.

ISCO 08 Unit Group Details:

Code	2264
Title	Physiotherapists

Family 2265

Dieticians and Nutritionists

Dieticians and Nutritionists assess, plan and implement programmes to enhance the impact of food and nutrition on human health.

2265.0100

Nutritionist, General

Nutritionist, General organizes, plans and conducts programmes concerning nutrition to assist in promotion of health and control of disease. Instructs auxiliary medical personnel and allied professional workers on food values and utilisation of

foods by human body. Advises health and other agencies on nutritional phases of their food programmes. Studies and analyses scientific discoveries in nutrition for adaptation and application to various food problems. Interprets and evaluates food and nutrient information designed for public use.

ISCO 08 Unit Group Details:

Code	2265
Title	Dieticians and Nutritionists

2265.0200

Dietician, General

Dietician, General plans, supervises and instructs in preparation of therapeutic or other diets for individuals or groups, in hospitals, institutions or other establishments. Determines diet values of food and food products. Plans the menu and special diets with proper nutritional value. Estimates and purchases required food, equipment and supplies. Ensures that food is properly prepared and sanitary conditions are maintained in cooking and catering places. Instructs individuals and groups in applying principles of nutrition for selection and preparation of food. May prepare educational materials on nutrition. May specialize in any particular branch of dietetics, and be designated accordingly.

ISCO 08 Unit Group Details:

Code	2265
Title	Dieticians and Nutritionists

2265.0201

Dietician Assistant

Dietician Assistant prepares diet, diet regulations, food handling, safety and sanitary standards and certain administrative functions.

Qualification Pack Details:

QP NOS Reference	HSS/Q5201
QP NOS Name	Dietician
Assistant	
NSQF Level	4

ISCO 08 Unit Group Details:

Code	2265
Title	Dieticians and Nutritionists

2265.0300

Animal Nutritionist

Animal Nutritionist studies composition and nutritive values of animal feeds and frames balanced diets and feeding schedules for different kinds of animals. Studies habits of animals in regard to type and quantity of feed consumed to determine their effect on size, weight, and development, strength and yield of milk, meat, wool, eggs etc. Experiments nourishing of animals with different types of feeds and records improvement and growth. Prescribes correct feed such as greens, dry or preserved hay or leaves, grass, oats or mixed feed etc. for different types of animals for better yield of milk, meat etc. Develops feed mixture for commercial purposes. Classifies types of plants harmful to animals as feed. May treat sick animals by regulating and prescribing specific feed. May analyse feed samples to determine protein, carbohydrate, fat, mineral and vitamin contents and trace elements.

ISCO 08 Unit Group Details:

Code	2265
Title	Dieticians and Nutritionists

2265.9900

Dieticians and Nutritionists, Other

Dieticians and Nutritionists, Other include all other Dieticians and Nutritionists engaged in scientific research, preparation

and storage of food and edibles, not elsewhere classified.

ISCO 08 Unit Group Details:

Code 2265
Title Dieticians and Nutritionists

Family 2266 Audiologists and Speech Therapists

Audiologists and Speech Therapists evaluate, manage and treat physical disorders affecting human hearing, speech, communication and swallowing. They prescribe corrective devices or rehabilitative therapies for hearing loss, speech disorders, and related sensory and neural problems and provide counselling on hearing safety and communication performance.

2266.0100

Speech Therapist and Audiologist

Speech Therapist and Audiologist determines type and degree of hearing impairment and implements facilitation and rehabilitation services for patient. Administers and interprets variety of tests, such as air and bone conduction, and speech reception and discrimination tests, to determine type and degree of hearing impairment, site of damage, and effects on comprehension and speech. Evaluates test results in relation to behavioural, social, educational, and medical information obtained from patients, families, teachers, Speech Pathologists and other professionals to determine communication problems related to hearing disability. Plans and implements prevention, habilitation, or rehabilitation services, including hearing aid selection and orientation, counselling, auditory training, lip reading, language habilitation, speech conservation, and

other treatment/remedial programmes designed to restore or improve communicative efficiency developed in consultation with Speech Pathologists and other professionals. Instructs speech speech-impaired persons in development of desirable speech habits by training in control of articulation and voice. Provides counselling and guidance to speech-impaired persons. Counsels patient's family concerning social and psychological problems associated with speech disabilities. May refer patient to physician or surgeon if medical treatment is determined necessary.

ISCO 08 Unit Group Details:

Code 2266
Title Audiologists and Speech Therapists

2266.0200

Speech Pathologist

Speech Pathologist specializes in diagnosis and treatment of speech and language problems, and engages in scientific study of human communication. Diagnoses and evaluates speech and language skills as related to educational, medical, social, and psychological factors. Plans, directs, or conducts rehabilitative treatment programmes to restore communicative efficiency of individuals with communication problems of organic and non-organic etiology. Provides counselling and guidance and language development therapy to differently-abled individuals. Administers, scores, and interprets specialized hearing and speech tests. Develops and implements individualised plans for assigned clients to meet individual needs, interests, and abilities. Evaluates and monitors individuals, using audio-visual equipment, such as tape recorders, overhead projectors, filmstrips, and demonstrative

materials. Reviews treatment plans, and assesses individual performance to modify, change, or write new programmes. Attends meetings and conferences and participates in other activities to promote professional growth. Instructs individuals to monitor their own speech and provides ways to practice new skills. May act as consultant to educational, medical, and other professional groups. May conduct research to develop diagnostic and remedial techniques. May teach manual sign language to student incapable of speaking. May instruct staff in use of special equipment designed to serve persons who are differently-abled.

ISCO 08 Unit Group Details:

Code 2266

Title Audiologists and Speech Therapists

2266.0300

Voice Pathologist

Voice Pathologist diagnoses and treats voice disorders, such as those associated with professional use of voice. Develops and implements perceptual evaluation procedures and psychophysical methods for voice assessment. Collects diagnostic data on individuals, such as output pressures, airflow, chest wall movements, and articular and laryngeal displacement, using scopes and other measuring instruments. Analyses and interprets diagnostic data and consults with other professionals to determine method of treatment, such as surgery, vocal modification, or voice therapy. Plans and conducts voice therapy sessions, applying auditory, visual, kinematic, and biofeedback techniques.

ISCO 08 Unit Group Details:

Code 2266

Title Audiologists and Speech Therapists

2266.0401

Speech Language Pathologist and Audiologist

Speech Language Pathologist and Audiologists are professionally trained to screen, identify, assess, diagnose, refer, and provide intervention and counselling to persons with articulation, fluency, voice, language, communication, hearing, swallowing, and related disabilities. They help children and adolescents with language disorders to understand and give directions, convey ideas, and improve language skills that lead to better academic performance. They also evaluate and treat person with swallowing disorders that may result from illness, surgery, stroke, or injury.

Qualification Pack Details:

QP NOS Reference HSS/Q7601

QP NOS Name Speech Language Pathologist and Audiologist

NSQF Level 4

ISCO 08 Unit Group Details:

Code 2266

Title Audiologists and Speech Therapists

Family 2267

Optometrists and Ophthalmic Opticians

Optometrists and Ophthalmic Opticians provide diagnosis, management and treatment services for disorders of the eyes and visual system. They counsel on eye care and prescribe optical aids or other therapies for visual disturbance.

2267.9900

Optometrists and Opticians, Other

Optometrists and Opticians, Other include those who prescribe and fit glasses and contact lenses and advise on their use or the use of other visual aids, as well as on proper lighting for work and reading not elsewhere classified.

ISCO 08 Unit Group Details:

Code 2267

Title Optometrists and Ophthalmic Opticians

Family 2269

Health Professionals, Not Elsewhere Classified

This unit group covers health professionals not classified elsewhere in sub-major group 22, Health professionals. For instance, the group includes occupations such as podiatrist, occupational therapist and other health professionals.

2269.0100

Naturopath

Naturopath Physician, Metropathy; examines patients to diagnose ailments and prescribes necessary treatment according to science of nature cure. Enquires patients about the nature and symptoms of ailment, previous history of their disease and keeps them under observation. Conducts routine tests to determine pulse rate, blood pressure, temperature, condition of heart, lungs, liver, etc. Diagnoses ailment and determines type of treatment to be administered such as Cosmo therapy, hydrotherapy, mud therapy etc. and advises patient for sun bathing, tub bathing, mud plastering of any part of body, massaging, regulating of diet,

special physical exercises to be taken etc. as necessary for recovery.

ISCO 08 Unit Group Details:

Code 2269

Title Health Professionals Not Elsewhere Classified

2269.0200

Physician, Osteopathic

Physician, Osteopathic diagnoses and treats diseases and injuries of human body, relying upon accepted medical and surgical modalities. Examines patient to determine symptoms attributable to impairments in musculoskeletal system. Corrects disorders and afflictions of bones, muscles, nerves, and other body systems by medicinal and surgical procedures and, when deemed beneficial, manipulative therapy. Employs diagnostic images, drugs, and other aids to diagnose and treat bodily impairments. May practice medical or surgical speciality.

ISCO 08 Unit Group Details:

Code 2269

Title Health Professionals Not Elsewhere Classified

2269.0300

Physician, Siddha

Physician, Siddha examines patients by interrogation, sight, feeling pulse rate, etc. and uses panjabutha theory, 96 thathuvas, 8 kinds of tests to diagnose ailments and prescribes necessary medicines according to Siddha System of treatment. Questions patients about nature of ailment, previous history of disease, etc. Diagnoses ailments by feeling pulse, examining abdomen, colour of skin, eyes, tongue, etc., of patient. Observes urine, stool and sputum, if necessary, and applies findings

for diagnosis and treatment. May use modern equipment also in diagnosing diseases. May prescribe medicines such as Legiams, Bhaspams, Kasayam, Chooranam, Senthoomaram eye ointment, etc. for treatment. May specialize in skin disease, eye disease, peptic ulcer (without operation) etc. May prescribe medicines for general improvement of health and prevention of diseases. May instruct patients on the use of medicines, and precautions with regard to diet to be observed and gives symptomatic treatment.

ISCO 08 Unit Group Details:

Code 2269

Title Health Professionals Not Elsewhere Classified

2269.0400

Physicians and Surgeons, Other

Health Professionals (Except Nursing), Other diagnose and treat human ailments and include physicians and surgeons not elsewhere classified.

ISCO 08 Unit Group Details:

Code 2269

Title Health Professionals Not Elsewhere Classified

2269.0500

Orthotist and Prosthetist

Orthotist and Prosthetist provides care to patients with disabling conditions of limbs, spine or partial or total absence of limb by fitting and preparing orthopaedic braces and prosthesis, under direction of and in consultation with physician. Assists in formulation of specifications for braces and substitutive aids. Examines and evaluates patient's needs in relation to disease and functional loss. Formulates

design of orthopaedic brace and prosthesis. Selects materials, making cast measurements, model modifications, and layouts. Performs fitting, including static and dynamic alignments. Evaluates brace and prosthesis on patient and makes adjustments to assure fit, function, and quality of work. Instructs patient in use of orthopaedic brace and prosthesis. Maintains patient records. May supervise other support personnel. May supervise laboratory activities relating to development of orthopaedic braces and prosthesis. May lecture and demonstrate to colleagues and other professionals concerned with orthotics and prosthetics.

ISCO 08 Unit Group Details:

Code 2269

Title Health Professionals Not Elsewhere Classified

2269.0600

Orientation and Mobility Instructor

Orientation and Mobility Instructor assists visually impaired persons to achieve personal adjustment and maximum independence through training in techniques of daily living. Interviews clients, analyses clients' lifestyle, and administers assessment tests to determine present and required or desired orientation and mobility skills. Trains clients in awareness of physical environment through sense of smell, hearing, and touch, and to travel alone, with or without a cane, through the use of various actual or simulated travel situations and exercises. Teaches clients personal and home management skills, and communication skills, such as eating, grooming, dressing, coin and money identification, cooking, and use of telephone and bathroom facilities. Teaches clients to protect body, using

hands and arms to detect obstacles. Instructs clients in arts, crafts, and recreational skills, such as leatherworking, sewing, ceramics, and playing musical instruments to improve sense of touch, co-ordination, and motor skills. Teaches clients to read and write Braille. Instructs clients in the use of reading machines and common electrical devices and in development of effective listening techniques. Instructs clients in-group activities, such as singing, playing modified sports activities to encourage and increase capacity for social participation and improve general health. Prepares progress report to allow members of rehabilitation team to evaluate clients' ability to perform varied activities essential to daily living.

ISCO 08 Unit Group Details:

Code 2269
Title Health Professionals Not Elsewhere Classified

2269.0700 Medical and Health Technicians, Other

Modern Health Associate Professionals, other include all other modern health associate professionals not elsewhere classified.

ISCO 08 Unit Group Details:

Code 2269
Title Health Professionals Not Elsewhere Classified

Sub Division 23 Teaching Professionals

Teaching Professionals teach the theory and practice of one or more disciplines at different educational levels, conduct research and improve or develop

concepts, theories and operational methods pertaining to their particular discipline, and prepare scholarly papers and books.

Tasks performed by workers in this sub-major group usually include: conducting classes, courses, or tutorials at a particular educational level, for educational and vocational purposes, including private lessons; conducting adult literacy programmes; teaching and educating persons learning difficulties or special needs. Designing and modifying curricula; inspecting and advising on teaching methods and aids; participating in decisions concerning the organization of teaching and related activities at schools and universities; conducting research in particular subjects to improve or develop concepts, theories or operational methods for application in industrial and other fields. Preparing scholarly papers and books. Supervising other workers may be included.

Occupations in this Sub Division are classified into the following Groups:

231	University and Higher Education Teachers
232	Vocational Education Teachers
233	Secondary Education Teachers
234	Primary School and Early Childhood Teachers
235	Other Teaching Professionals

Group 231 University and Higher Education Teachers

University and Higher Education Teachers prepare and deliver lectures and conduct tutorials in one or more subjects within a prescribed course of study at a university

or other higher educational institution. They conduct research, and prepare scholarly papers and books.

Occupations in this Group are classified into the following Families:

2310 University and Higher Education Teachers

**Family 2310
University and Higher Education
Teachers**

University and Higher Education Teachers prepare and deliver lectures and conduct tutorials in one or more subjects within a prescribed course of study at a university or other higher educational institution. They conduct research, and prepare scholarly papers and books.

**2310.0100
University and College Teacher,
Arts Subjects/Professors/Assistant
Professors, Arts Subjects**

University and College Teacher, Arts Subjects teaches university students one or more arts subjects such as history, geography, anthropology, sociology, philosophy, psychology, economics, politics, Indian or Foreign language such as Hindi, Sanskrit, English, French etc. Deliver lectures and conducts seminars. Sets examination papers, conducts examination and evaluates answer books. May conduct research and guide research workers. Is designated as LECTURER, READER, PROFESSOR in subject concerned, according to level of responsibility held. May be designated as DEAN OF FACULTY, if responsible for controlling and supervising teaching activities and management of institution.

ISCO 08 Unit Group Details:

Code 2310

Title University and Higher Education Teachers

2310.0200

**University and College Teacher,
Commerce
Subjects/Professors/Assistant
Professors, Commerce Subjects**

University and College Teacher, Commerce Subjects teaches university students one or more commerce subjects such as banking, accountancy, auditing, etc. Delivers lectures, sets examination papers, conducts examinations and marks papers. Is designated as LECTURER, READER, PROFESSOR, etc. in subject concerned, according to level of responsibility held. Is designated as DEAN OF FACULTY, if responsible for controlling and supervising teaching activities and management of institution.

ISCO 08 Unit Group Details:

Code 2310

Title University and Higher Education Teachers

2310.0300

**University and College Teacher,
Management
Subjects/Professors/Assistant
Professors, Management Subjects**

University and College Teacher, Management Subjects teaches one or more management subjects, within prescribed curriculum. Prepares and delivers lectures to students, compiles bibliographies of specialized materials for outside reading assignments. Stimulates group discussions and assigns projects to students. Compiles, administers, and

grades examinations, or assigns this work to others. Directs research of other teachers or graduate students working for advanced academic degrees. Conducts research in particular field of knowledge and publishes findings in professional journals. Performs related duties, such as advising students on academic and vocational curricula, and acting as adviser to student organizations. Serves in the faculty committee providing professional consulting services to government and industry. May be designated according to faculty rank such as LECTURER, READER, PROFESSOR, etc.

ISCO 08 Unit Group Details:

Code 2310

Title University and Higher Education Teachers

2310.0400

University and College Teacher, Law/Professors/Assistant Professors, Education

University and College Teacher, Education teaches sponsored Teachers and university students one or more subjects in education such as methods of teaching, educational psychology etc. Arranges for teaching practice classes and accompanies students to supervise and guide them. Conducts seminars and holds tutorial classes. May conduct research and guide research workers. May be designated as LECTURER, READER, PROFESSOR, etc. according to level of responsibility held. Is designated as DEAN OF FACULTY if responsible for controlling and supervising and teaching activities and management of institution.

ISCO 08 Unit Group Details:

Code 2310

Title University and Higher Education Teachers

2310.0500

University and College Teacher, Law/Professors/Assistant Professors, Law

University and College Teacher, Law teaches university students one or more subjects relating to principles and practice of law. Delivers lectures, sets examination papers, conducts examinations and marks papers. May conduct or guide research work. Is designated as LECTURER, READER, PROFESSOR, etc. in subject concerned, according to level of responsibility held. Is designated as DEAN OF FACULTY, if responsible for controlling and supervising teaching activities and management of the institution.

ISCO 08 Unit Group Details:

Code 2310

Title University and Higher Education Teachers

2310.0600

University and College Teacher, Science Subjects/Professors/Assistant Professors, Science Subjects

University and College Teacher, Science Subjects teaches university students one or more science subjects such as chemistry, physics, botany, zoology, mathematics, statistics, geology etc. Delivers lectures, guides and supervises practical work in field or laboratory, sets examination papers, conducts examinations and marks papers. May conduct or guide research work. Is designated as DEMONSTRATOR, LECTURER, READER, PROFESSOR, etc. in

subject concerned, according to level of responsibility held. Is designated as DEAN OF FACULTY, if responsible for controlling and supervising teaching activities and management of institution (Excluded are university teachers in engineering, medicine and surgery, agriculture and veterinary science subjects).

ISCO 08 Unit Group Details:

Code 2310

Title University and Higher Education Teachers

2310.0700

University and College Teacher, Engineering/Professors/Assistant Professors, Engineering

University and College Teacher, Engineering teaches university students one or more subjects relating to architecture, civil engineering, mechanical engineering, electrical engineering, telecommunication engineering, chemical engineering, metallurgy, mining, surveying, fuel technology, soap technology, textile technology or other branches of engineering, and technology. Delivers lectures, guides and supervises practical work in field or laboratory. Sets examination papers, conducts examination and marks papers. May conduct or guide research work. Is designated as Lecturer; Reader; Professor; etc. in the subject concerned, according to the level of responsibility held. Is designated as Dean of Faculty if responsible for controlling and supervising activities and management of institution.

ISCO 08 Unit Group Details:

Code 2310

Title University and Higher Education Teachers

2310.0800

University and College Teacher, Information Technology/Professors/Assistant Professors, Information Technology

University and College Teacher, Information Technology teaches one or more Information Technology subjects, within prescribed curriculum. Prepares and delivers lectures to students, compiles bibliographies of specialized materials for outside reading assignments. Assists students in software development projects and finding solutions to software/hardware related problems. Stimulates group discussions and assigns projects to students. Compiles, administers, and grades examinations, or assigns this work to others. Directs research of other teachers or graduate students working for advanced academic degrees. Conducts research in particular field of knowledge and publishes findings in professional journals. Performs related duties, such as advising students on academic and vocational curricula, and acting as adviser to student organizations. Serves on faculty committee providing professional consulting services to government and industry. May be designated according to faculty rank such as LECTURER, READER, PROFESSOR, etc.

ISCO 08 Unit Group Details:

Code 2310

Title University and Higher Education Teachers

2310.0900

University and College Teacher, Medicine and Surgery/Professors/Assistant Professors, Medicine and Surgery

University and College Teacher, Medicine and Surgery teaches university students one or more subjects relating to medicine and surgery, including dental science, according to any medical system such as Allopathy, Ayurveda, Homoeopathy or Unani. Delivers lectures, guides and supervises students in diagnosis of ailments and in practical work in ward, operation theatre, labour room and laboratory. Sets examination papers, conducts examinations and marks papers. May conduct or guide research work. Is designated as Lecturer, Reader, Professor, etc. in subjects concerned, according to level of responsibility held. Is designated as Dean of Faculty if controlling; activities and management of institution.

ISCO 08 Unit Group Details:

Code 2310

Title University and Higher Education Teachers

2310.1000

**University and College Teacher,
Veterinary**

**Science/Professors/Assistant
Professors, Veterinary Science**

University and College Teacher, Veterinary Science teaches university students one or more subjects relating to veterinary science. Delivers lectures, guides and supervises students in diagnosis and treatment of diseases and in laboratory work. Sets examination papers, conducts examination and marks papers. May conduct or guide research work. Is designated as Lecturer, Reader, Professor, etc. in subject concerned, according to level of responsibility held. Is designated as Dean of Faculty if responsible for controlling and supervising teaching activities and management of institution.

ISCO 08 Unit Group Details:

Code 2310

Title University and Higher Education Teachers

2310.1100

**University and College Teacher,
Agricultural Subjects**

University and College Teacher, Agricultural Subjects teaches university students one or more subjects relating to agronomy, horticulture, silviculture or other branches of agriculture. Delivers lectures, guides and supervises practical work in field or laboratory, sets examination papers. Conducts examination and marks papers. May conduct or guide research work. Is designated as Lecturer; Reader, Professor; etc. in the subject concerned according to the level of responsibility held. Is designated as Dean of Faculty if responsible for controlling and supervising teaching activities and management of the institution.

ISCO 08 Unit Group Details:

Code 2310

Title University and Higher Education Teachers

2310.1200

**University and College Teacher,
Fine Arts/Professors/Assistant
Professors, Fine Arts**

University and College Teacher, Fine Arts teaches university students principles and practice of one or more fine arts such as dance, music, painting, etc. Delivers lectures, gives practical demonstrations and guides and supervises practical work. Sets examination papers, conducts examinations and marks papers.

Is designated as Lecturer; Reader; Professor; etc. in subjects concerned, according to level of responsibility held. Is designated as Dean of Faculty if responsible for controlling and supervising teaching activities and management of institution.

ISCO 08 Unit Group Details:

Code 2310
Title University and Higher Education Teachers

2310.9900 Professors/Assistant Professors, Other

University and College Teachers, Other teach university students one or more subjects and include those teaching subjects such as library science, journalism, public administration, military science, home science,, etc., not elsewhere classified.

ISCO 08 Unit Group Details:

Code 2310
Title University and Higher Education Teachers

Group 232 Vocational Education Teachers

Vocational Education Teachers teach or instruct vocational or occupational subjects in adult and further education institutions and to senior students in secondary schools and colleges. They prepare students for employment in specific occupations or occupational areas for which university or higher education is not normally required.

Occupations in this Group are classified into the following Families:

2320 Vocational Education Teachers

Family 2320 Vocational Education Teachers

Vocational Education Teachers teach or instruct vocational or occupational subjects in adult and further education institutions and to senior students in secondary schools and colleges. They prepare students for employment in specific occupations or occupational areas for which university or higher education is not normally required.

2320.0101 Certified Training Assessor

Certified Training Assessor (CTA) would be required to assess the standard of training of trainees within the scope of a certified syllabus and courseware. They should be able to assess trainees objectively on theory and practical aspects. An assessor should have requisite aptitude for training and teaching, backed by adequate subject matter expertise and clarity regarding the documentation required. A CTA should be familiar with the syllabus, courseware, methods, assessment processes and documentation for structured training in the PSS.

Qualification Pack Details:

QP NOS Reference	SKS/Q0901
QP NOS Name	Certified Training Assessor
NSQF Level	6

ISCO 08 Unit Group Details:

Code 2320

Title Vocational Education
Teachers

2330	Secondary Education Teachers
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2320.0102 Physical Security Trainer

Physical Security Trainer (PST) would be required to train a batch of trainees within a stipulated period of time and according to a certified syllabus. They should be able to impart knowledge, refine understanding of the subject and hone skills of the pupils. A PST should have requisite aptitude for training and teaching, backed by adequate knowledge and experience in safe, proficient handling and use of licensed firearms. Trainer should be able to teach and train new trainees as well as those already working in the PSS without receiving formal training

Qualification Pack Details:

QP NOS Reference	SKS/Q0801
QP NOS Name	Physical
Security Trainer	
NSQF Level	6

ISCO 08 Unit Group Details:

Code	2320
Title	Vocational Education Teachers

Group 233 Secondary Education Teachers

Secondary Education Teachers teach one or more subjects at secondary education level, excluding subjects intended to prepare students for employment in specific occupational areas.

Occupations in this Group are classified into the following Families:

Family 2330 Secondary Education Teachers

Secondary Education Teachers teach one or more subjects at secondary education level, excluding subjects intended to prepare students for employment in specific occupational areas.

2330.0100 Senior Secondary and Secondary School Teacher, Arts

Senior Secondary and Secondary School Teacher, Arts teaches one or more subjects to students of high school, higher secondary school, multipurpose school in regional language or English. Teaches students of various standards, allots and corrects home work. Conducts tests; and examinations and decides eligibility for promotion to higher standards. Maintains school registers and records. May collect fees, conduct sports and extracurricular activities such as scouting, hobby clubs, dramatics. May be in charge of stores and equipment, hostel, transport, canteen, library, etc. Is designated as Arts Teacher for teaching history, geography, civics, social science, economics, psychology, etc.

ISCO 08 Unit Group Details:

Code	2330
Title	Senior Secondary and Secondary School Teaching Professionals

2330.0200 Senior Secondary and Secondary School Teacher, Science

Senior Secondary and Secondary School Teacher, Science teaches one or more

subjects to students of high school, higher secondary school, multipurpose school in regional language or English. Teaches students of various standards, allots and corrects homework, gives practical instructions in science subjects in laboratory. Conducts tests; and examinations and decides eligibility for promotion to higher standards. Maintains school registers and records, may collect fees; conduct sports and extracurricular activities such as scouting, hobby clubs, dramatics. May be in charge of stores and equipment, hostel, transport, canteen, library, etc. Is designated as Science Teacher for teaching science subjects such as chemistry, physics, biology, mathematics, statistics etc.

ISCO 08 Unit Group Details:

Code 2330
Title Senior Secondary and Secondary School Teaching Professionals

2330.0300 Senior Secondary and Secondary School Teacher, Commerce

Senior Secondary and Secondary School Teacher, Commerce teaches one or more subjects of commerce such as banking, accountancy, auditing etc. to students of high school, higher secondary school, multipurpose school in regional language or English. Teaches students of various standards, allots and corrects home work. Conducts tests; and examinations and decides eligibility for promotion to higher standards. Maintains school registers and records. May collect fees; conduct sports and extracurricular activities such as scouting, hobby clubs, and dramatics. May be in charge of stores and equipment, hostel, transport, canteen, library, etc.

ISCO 08 Unit Group Details:

Code 2330
Title Senior Secondary and Secondary School Teaching Professionals

2330.0400 Language Teacher, Senior Secondary and Secondary School

Language Teacher, Senior Secondary and Secondary School teaches one or more Indian or foreign languages in high school, higher secondary school or multipurpose school. Teaches spellings, pronunciation and grammar of language, gives exercises in speaking and writing language. Conducts tests and examinations and decides eligibility for promotion to higher standards.

ISCO 08 Unit Group Details:

Code 2330
Title Senior Secondary and Secondary School Teaching Professionals

2330.9900 Senior Secondary and Secondary School Teachers, other

Senior Secondary and Secondary School Teachers, Other include all other teachers engaged in teaching students of high and higher secondary schools, not elsewhere classified.

ISCO 08 Unit Group Details:

Code 2330
Title Senior Secondary and Secondary School Teaching Professionals

Group 234 Primary School and Early Childhood Teachers

Primary School and Early Childhood Teachers teach a range of subjects at the primary level of education and organize

educational activities for children below primary school age.

Occupations in this Group are classified into the following Families:

2341 Primary School Teachers

2342 Early Childhood Educators

Family 2341

Primary School Teachers

Primary School Teachers teach a range of subjects at the primary education level.

2341.0100

Middle School Teacher

Middle School Teacher teaches one or more subjects to students of middle school in regional language or English. Teaches students of various standards, allots and corrects homework, conducts test and examinations and decides eligibility for promotion to higher standards, Maintains school registers and records. May collect fees, conduct sports and extra-curricular activities and be in charge of library, canteen, dramatics, etc. Is designated as Senior Basic Teacher if teaching according to basic educational systems.

ISCO 08 Unit Group Details:

Code 2341

Title Primary School Teachers

2341.0200

Language Teacher, Middle School

Language Teacher, Middle School teaches one or more Indian or foreign languages to students of middle schools. Teaches spellings, pronunciation and grammar of language, gives exercises in speaking and writing language, conducts tests and

examinations and decides eligibility for promotion to higher standards.

ISCO 08 Unit Group Details:

Code 2341

Title Primary School Teachers

2341.0400

Primary School Teacher

Primary School Teacher teaches students of primary or elementary school in all subjects, such as reading, writing, arithmetic, language, social science, moral science, history and geography. Teaches all specified subjects according to prescribed time schedule, allots and corrects homework. Conducts tests and examinations and prepares examination results. Maintains school registers and record of attendance, collects fees and submits accounts to office. May conduct extracurricular activities such as hobbies, sports, dramatics, etc.

ISCO 08 Unit Group Details:

Code 2341

Title Primary School Teachers

2341.9900

Primary School Teachers, Other

Primary School Teachers, Other include all other teachers engaged in teaching students of primary school not elsewhere classified.

ISCO 08 Unit Group Details:

Code 2341

Title Primary School Teachers

Family 2342

Early Childhood Educators

Early Childhood Educators promote the social, physical, and intellectual development of children below primary school age through the provision of educational and play activities.

2342.0100

Teacher, Infant School/Teacher Pre-Primary

Teacher, Infant School teaches children of nursery and kindergarten classes. Teaches through Montessori, happy education or other system of child education, reading and writing of alphabets, numerals and simple sentences, simple additions and subtractions, familiarises them with names, colours, shapes, sounds, etc., of objects, flowers, birds and animals. Directs recreational activities and generally guides development of physical and mental activities of children. May look after and store teaching equipment, receive fees and maintain accounts, arrange for children's mid-day meals and attend to other extra-curricular or special activities, such as sports, dramatics, picnics and excursions, music, hand work, etc. Is designated as Nursery Teacher or Kindergarten Teacher according to the school or standard in which teaching.

ISCO 08 Unit Group Details:

Code 2342
Title Early Childhood Educators

2342.9900

Pre-Primary Education Teaching Associate Professionals, Other

Pre-Primary Education Teaching Associate Professionals, Other include those who organize group and individual play and educational activities to support and promote physical, mental and social

development of children below primary school age not classified elsewhere.

ISCO 08 Unit Group Details:

Code 2342
Title Early Childhood Educators

Group 235

Other Teaching Professionals

Other Teaching Professionals conduct research and advise on teaching methods, teach people with learning difficulties or special needs; teach non-native languages for migration and related purposes; give private tuition; teach arts, Information Technology and other subjects outside the mainstream primary, secondary and higher education systems and provide other teaching services not classified elsewhere in Sub-major group 23, Teaching professionals.

Occupations in this Group are classified into the following Families:

2351	Education Method Specialists
2352	Special Needs Teachers
2353	Other Language Professionals
2354	Other Music Teachers
2355	Other Arts Teachers
2356	Information Technology Trainers
2359	Teaching Professionals, Not Elsewhere Classified

Family 2351

Education Method Specialists

Education Method Specialists conduct research and develop or advise on teaching methods, courses and aids. They review and examine teachers' work, the functioning of educational institutions and

the results achieved and recommend changes and improvement.

2351.0100 School Inspector

School Inspector performs variety of supervisory and executive tasks in any branch of public or private schools and ensures satisfactory working on procedural matters, records and registers to be maintained, policy decisions, connected rules and regulation, etc. and guides teachers and staff as necessary. Visits schools, checks records and connected papers; examines working conditions. Confers with the teaching staff on questions relating to curricula, teaching methods, equipment and other matters. Visits classrooms to observe teaching techniques and to evaluate teachers' performance, and scholastic results obtained. Prepares reports and makes recommendations to educational authorities concerning possible changes and improvement in curricula, teaching methods, and other matters. CIRCLE INSPECTOR SCHOOLS DISTRICT INSPECTOR OF SCHOOLS.

ISCO 08 Unit Group Details:

Code	2351
Title	Education Method Specialists

2351.9900

Education Methods Specialists, Other

Education Method Specialists, Other include all other specialists in education methods, not elsewhere classified.

ISCO 08 Unit Group Details:

Code	2351
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Title	Education Method Specialists
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Family 2352 Special Needs Teachers

Special Needs Teachers teach children who are differently-abled (mentally or physically), young persons or adults or those with learning difficulties or other special needs. They promote the social, emotional, intellectual and physical development of their students.

2352.0100 Teacher for Visually Impaired

Teacher for Visually Impaired teaches elementary middle and secondary school subjects to pupils with visual impairment using Braille system. Instructs students in reading and writing braille, using slate and stylus or braillewriter. Adapts school curriculum to meet needs of pupils, teaching subjects such as mental arithmetic and music listening. Trains pupils to recognise objects and perform useful duties by developing their sense of touch. May teach Braille to persons with sight and be designated as Instructor, Braille.

ISCO 08 Unit Group Details:

Code	2352
Title	Special Needs Teachers

2352.0200

Teacher for Hearing-Impaired

Teacher for Hearing-Impaired teaches elementary middle and secondary school subjects to pupils with hearing impairment using special skills such as lip reading and teaches special skills. Instruct pupils in formation and development of

sounds for speech, using high-powered hearing aid or electrical amplifying equipment. Teach students to read lips, pointing out characteristic formation of lips and facial expressions. Teaches music appreciation and speech rhythm through sense vibration. Instruct pupils in elementary and secondary subjects adapting curriculum to meet their needs. May specialize in teaching lip reading and be designated as Teacher, Lip Reading.

ISCO 08 Unit Group Details:

Code 2352
Title Special Needs Teachers

2352.0300

Teacher for Differently-Abled (Mental)

Teacher for Differently-Abled (Mental) teaches basic academic subjects in schools, centres and institutions to children who are differently-abled (mentally). Plans courses of study according to pupils' levels of learning. Conducts activities in subjects, such as music, art, crafts and physical education to stimulate and develop interest, abilities, manual skills and co-ordination. Administers mental ability and achievement tests and interprets results. Devises instructional methods and aids, such as audio-visual techniques and materials to meet needs of pupils. Prepares reports and make special studies on pupil behaviour.

ISCO 08 Unit Group Details:

Code 2352
Title Special Needs Teachers

2352.0400

Teacher for Differently-Abled (Physical)

Teacher for Differently-Abled (Physical) teaches differently-abled pupils in elementary, middle and secondary grades, evaluating pupils' abilities in order to determine training programmes that will result in maximum progress. Observes pupils to determine physical limitations and plans academic and recreational programmes to meet individual needs. Devises instructional materials methods and aids to assist in rehabilitation process. Plans and organizes extra-curricular programmes. May teach pupils in hospitals.

ISCO 08 Unit Group Details:

Code 2352
Title Special Needs Teachers

2352.9900

Teacher for Differently-Abled, Other

Teacher for Differently-Abled, Other includes all other teachers engaged in teaching students who are differently-abled (mentally and/or physically), not elsewhere classified.

ISCO 08 Unit Group Details:

Code 2352
Title Special Needs Teachers

Family 2353

Other Language Teachers

Other Language Teachers teach non-native languages to adults and children who are learning a language for reasons of migration, to fulfil employment requirements or opportunities, to facilitate participation in educational programmes delivered in a foreign language, or for personal enrichment. They work outside the mainstream

primary, secondary and higher education systems, or in support of students and teachers within those systems.

Family 2354

Other Music Teachers

Other Music Teachers teach students in the practice, theory and performance of music outside the mainstream primary, secondary and higher education systems, but may provide private or small group tuition as an extracurricular activity in association with mainstream educational institutions.

Family 2355

Other Arts Teachers

Other Arts Teachers teach students in the practice, theory and performance of dance, drama, visual and other arts (excluding music) outside the mainstream primary, secondary and higher education systems, but may provide private or small group tuition as an extracurricular activity in association with mainstream educational institutions.

2355.0100

Art Teacher

Art Teacher Drawing Teacher instructs school students in art subjects such as drawing and painting. Demonstrates to pupils' methods and techniques of using drawing material such as brushes, scale, pencils and colours. Instructs them in model drawing in pencil and crayons and painting of objects, landscapes, plant life, murals, etc. Observes their work and makes corrections. May organize art exhibitions and visits to museums art galleries and places of artistic interest.

ISCO 08 Unit Group Details:

Code	2355
Title	Other Arts Teacher

2355.9900

Arts Teacher, Other

Arts Teacher, Other include all other teachers engaged in teaching of specialized subjects like music, commercial practice, etc., not elsewhere classified.

ISCO 08 Unit Group Details:

Code	2355
Title	Other Arts Teacher

Family 2356

Information Technology Trainers

Information Technology Trainers develop, schedule and conduct training programmes and courses for computer and other information technology users outside the mainstream primary, secondary and higher education systems.

2356.0100

Manual Training Teacher/Craft Instructor

Manual Training Teacher; Craft Instructor gives instructions to students in schools and training institutions in manual crafts such as carpentry, tailoring, weaving, book binding, blacksmithy etc. Imparts theoretical instructions for the use of tools, mechanical drawings, blueprint reading and related subjects. Gives demonstrations of process and operations in the workshop; supervises and guides students in their practical work. Looks after stores, equipment and tools.

ISCO 08 Unit Group Details:

Code 2356
 Title Information Technology Trainers

2356.0301**Master Trainer for Junior Software Developer**

Master Trainer for Junior Software Developer will be accountable to train and equip students of 0 to 2 years' experience. Major responsibility being to prepare trainees and enable them to procure, and perform to a reasonable extent, at entry level jobs that exist in the IT Services Industry.

Qualification Pack Details:

QP NOS Reference SSC/Q0509
 QP NOS Name Master Trainer for Junior Software Developer
 NSQF Level 6

ISCO 08 Unit Group Details:

Code 2356
 Title Information Technology Trainers

2356.9900**Information Technology Trainers, Other**

Information Technology Trainers, Other include those who engage in other teaching activities than those connected with primary, pre-primary and special education school levels not elsewhere classified.

ISCO 08 Unit Group Details:

Code 2356
 Title Information Technology Trainers

Family 2359**Teaching Professionals, Not Elsewhere Classified**

This unit group covers Teaching Professionals not classified elsewhere. For instance, the group includes those who provide private tuition in subjects other than foreign languages and the arts, and those who provide educational counselling to students.

2359.0100**Handwork Teacher/Teacher, Art and Craft**

Handwork Teacher; Handicraft Teacher imparts training to school students in handwork and handicraft. Teaches and develops, in students, sense of colour combinations, forms and shapes and three-dimension visualisation. Instructs in handicrafts such as modelling, fret work, clay work, cutting forms and shapes in card boards, paper and plywood toy making, designing simple artistic and decorative pieces. May also instruct in drawing and in art subjects.

ISCO 08 Unit Group Details:

Code 2359
 Title Teaching Professionals Not Elsewhere Classified

Sub Division 24**Business and Administrative Professionals**

Business and Administration Professionals perform analytical, conceptual and practical tasks to provide services in financial matters, human resource development, public relations and

marketing, sales in the technical, medical, information and communication technology areas and conduct, reviews of organizational structures, methods and systems as well as quantitative analyses of information affecting investment programmes.

Tasks performed by workers in this sub-major group usually include, collecting, analysing and interpreting information on the financial viability, cost structures and trading effectiveness of organizations; conducting audits, preparing financial statements and controlling treasury systems for organizations; developing and reviewing financial plans and strategies, executing buy and sell orders, and negotiating the purchase and sale of commodities; developing, implementing and evaluating staff recruitment, training and development programmes; researching, developing and implementing marketing and public relations campaigns; studying and developing methods and policies to improve and promote government and business operations and effectiveness; acquiring and updating knowledge of employers' and competitors' goods and services, and market conditions; assessing customers' needs and explaining and demonstrating goods and services to them.

Occupations in this Sub Division are classified into the following Groups:

241 Finance Professionals
242 Administration Professionals
243 Sales, Marketing and Public Relations Professionals

Group 241 Finance Professionals

Finance Professionals plan, develop, organize, administer, invest, manage and conduct quantitative analyses of either financial accounting systems or funds for individuals, establishments and public or private institutions.

Occupations in this Group are classified into the following Families:

2411 Accountants
2412 Financial and Investment Advisors
2413 Financial Analysts

Family 2411 Accountants

Accountants plan, organize and administer accounting systems for individuals and establishments. Some occupations classified here examine and analyse the accounting and financial records of individuals and establishments to ensure accuracy and compliance with established accounting standards and procedures.

2411.0100 Accountant

Accountant ensures proper maintenance of account books and records of business and financial establishments, private institutions, Government or Quasi Government Offices. Supervise subordinates e.g. Accounts Clerk engaged in maintenance of accounts and records. Scrutinises bills, receipts, payments, etc. for proper entries in Cash Book, Journal, Ledger and other records. Keeps record of all taxes, licenses, fees etc. required to be paid by organizations or establishment in which engaged and ensures that they are paid in time and kept up-to-date. Gets

annual budget (or Budget for prescribed period) prepared and consolidated under their supervision and places it before 'Board' or appropriate authority for consideration. Prepares final accounts such as trial balance, profit annual loss statement and balance sheet etc. as required depending upon type of industry or organization in which engaged. Sees that prescribed account procedure is followed by Offices, establishments and institutions and account books are properly maintained. Checks inventory, counts cash, examines documents in support of entries and reports to appropriate authorities in maintenance of accounts or loss of money, material etc. Ensures that instructions given or objections raised are carried out or rectified. Makes periodical and surprise checks of accounts. Advises appropriate authority on financial matters including revenue and expenditure, such as procedure for procurement of raw materials, machinery and other purchases and also disposal of assets, write off, depreciation award of contract etc. May specialize in particular branches of accountancy and be designated as Chartered Accountant; Tax Accountant etc. May prepare tax returns and financial statements. May also perform secretarial work, such as transfer of shares, registration etc.

ISCO 08 Unit Group Details:

Code	2411
Title	Accountants

2411.0101

Associate-Transactional Finance and Accounting

Associate-Transactional, Finance and Accounting is responsible for financial activities that are largely simple and

transactional in nature. They are responsible for systematic and timely recording, reporting, and analysis of financial transactions of a business.

Qualification Pack Details:

QP NOS Reference	SSC/Q2301
QP NOS Name	Associate-Transactional Finance and Accounting
NSQF Level	7

ISCO 08 Unit Group Details:

Code	2411
Title	Accountants

2411.0200

Auditor

Auditor examines accounts books and records of business establishments, private institutions, Government or Quasi Government offices for accuracy and completeness of book keeping records and financial statements. Checks items of entries in day book or journal for correct recording. Scrutinises bills, vouchers and relevant entries in cashbooks. Verifies ledger entries against receipts for cash payment. Checks Arithmetic total for accuracy and counts cash in hand if required. Conducts test checks for proper observance of accounts procedure and ensures that all revenue and expenditure are brought to account under proper heads and that expenditure and disbursements are properly authorised, vouched and correctly classified. Acts as liquidator or arbitrator when required. Represents employees before tribunals, courts, etc. to clarify points regarding financial matters of companies and certifies financial statements as and when required by court of law or other authorities. Advises new or prospective

firms in matters of account rules, taxation and procedure to be followed. Reports to appropriate authority irregularities in accounts and cases of losses of money, improper expenditure etc. May prepare financial statement and final accounts, such as profit and loss statements, balance sheets, etc. for private and public undertakings.

ISCO 08 Unit Group Details:

Code	2411
Title	Accountants

2411.0201

Associate-Finance and Accounting Complex

Associate-Finance and Accounting Complex is responsible for as collection, analysis, summarisation and presentation of the financial performance of a business. These individuals are also responsible for maintaining and analysing financial information for ongoing reporting and also supporting fiscal year planning and budgeting.

Qualification Pack Details:

QP NOS Reference	SSC/Q2302
QP NOS Name	Associate-Finance and Accounting Complex
NSQF Level	7

ISCO 08 Unit Group Details:

Code	2411
Title	Accountants

2411.0300

Cost Accountant

Cost Accountant devises and controls system of determining unit cost of products or services and calculates actual

or average cost per unit considering various factors such as cost of raw materials, depreciation of machinery, payment of wages, rent and interest and other overhead expenses etc. Analyses cost records such as raw materials purchased, wages and salaries paid, depreciation of machinery and overhead charges to ascertain distribution of cost of various divisions of management and production. Determines performance of each unit by computing machine hour rate, labour hour rate etc. to calculate output. Devises methods for finding out sources of wastage of material and unremunerative labour and suggests measure for eliminating or reducing wastage. Spots out financial weakness in methods of production and suggests measures for improvement. Assists management in setting standards for future cost and budgets for controlling expenses, deciding price structure, new investment, automation-making policy, etc. and also in deciding quantum of work to be assigned to employees. Ascertains proper bases for distribution of cost of various divisions of management. Classifies overhead charges into fixed and variable, controllable and uncontrollable etc. and suggests measures for their reduction or elimination. May work independently or supervise work of junior Cost Accountants and Cost Clerks performing routine phases of operations. May devise suitable form for determining quantum of work to be performed by each unit. May prepare statistical statement of costs and production. May specialize in Management Accounting.

ISCO 08 Unit Group Details:

Code	2411
Title	Accountants

Family 2412

Financial and Investment Advisors

Financial and Investment Advisers develop financial plans for individuals and organizations, and invest and manage funds on their behalf.

2412.0100 Financial Examiner

Financial Examiner enforces or ensures compliance with laws and regulations governing financial and securities institutions and financial and real estate transactions. May examine, verify correctness of, or establish authenticity of records. Direct and participate in formal and informal meetings with bank directors, trustees, senior management, counsels, outside accountants and consultants in order to gather information and discuss findings. Investigate activities of institutions in order to enforce laws and regulations and to ensure legality of transactions and operations or financial solvency. Prepare reports, exhibits and other supporting schedules that detail an institution's safety and soundness, compliance with laws and regulations, and recommended solutions to questionable financial conditions. Recommend actions to ensure compliance with laws and regulations, or to protect solvency of institutions. Resolve problems concerning the overall financial integrity of banking institutions including loan investment portfolios, capital, earnings, and specific or large troubled accounts. Review audit reports of internal and external auditors in order to monitor adequacy of scope of reports or to discover specific weaknesses in internal routines. Review balance sheets, operating income and expense accounts, and loan documentation in order to confirm institution assets and liabilities. Verify and inspect cash

reserves, assigned collateral, and bank-owned securities in order to check internal control procedures. Confer with officials of real estate, securities, or financial institution industries in order to exchange views and discuss issues or pending cases. Establish guidelines for procedures and policies that comply with new and revised regulations, and direct their implementation.

ISCO 08 Unit Group Details:

Code	2412
Title	Financial and Investment Advisors

2412.0200 Financial Analyst

Financial Analyst conducts quantitative analysis of information affecting investment programmes of public or private institutions. Analyses financial information to produce forecasts of business, industry, and economic conditions for use in making investment decisions. Assemble spreadsheets and draw charts and graphs used to illustrate technical reports, using a computer. Evaluates and compares the relative quality of various securities in a given industry. Interprets data affecting investment programmes, such as price, yield, stability, future trends in investment risks, and economic influences. Maintains knowledge and stays abreast of developments in the fields of industrial technology, business, finance, and economic theory. Monitor fundamental economic, industrial, and corporate developments through the analysis of information obtained from financial publications and services, investment banking firms, government agencies, trade publications, company sources, and personal interviews. Prepare plans of

action for investment based on financial analyses. Present oral and written reports on general economic trends, individual corporations, and entire industries.

Recommends investments and investment timing to companies, investment firm staff, or the investing public. Collaborates with investment bankers to attract new corporate clients to securities firms.

ISCO 08 Unit Group Details:

Code	2412
Title	Financial and Investment Advisors

2412.0300 Budget Analyst

Budget Analyst examines budget estimates for completeness, accuracy, and conformance with procedures and regulations. Analyses budgeting and accounting reports for the purpose of maintaining expenditure controls. Analyses monthly department budgeting and accounting reports to maintain expenditure controls. Compiles and analyses accounting records and other data to determine the financial resources required to implement a programme. Directs the preparation of regular and special budget reports. Interprets budget directives and establishes policies for carrying out directives. Performs cost-benefits analyses to compare operating programmes, reviews financial requests, and explores alternative financing methods. Reviews operating budgets to analyse trends affecting budget needs. Summarises budgets and submits recommendations for the approval or disapproval of funds requests. Consults with managers to ensure that budget adjustments are made in accordance with programme changes. Matches appropriations for specific programmes

with appropriations for broader programmes, including items for emergency funds.

ISCO 08 Unit Group Details:

Code	2412
Title	Financial and Investment Advisors

2412.0400 Risk Management Analyst

Risk Management Analyst (Credit Card Portfolio) researches ideas, formulates business intelligence, implement and quantifies the benefits. Makes recommendations to management in acquisition of new card members; manages existing portfolio and operational effectiveness. Responsible to develop scores to be applied to each stage within the lifecycle of the customer. Conducts research and analysis on the emerging trends and innovation in the industry to ensure competitiveness in the market place. The role includes co-ordination of several groups within the organization to brainstorm ideas, assess benefits, prioritise and manage the development from concept to implementation.

ISCO 08 Unit Group Details:

Code	2412
Title	Financial and Investment Advisors

2412.0501 Agriculture Field Officer

Agriculture Field Officer involves in promoting loans and other credit services to the farmers. The person is responsible for promoting the loan products of the financial institution to prospective farmers, visit their areas to pre assess

their credibility and reliability, analyse on all possible ways about the borrower to ensure that their details are eligible to sanction the loan, disburse the amount and finally supervise and follow up for recovery of the loan amount.

Qualification Pack Details:

QP NOS Reference	AGR/Q7701
QP NOS Name	Agriculture Field Officer
NSQF Level	4

ISCO 08 Unit Group Details:

Code	2412
Title	Financial and Investment Advisors

2412.0600

Commission Agent

Commission Agent advises client regarding marketing conditions, purchases and sells goods on their behalf for commission. Studies market rates, supply and demand position of goods in which they deal in various markets. Advises clients accordingly and purchases and sells goods in the market on behalf of customers according to their instructions. Makes necessary arrangements for forwarding and clearing of goods according to instructions of customers. Recovers the commission and other charges incurred, from their clients. Maintains account of purchases and sales effected on behalf of the regular clients and recovers commission etc. periodically. Attends to all correspondence relating to the business.

ISCO 08 Unit Group Details:

Code	2412
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Title	Financial and Investment Advisors
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2412.9900

Financial and Investment Advisors, Other

Accountants, Other includes all other accountants engaged in maintaining accounts, not elsewhere classified.

ISCO 08 Unit Group Details:

Code	2412
Title	Financial and Investment Advisors

Family 2413

Financial Analysts

Financial Analysts conduct quantitative analyses of information affecting investment programmes of public or private institutions.

Group 242

Administration Professionals

Administration Professionals apply various concepts and theories related to improving the effectiveness of organizations and the individuals within the organization.

Occupations in this Group are classified into the following Families:

2421	Management and Organization Analysts
2422	Policy Administration Professionals
2423	Personal and Careers Professionals
2424	Training and Staff Development Professionals

Family 2421
Management and Organization Analysts

Management and Organization Analysts assist organizations to achieve greater efficiency and solve organizational problems. They study organizational structures, methods, systems and procedures.

2421.0101
Analyst-Research

Primary responsibility of the individual in this job is to organize, analyse, synthesise and summarise information using appropriate analytical methodologies. They need to prepare companies profiles, conducts financial analysis and valuations, benchmarking, collect data using techniques, such as questionnaires, surveys, interviews and electronic data collection as part of the job.

Qualification Pack Details:

QP NOS Reference	SSC/Q2601
QP NOS Name	Analyst-Research
NSQF Level	7

ISCO 08 Unit Group Details:

Code	2421
Title	Management and Organization Analysts

Family 2422
Policy Administration Professionals

Policy Administration Professionals develop and analyse policies guiding the design, implementation and modification of government and commercial operations and programmes.

Family 2423
Personal and Careers Professionals

Personnel and Careers Professionals provide professional business services related to personnel policies, such as employee recruitment or development, occupational analysis and vocational guidance.

2423.0100
Vocational Guidance Officer/Career Counsellors

Vocational Guidance Officer; Vocational Counsellor guide and counsel individuals in vocational choice vocational adjustment, vocational progress, etc. Interviews and collects information about clients to assess their strength and weaknesses in relation to requirements of various occupations and educational training courses. Collects comprehensive information about occupations, employment market, educational and training facilities, scholarship facilities and other information relating to world of work. Conducts counselling interviews on vocational and occupational choices in relation to special aptitudes, interests and personality characteristics. Provides occupational information to all those seeking it in person or by post. Conducts group guidance programmes for purposes of disseminating occupational information and promoting vocational maturity. May administer psychological tests of aptitudes, interests, personality traits, etc. as aids in assessment of individuals' strengths and weaknesses. May conduct surveys and studies concerning psychological requirements of different occupations and problems relating to adjustment and efficiency in different fields of activity. May conduct job analysis and study staffing patterns in different

industrial and commercial organizations. May assist employers in their recruitment problems by using specialized techniques to determine aptitude, interest values, etc. May organize career week, career exhibition, etc. and deliver lectures on topics relating to vocational guidance to students in schools and colleges.

Qualification Pack Details:

QP NOS Reference

QP NOS Name

NSQF Level

ISCO 08 Unit Group Details:

Code 2423

Title Personal and Careers Professionals

2423.0101

Associate-Recruitment

Associate-Recruitment is responsible for supporting recruitment activities such as candidate management, scheduling and co-ordination and head-hunting.

Qualification Pack Details:

QP NOS Reference SSC/Q2501

QP NOS Name Associate-
Recruitment

NSQF Level 5

ISCO 08 Unit Group Details:

Code 2423

Title Personal and Careers
Professionals

2423.0200

Counsellor

Counsellor; Teacher Counsellor guide or counsel individuals in various problems such as educational, vocational, personal etc., and guides and co-ordinates activities of career masters in schools. Collects

educational, occupational, employment, social and related information and studies relevant details of clients obtained from them and other sources. Administers tests of intelligence, aptitudes, interests, personality traits, etc. for obtaining data about individuals to be guided. Collects and studies information relating to environment involved in individual's adjustment. Interviews various persons for collecting information and counsel individuals needing such assistance accordingly, employing suitable techniques. Conducts group-guidance activities to serve various purposes of counselling. Carries out follow up studies on individuals guided, to render further assistance, and to evaluate guidance programmes. Keeps themselves abreast of guidance programmes in schools and co-ordinates their activities to ensure uniformity. May guide Career Masters and conduct research and surveys for purposes relevant to counselling.

ISCO 08 Unit Group Details:

Code 2423

Title Personal and Careers Professionals

2423.0500

Occupational Analyst

Occupational Analyst; Job Analyst; Occupational Information Officer; Occupational Research Officer collects, analyses and develops occupational data relating to job specifications and work characteristics for purposes of vocational counselling, wage evaluation, utilisation of workers and other personnel practices. Studies jobs being performed in industrial, commercial or other organizations and writes descriptions of elements of jobs and physical and mental qualities needed by worker. Analyses, classifies and correlates occupational data. Develops

counselling aids and prepares interviewing aids to facilitate placement of workers. Utilises data to evolve wage-evaluation system and to recommend changes in pay-scale classifications of jobs. May prepare organizational and functional charts and develop testing devices for measuring occupational knowledge of workers.

ISCO 08 Unit Group Details:

Code 2423

Title Personal and Careers Professionals

2423.9900

Personal and Careers Professionals, Other

Personnel and Occupational Professionals, Other include all other personnel and occupational professionals, engaged in guidance, human resource management, job evaluation, etc., not elsewhere classified.

ISCO 08 Unit Group Details:

Code 2423

Title Personal and Careers Professionals

Family 2424

Training and Staff Development Professionals

Training and Staff Development Professionals plan, develop, implement and evaluate training and development programmes to ensure management and staff acquire the skills and develop the competencies required by organizations to meet organizational objectives.

2424.0100

Manpower Officer/Area Manager, Human Resource

Manpower Officer assesses manpower supply and requirements, prepares schemes for meeting shortages, conducts enquiry into employment market trends and other man power problems and makes plans for efficient utilisation of human resources and achievement of nations major objectives. Plans, organizes and conducts surveys for collection of data regarding manpower availability and utilisation in different spheres of economic activity, and analyses data from all available sources like census reports and special studies for preparation of reports on selected aspects of manpower problems. Identifies fields to which flow of manpower is not adequate and takes appropriate steps to accelerate flow. Studies problem; of manpower training, labour mobility, labour force participation, relationship of educational and training programmes to demand for special skills, and labour utilisation in different fields of economic activity. May specialize in any field of study like problems relating to availability and utilisation of scientific manpower, managerial personnel, technical and low-skilled personnel, or white-collar workers. May also examine recruitment and employment matters, service conditions etc., and advise on formulation of manpower policies.

ISCO 08 Unit Group Details:

Code 2423

Title Personal and Careers Professionals

2424.0200

Employment Officer/Operation Head, Employment

Employment Officer manages Employment Exchange carrying out placement and related activities. Interviews employment seekers to obtain factual details of job experience, training

obtained etc., and registers them for placement against vacancies notified by employers. Selects registered applicants with appropriate qualifications specified for vacancies and directs or submits particulars of applicants to employers. Maintains liaison with trade unions, employing organizations and solicits notification of vacancies for better organization of local employment market. Maintains contacts with local sources of labour supply and with mobile personnel in other places by circulating particulars of vacancies. Counsels applicants on employment opportunities available, suggesting suitable training and necessary mobility for early employment and also participates in career conferences. Submits statistical and ad hoc reports and conducts inspection of different sections and exchanges as prescribed. Conducts local labour market surveys, and studies trends in employment opportunities. Provides expert advice to employers regarding availability of different categories of personnel and the sources of labour supply. May carry out special surveys and conduct research on subjects connected with employment and manpower planning.

ISCO 08 Unit Group Details:

Code 2423

Title Personal and Careers Professionals

2424.0300

Human Resource Manager

Human Resource Manager plans, directs, and co-ordinates human resource management activities of an organization to maximise the strategic use of human resources and maintain functions such as employee compensation, recruitment, personnel policies, and regulatory compliance. Administer compensation,

benefits and performance management systems, and safety and recreation programmes. Advise managers on organizational policy matters such as equal employment opportunity and sexual harassment, and recommend needed changes. Allocate human resources, ensuring appropriate matches between personnel. Analyse statistical data and reports to identify and determine causes of personnel problems and develop recommendations for improvement of organization's personnel policies and practices. Analyse training needs to design employee development, language training and health and safety programmes. Conduct exit interviews to identify reasons for employee termination. Develop, administer and evaluate applicant tests. Identify staff vacancies and recruit, interview and select applicants. Maintain records and compile statistical reports concerning personnel-related data such as hires, transfers, performance appraisals, and absenteeism rates. Negotiate bargaining agreements and help interpret labour contracts.

ISCO 08 Unit Group Details:

Code 2423

Title Personal and Careers Professionals

2424.0401

Sales Training Manager

Sales Training Manager is responsible for developing sales training modules on features of product line for delivering effective training to the sales function and ensures proper execution of sales process. The individual also manages a team of sales trainers to ensure maximum effectiveness of the sales force and should have an idea about the automotive products, services and sales techniques.

Qualification Pack Details:

QP NOS Reference	ASC/Q0201
QP NOS Name	Sales Training Manager
NSQF Level	6

Service Centre Training In Charge monitors all aspects of training programmes and supervises Services function about IT functions and other Service processes.

ISCO 08 Unit Group Details:

Code	2423
Title	Personal and Careers Professionals

2424.0402**Sales/Service Trainer (Dealer)**

Sales/Service Trainer (Dealer) is also known as Training Executive, Training In Charge, Training Supervisor, Process Trainer and Field Training Officer etc. A Sales/Service Trainer (Dealer) is responsible for ensuring a trained sales and service workforce in the dealership and includes activities such as designing and framing training modules, executing them and recording their effectiveness are also part of the job role. The responsibility also includes implementing the developed modules by the respective OEM to ensure effective brand communication by the sales/service workforce to the end customer.

Qualification Pack Details:

QP NOS Reference	ASC/Q1109
QP NOS Name	Sales/Service Trainer (Dealer)
NSQF Level	6

ISCO 08 Unit Group Details:

Code	2423
Title	Personal and Careers Professionals

2424.0501**Service Training Centre In charge****Qualification Pack Details:**

QP NOS Reference	ASC/Q0802
QP NOS Name	Service Training Centre In charge
NSQF Level	6

ISCO 08 Unit Group Details:

Code	2423
Title	Personal and Careers Professionals

2424.0502**Field Service Trainer**

Service Trainer is also known as Field Service Trainer, Service Advisor or Automotive Service Trainer. A Service Trainer will provide training to the Service Executives and dealers of the company on all IT functions of the company, flow of processes, account management and conducting market research and surveys.

Qualification Pack Details:

QP NOS Reference	ASC/Q0801
QP NOS Name	Field Service Trainer
NSQF Level	5

ISCO 08 Unit Group Details:

Code	2423
Title	Personal and Careers Professionals

2424.9900**Training and Staff Development Professionals, Other**

Training and Staff Development Professionals, Other include professionals who plan, develop, implement and

evaluate training and development programmes required by organizations to meet organizational objectives not elsewhere classified.

ISCO 08 Unit Group Details:

Code 2423

Title Personal and Careers Professionals

Group 243

Sales, Marketing and Public Relations Professionals

Sales, Marketing and Public Relations Professionals plan, develop, co-ordinate and implement programmes of information dissemination to promote organizations, goods and services, and represent companies in selling a range of technical, industrial, medical, pharmaceutical and ICT goods and services.

Occupations in this Group are classified into the following Families:

2431 Advertising and Marketing Professionals
2432 Public Relations Professionals
2433 Technical and Medical Sales Professional (excluding ICT)
2434 Information and Communications Technology Sales Professionals

Family 2431

Advertising and Marketing Professionals

Advertising and Marketing Professionals develop and co-ordinate advertising strategies and campaigns, determine the market for new goods and services, and

identify and develop market opportunities for new and existing goods and services.

2431.0100

Market Research Analyst

Market Research Analyst researches market conditions in local, regional, or national areas to determine potential sales of a product or service. May gather information on competitors, prices, sales, and methods of marketing and distribution. May use survey results to create a marketing campaign based on regional preferences and buying habits. Collects and analyses data on customer demographics, preferences, needs, and buying habits to identify potential markets and factors affecting product demand. Conducts research on consumer opinions and marketing strategies, collaborating with marketing professionals, statisticians, pollsters, and other professionals. Develops and implements procedures for identifying advertising needs. Devises and evaluates methods and procedures for collecting data (such as surveys, opinion polls, or questionnaires), or arranges to obtain existing data. Forecasts and tracks marketing and sales trends, analysing collected data. Gathers data on competitors and analyses their prices, sales, and method of marketing and distribution. Measures and assesses customer and employee satisfaction. Measures the effectiveness of marketing, advertising, and communications programmes and strategies. Monitors industry statistics and follows trends in trade literature. Prepares reports of findings, illustrating data graphically and translating complex findings into written text.

ISCO 08 Unit Group Details:

Code 2431

Title Advertising and Marketing Professionals

2431.0101

Regional Service Marketing Manager

Regional Service Marketing Manager is responsible for the outbound marketing activities for service offerings of the organization. The individual is able to craft the messaging and positioning for service offerings.

Qualification Pack Details:

QP NOS Reference	ASC/Q0701
QP NOS Name	Regional Service Marketing Manager
NSQF Level	6

ISCO 08 Unit Group Details:

Code	2431
Title	Advertising and Marketing Professionals

2431.0102

Regional Service Process Manager

Regional Service Process Manager is responsible for designing and developing service process framework for services function and also its proper implementation for smoother flow of service operations of OEM products. The individual is also capable of assigning duties to be performed by the sales and services function for smoother flow of service process.

Qualification Pack Details:

QP NOS Reference	ASC/Q 0702
QP NOS Name	Regional Service Process Manager
NSQF Level	6

ISCO 08 Unit Group Details:

Code	2431
Title	Advertising and Marketing Professionals

2431.0201

Product Brand Manager (Automotive)

Product Manager is responsible for implementation of promotional and branding framework of a product and co-ordination with the sales function to ensure effective implementation of the branding strategies.

Qualification Pack Details:

QP NOS Reference	ASC/Q0503
QP NOS Name	Product Brand Manager
NSQF Level	6

ISCO 08 Unit Group Details:

Code	2431
Title	Advertising and Marketing Professionals

2431.0202

Account Executive (Advertising Agency)

Account Executive (Advertising Agency) is responsible for managing preparation of clients' advertisement end-products.

Qualification Pack Details:

QP NOS Reference	MES/Q0208
QP NOS Name	Account Executive (Advertising Agency)
NSQF Level	6

ISCO 08 Unit Group Details:

Code	2431
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Title Advertising and Marketing Professionals

2431.0300

Caption Writer

Caption Writer writes caption phrases of dialogue for hearing-impaired and different Indian language-speaking viewers of movie or television productions. Writes captions to describe music and background noises. Watches production and reviews captions simultaneously to determine which caption phrases require editing. Enters commands to synchronize captions with dialogue and place on the screen. Translates different Indian language dialogues into English language captions or English dialogue into different Indian language captions. Operates computerised captioning system for movies or television productions for hearing-impaired and different Indian language speaking viewers. Oversees encoding of captions to master tape of television production. Discusses captions with Directors or Producers of movie and television productions. Edits translations for correctness of grammar, punctuation, and clarity of expression.

ISCO 08 Unit Group Details:

Code 2431
Title Advertising and Marketing Professionals

2431.0400

Advertisement Writer

Advertisement Writer; Copywriter composes wording of advertisement, either in descriptive style or in form of slogans, captions, etc., for popularising particular product or establishment. Receives advertisement matter from

customer. Writes descriptive matter or slogans in attractive form to advertise merits of product or establishment.

ISCO 08 Unit Group Details:

Code 2431
Title Advertising and Marketing Professionals

2431.0501

Market Research Associate-Sales and Marketing/Business Development

Market Research Associate is responsible for undertaking detailed market research to create product backlog or product funnel. These individuals collect data and undertake exhaustive analysis including competitive analysis, to gather intelligence and provide inputs to teams involved in design, manufacturing or management of product lifecycle.

Qualification Pack Details:

QP NOS Reference SSC/Q6302
QP NOS Name Market Research Associate
NSQF Level 7

ISCO 08 Unit Group Details:

Code 2431
Title Advertising and Marketing Professionals

2431.0502

Management Trainee-Sales and Marketing/Business Development

Management Trainee Sales and Marketing; Business Development supports ongoing market research work such as data gathering, analysis and preparation of documents to gain relevant

insights on customer behaviour and the competitive landscape.

Qualification Pack Details:

QP NOS Reference	SSC/Q6301
QP NOS Name	Management Trainee Sales Marketing/Business Development
NSQF Level	8

ISCO 08 Unit Group Details:

Code 2431

Title Advertising and Marketing Professionals

2431.0503

Market Research Associate-Product Marketing

Market Research Associate is responsible for undertaking detailed market research to create product backlog or product funnel. These individuals collect data and undertake exhaustive analysis including competitive analysis, to gather intelligence and provide inputs to teams involved in design, manufacturing or management of product lifecycle.

Qualification Pack Details:

QP NOS Reference	SSC/Q4102
QP NOS Name	Market Research Associate
NSQF Level	7

ISCO 08 Unit Group Details:

Code 2431

Title Advertising and Marketing Professionals

2431.0504

Management Trainee-Product Marketing

Management Trainee supports ongoing market research work such as data gathering, analysis and preparation of documents to gain relevant insights on customer behaviour as well as the competitive landscape.

Qualification Pack Details:

QP NOS Reference	SSC/Q4101
QP NOS Name	Management Trainee – Product Marketing
NSQF Level	8

ISCO 08 Unit Group Details:

Code	2431
Title	Advertising and Marketing Professionals

2431.0601

Product Executive

Product Executive is responsible for research, representing and advocating products to the customers. The job also involves competitive landscape analysis, developing partnership with third parties, facilitating contractual, product positioning and pricing strategies.

Qualification Pack Details:

QP NOS Reference	SSC/Q6501
QP NOS Name	Product Executive
NSQF Level	7

ISCO 08 Unit Group Details:

Code	2431
Title	Advertising and Marketing Professionals

2431.0651

Sales Executive (Media Org)

Sales Executive (Media Org) is responsible to close sales transactions with new and existing clients.

Qualification Pack Details:

QP NOS Reference	MES/Q0203
QP NOS Name	Sales Executive (Media Org)
NSQF Level	2

ISCO 08 Unit Group Details:

Code	2431
Title	Advertising and Marketing Professionals

2431.0671

Traffic Co-ordinator

Traffic Co-ordinator is responsible for managing and scheduling advertisement inventory.

Qualification Pack Details:

QP NOS Reference	MES/Q0205
QP NOS Name	Traffic Co-ordinator
NSQF Level	4

ISCO 08 Unit Group Details:

Code	2431
Title	Advertising and Marketing Professionals

2431.0700

Creative Writer

Creative Writer develops basic presentation approaches and directs layout design and copy writing for promotional material such as books, magazines, newspapers, television, posters and packaging. Reviews materials and information presented by client and discusses various production factors to determine most desirable presentation

concept. Confers with heads of art, copy writing and production departments to discuss client requirements and scheduling, outline basic presentation concepts and co-ordinate creative activities. Reviews and approves art and copy materials developed by staff and presents final layouts to client for approval.

ISCO 08 Unit Group Details:

Code	2431
Title	Advertising and Marketing Professionals

2431.0800

Propagandist

Propagandist creates buying interest amongst public for products by publicising them at street-corners, exhibitions, village-fairs, through various publicity media such as talks, demonstrations, filmstrips, etc. Plans tour programmes and visits places accordingly. Selects suitable site for giving demonstrations. Makes necessary announcements through loud speaker etc., to attract public. Introduces products to public assembled and explains their working and utility through actual demonstrations, charts, filmstrips, etc. Canvasses products among local dealers and persuades them to stock goods to meet likely local demands. Books orders and supplies products to local dealers either immediately or arranges to supply them expeditiously. Submits reports of their canvassing activities to higher authorities and seeks their guidance where necessary. May play musical gramophone records to attract public for giving demonstration. May distribute free samples to assembled public and effect retail sale.

ISCO 08 Unit Group Details:

Code 2412
 Title Financial and Investment
 Advisors

2431.9900
Advertising and Marketing
Professionals, Other

Advertising and Marketing Professionals, Other include marketing professionals who develop and co-ordinate advertising strategies and campaigns, determine the market for new goods and services, and identify and develop market opportunities for new and existing goods and services not elsewhere classified.

ISCO 08 Unit Group Details:

Code
 Title

Family 2432
Public Relations Professionals

Public Relations Professionals plan, develop, implement and evaluate information and communication strategies that create an understanding and a favourable view of businesses and other organizations, their goods and services, and their role in the community.

2432.0100
Publicity Officer

Publicity Officer prepares publicity material and issues it through press, screen or Radio/TV to attain effective publicity for organizations, Government, business houses or other institutions. Prepares news releases, scripts, salient features and other publicity materials to be published. Publicises publicity material through appropriate media such as display at important places, exhibitions, films,

newspapers, radio/TV and personal contacts. Scrutinises newspaper and magazines to collect news and views to ensure effective publicity relating to the publicised material. May tour area and contact public to promote mutual goodwill. May maintain liaison with press representatives.

ISCO 08 Unit Group Details:

Code 2432
 Title Public Relations
 Professionals

2432.0200
Public Relations Officer

Public Relation Officer; Liaison Officer maintains liaison between organization employing him and general public for promoting goodwill and better understanding. Distributes publicity material and issues press releases to popularise the organizations' activities. Studies newspapers, journals etc. carefully and notes trends of public opinion on policies and activities of organizations. Explains and helps employer to understand public opinion and criticism of policies. Meets press and public representatives, explains special features of the organizations employing them. Distributes publicity material, arranges film shows etc. to cultivate appreciation of organizations' activities and counteracts criticisms. Arranges visits of important persons and special parties to establishment for explaining their activities. Participates in exhibitions and displays posters, charts, models etc. to public. May select suitable publicity material; write special feature articles, reports or pamphlets. May participate and get photographs/video graphs taken of important functions and prepare other audio visual aids. May edit journals or

periodicals for publicising activities of establishments or organizations.

May maintain information centres and organize community relation activities.

ISCO 08 Unit Group Details:

Code	2432
Title	Public Relations Professionals

2432.0201 Digital Marketing/Social Media Manager

Digital Marketing/Social Media Manager is responsible for designing and supervising implementation of the complete Digital and Social media marketing strategy for the assigned product.

Qualification Pack Details:

QP NOS Reference	ASC/Q0501
QP NOS Name	Digital Marketing/Social Media Manager
NSQF Level	6

ISCO 08 Unit Group Details:

Code	2432
Title	Public Relations Professionals

2432.0300 Information Officer

Information Officer collects and disseminates useful information connected with employers' activities and conducts information centre to educate and benefit public. Plans and prepares educational exhibits, charts, diagrams and other forms of audio visual aids. Displays publicity materials in information centre in attractive manner. Stocks books, pamphlets and other literature relating to

activities of employer or institution for distribution or sale. Conducts persons and parties round information centre and explains charts and other exhibits to them. Distributes complimentary copies of literature or sells publications. Maintains proper accounts regarding sales and stock. Renders periodical reports to authorities concerned. May address public gatherings, private clubs and schools. May answer queries and explain achievements made.

ISCO 08 Unit Group Details:

Code	2432
Title	Public Relations Professionals

2432.9900 Public Relations Professionals, Other

Business Professionals, Other include professionals engaged in studying, advising on and applying operational methods relating to various aspects of business undertakings, such as marketing, advertising, public relations, application of rules concerning patents, or steps to be taken in setting up and running a business, and home economics principles not elsewhere classified.

ISCO 08 Unit Group Details:

Code	2432
Title	Public Relations Professionals

Family 2433

Technical and Medical Sales Professional (excluding ICT)

Technical and Medical Sales Professionals (excluding ICT) represent companies in

selling a range of industrial, medical and pharmaceutical goods and services to industrial, business, professional and other establishments.

2433.0101

Area Sales Officer

Area Sales Officer: Business Development Executive; Marketing Executive is responsible for marketing products and services of the organizations in the designated geography. The individual at work is responsible for studying the market, understanding the client requirement and offering products and services to satisfy the customer requirement. The individual at work co-ordinates with the channel sales partners and interacts directly with customers for sale of products and services.

Qualification Pack Details:

QP NOS Reference	ELE/Q7202
QP NOS Name	Area Sales Officer
NSQF Level	5

ISCO 08 Unit Group Details:

Code	2433
Title	Technical and Medical Sales Professional (excluding ICT)

2433.0201

Medical Representative

Medical Representatives contact physicians, hospitals, nursing homes, a druggist etc. in specified areas and introduces medical products of his company to stimulate sales. Plans daily visits and calls on doctors, hospitals, nursing homes, etc. in their area. Introduces to physicians medical products of their company and explains their merits. Distributes literature, catalogue, samples other publicity material, etc. for

guidance and prescription. Follows up their visit, ascertains views regarding their products and induces clients to prescribe their products to patients. Persuades druggists and dealers of their area to stock their products to meet likely demands. Offers credit facilities, commission, etc. as authorised by company. Books orders and forwards them to controlling office for compliance. Submits daily report of their canvassing activities and gives suggestions for improving sales. May collect payment for products sold.

Qualification Pack Details:

QP NOS Reference	LFS/Q0401
QP NOS Name	Medical Sales Representative
NSQF Level	5

ISCO 08 Unit Group Details:

Code	2433
Title	Technical and Medical Sales Professional (excluding ICT)

2433.0301

Sales Executive-Medical Electronics

Sales Executive-Medical Electronics is also called Salesman or Sales Person, the Sales Executive sells medical devices to customers. The individual at work approaches hospitals, diagnostic centres, doctors, wholesalers, retailers and pitches company's products. The individual is responsible for sale of medical devices to customers.

Qualification Pack Details:

QP NOS Reference	ELE/Q7601
QP NOS Name	Sales Executive-Medical Electronics
NSQF Level	5

ISCO 08 Unit Group Details:

Code 2433
 Title Technical and Medical Sales Professional (excluding ICT)

2433.0401 Sales Executive-Consumer Electronics

Sales Executive-Consumer Electronics is also called ‘Business Development Executive’ or ‘Marketing Executive’, the Sales Executive is responsible for marketing and selling the products and services of the organization. The individual at work is responsible for studying the market, understanding the client requirement and offering products and services to satisfy the customer requirement. The individual at work co-ordinates with the channel sales partners and interacts directly with clients for sale of products and services.

Qualification Pack Details:

QP NOS Reference ELE/Q3201
 QP NOS Name Sales Executive-
 Consumer
 Electronics
 NSQF Level 4

ISCO 08 Unit Group Details:

Code 2433
 Title Technical and Medical Sales Professional (excluding ICT)

2433.0501 Sales Executive-Solar Electronics

Sales Executive-Solar Electronics is also called ‘Business Development Executive’ or ‘Marketing Executive’, the Sales Executive is responsible for marketing and selling the solar products and services of the organization. The individual at work is responsible for studying the market, understanding the customer requirement

and offering products and services to satisfy the customer requirement. The individual co-ordinates with the channel sales partners and interacts directly with customers for sale of products and services.

Qualification Pack Details:

QP NOS Reference ELE/Q5601
 QP NOS Name Sales Executive-
 Solar Electronics
 NSQF Level 5

ISCO 08 Unit Group Details:

Code 2433
 Title Technical and Medical Sales Professional (excluding ICT)

2433.0601 Business Development Executive

Business Development Executive is also called ‘Marketing Executive’. The Business Executive is responsible for marketing and selling the products and services of the organization. The individual at work is responsible for studying the market, understanding the customer requirement and offering products and services to satisfy the customer requirement. The individual at work co-ordinates and interacts with customers for sale of products and services.

Qualification Pack Details:

QP NOS Reference ELE/Q1101
 QP NOS Name Business
 Development
 Executive
 NSQF Level 5

ISCO 08 Unit Group Details:

Code 2433
 Title Technical and Medical Sales Professional (excluding ICT)

2433.0700 Field Officer, Insurance

Field Officer, Insurance; Insurance Inspector plans, organizes and develops various types of insurance business (life, fire, marine, accident, etc.) and guides and supervises work of Insurance Agents. Works out plans to develop business in a given area or organization. Selects and hires new agents and trains them in selling insurance to clients. Draws out plan of work for their agents and guides and supervises their day-to-day work by contacting prospective clients along with their agent if considered necessary. Encourages agents to work in scientific manner by persuading them to make regular calls on clients and to maintain their work-book (daily record). Recommends appointments of suitable agents in replacement of inactive agents when considered necessary. Gives publicity in their area to various new plans devised by the insurance company. Maintains social contacts with all important persons of locality. Ensures that maximum business from given area or organizations is secured. Keeps authorities informed of developments in their area or organization. Investigates claim cases. Acts as Liaison Officer between corporation, insuring public and Commission Agent. May collect first premium deposit.

ISCO 08 Unit Group Details:

Code	2433
Title	Technical and Medical Sales Professional (excluding ICT)

**Family 2434
Information and Communications
Technology Sales Professionals**

Information and Communications Technology (ICT) Sales Professionals sell, at the wholesale level, a range of computer hardware, software and other information and communications technology goods and services including installations and provide specialized information as required.

2434.0101 Sales and Pre-Sales Analyst

Sales and Pre-Sales Analyst is responsible for new business development by capturing and understanding the requirements and proposing the right solution. They manage relationships with various internal and external stakeholders to ensure inflow of required inputs. This role also involves supporting all aspects of the pre-sales cycle from requirement analysis to successful evaluation and solution.

Qualification Pack Details:

QP NOS Reference	SSC/Q1101
QP NOS Name	Sales and Pre-Sales Analyst
NSQF Level	7

ISCO 08 Unit Group Details:

Code	2434
Title	Information and Communication Technology Sales Professionals

2434.0201 Sales/Pre-Sales Executive

Sales/Pre-Sales Executive is responsible for new business development by capturing and understanding the requirements and proposing the right solution. They manage relationships with various internal and external stakeholders

to ensure inflow of required inputs. This role also involves supporting all aspects of the pre-sales cycle from requirements analysis to successful evaluation and solution.

Qualification Pack Details:

QP NOS Reference	SSC/Q6303
QP NOS Name	Sales/Pre-Sales Executive
NSQF Level	7

ISCO 08 Unit Group Details:

Code	2434
Title	Information and Communication Technology Sales Professionals

Sub Division 25

Information and Communication Technology Professionals

Information and Communications Technology Professionals conduct research, plan, design, write, test, provide advice and improve information technology systems, hardware, software and related concepts for specific applications; develop associated documentation including principles, policies and procedures; and design, develop, control, maintain and support databases and other information systems to ensure optimal performance and data integrity and security.

Tasks performed usually include: researching information technology use in business functions; identifying areas for improvement and researching the theoretical aspects and operational methods for the use of computers; evaluating, planning and designing hardware or software configurations for

specific applications including for Internet, Intranet and multimedia systems; designing, writing, testing and maintaining computer programmes; designing and developing database architecture and database management systems; developing and implementing security plans and data administration policy, and administering computer networks and related computing environments; analysing, developing, interpreting and evaluating complex system design and architecture specifications, data models and diagrams in the development, configuration and integration of computer systems.

Occupations in this Sub Division are classified into the following Groups:

251	Software and Application Developers, and Analysts
252	Database and Network Professionals

Group 251 Software and Application Developers, and Analysts

Software and Application Developers and Analysts conduct research, plan, design, write, test, provide advice on and improve information technology systems, such as hardware, software and other applications to meet specific requirements.

Occupations in this Group are classified into the following Families:

2511	System Analysts
2512	Software Developers
2513	Web and Multimedia Developers
2514	Applications Programmers

2519 Software and Application Developers and Analysts, Not Elsewhere Classified

Family 2511 System Analysts

Systems Analysts conduct research, analyse and evaluate client information technology requirements, procedures or problems, and develop and implement proposals, recommendations, and plans to improve current or future information systems.

2511.0100 System Analysts

System Analyst analyses user requirements, procedures, and problems to automate processing or to improve existing computer system. Confers with personnel of organizational units involved to analyse current operational procedures, identify problems, and learn specific input and output requirements, such as forms of data input, how data is to be summarised, and formats for reports. Writes detailed description of user needs, programme functions, and steps required to develop or modify computer programme. Reviews computer system capabilities, workflow, and scheduling limitations to determine if requested programme or programme change is possible within existing system. Studies existing information processing systems to evaluate effectiveness and develops new systems to improve production or workflow as required. Prepares workflow charts and diagrams to specify in detail operations to be performed by equipment and computer programmes and operations to be performed by personnel in system. Conducts studies pertaining to

development of new information systems to meet current and projected needs. Plans and prepares technical reports, memoranda, and instructional manuals as documentation of programme development. Upgrades system and corrects errors to maintain system after implementation. May assist COMPUTER PROGRAMMER in resolution of work problems related to flow charts, project specifications or programming. May prepare time and cost estimates for completing projects. May direct and co-ordinate work of others to develop, test, install, and modify programs.

ISCO 08 Unit Group Details:

Code	2511
Title	Systems Analysts

2511.0101 Deployment Engineer

Deployment Engineer is responsible for ensuring that software systems are fully deployed, implemented and functioning and are configured with the appropriate hardware requirements.

Qualification Pack Details:

QP NOS Reference	SSC/Q0301
QP NOS Name	Deployment Engineer
NSQF Level	7

ISCO 08 Unit Group Details:

Code	2511
Title	System Analysts

2511.0102 Engineer-Software Transition

Engineer-Software Transition is responsible for change management for implementing new products and the

intended communication to all stakeholders.

Qualification Pack Details:

QP NOS Reference	SSC/Q7101
QP NOS Name	Engineer-Software Transition
NSQF Level	7

ISCO 08 Unit Group Details:

Code	2511
Title	System Analysts

2511.0103

Engineer-Packaging

Engineer-Packaging is responsible for creating a new, company-specific or industry vertical-specific image of a software product before releasing it.

Qualification Pack Details:

QP NOS Reference	SSC/Q6901
QP NOS Name	Engineer-Packaging
NSQF Level	7

ISCO 08 Unit Group Details:

Code	2511
Title	System Analysts

2511.0104

Engineer-Product Lifecycle Management (PLM)

Product Lifecycle Management (PLM) is responsible for helping implement and manage the appropriate PLM package and strategy for an organization using commercial packages like Wind chill, Teamcenter, Enovia, SAP-PLM and so on. The individuals in these roles manage different versions/releases of products and engage in customer support.

Qualification Pack Details:

QP NOS Reference	SSC/Q5201
QP NOS Name	Engineer-Product Lifecycle Management (PLM)
NSQF Level	7

ISCO 08 Unit Group Details:

Code	2511
Title	System Analysts

2511.0105

Analyst

Analyst understands the clients' business requirements and translates them into technology requirements for the technology consultants. They act as facilitators in the process of providing solutions and development of the end product/service.

Qualification Pack Details:

QP NOS Reference	SSC/Q0701
QP NOS Name	Analyst
NSQF Level	7

ISCO 08 Unit Group Details:

Code	2511
Title	System Analysts

2511.0106

Support Engineer

Support Engineer is responsible for planning and managing project related activities for the integration of new hardware and software to the client site as well as migration to the desired platform. Deployment involves ensuring that hardware and software systems are fully deployed, implemented and functioning.

Qualification Pack Details:

QP NOS Reference	SSC/Q6101
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QP NOS Name Support Engineer
 NSQF Level 7

ISCO 08 Unit Group Details:

Code 2511
 Title System Analysts

2511.9900 **System Analysts, Other**

Computer System Designers and Analysts, Other, Computer System Designers and Analysts' conducts research, improve or develop computing concepts and advise on or engage in their practical application and all other Computer System Designers and Analysts not elsewhere classified.

ISCO 08 Unit Group Details:

Code 2511
 Title System Analysts

Family 2512

Software Developers

Software Developers research, analyse and evaluate requirements for existing or new software applications and operating systems, and design, develop, test and maintain software solutions to meet these requirements.

2512.0100 **Computer Programmer/Software Engineer**

Computer Programmer converts data from project specifications and statements of problems and procedures to create or modify computer programs.

Prepares or receives from SYSTEMS ANALYST, detailed workflow chart and diagram to illustrate sequence of steps that the program must follow and to describe input, output, and logical operations involved. Analyses workflow chart and diagram, applying knowledge of computer capabilities, subject matter, and symbolic logic. Confers with Supervisor and representatives of departments concerned with programming to resolve questions of program intent, data input, output requirements, and inclusion of internal checks and controls. Converts detailed logical flow chart to a language that can be processed by a computer. Enters program codes into the computer system. Inputs test data into computer. Observes the computer monitor screen to interpret program-operating codes. Corrects program errors, using methods, such as modifying the program or altering sequence of the program steps. Writes instructions to guide operating personnel during production runs. Analyses, reviews, and rewrites programs to increase operating efficiency or to adapt the program to new requirements. Compiles and writes documentation of program development and subsequent revisions. May train workers to use the program. May assist COMPUTER OPERATORS to resolve problems in running a computer program. May work with SYSTEMS ANALYST to obtain and analyse project specifications and flow charts. May direct and co-ordinate work of others to write, test, and modify computer programs.

ISCO 08 Unit Group Details:

Code 2512
 Title Software Developers

2512.0201 **Software Engineer**

Software Engineer researches, designs, and develops computer software systems, in conjunction with hardware product development, for medical, industrial, communications, aerospace, and scientific applications, applying principles and techniques of computer science, engineering, and mathematical analysis: Analyses software requirements to determine feasibility of design within time and cost constraints. Consults with Hardware Engineers and other engineering staff to evaluate interface between hardware and software, and operational and performance requirements of the system. Formulates and designs software system, using scientific analysis and mathematical models to predict and measure outcome and consequences of design. Develops and directs software system testing procedures, programming and documentation. Consults with the customer regarding maintenance of software system. May co-ordinate installation of software system.

Qualification Pack Details:

QP NOS Reference	SSC/Q4601
QP NOS Name	Software Engineer
NSQF Level	7

ISCO 08 Unit Group Details:

Code	2512
Title	Software Developers

2512.0202

Test Engineer-Software

Test Engineer-Software is responsible for ensuring the software product meets the specified requirements and produces the desired results. These individuals perform tests, develop and execute test plans and report and rectify defects to ensure that quality outputs are generated.

Qualification Pack Details:

QP NOS Reference	SSC/Q4901
QP NOS Name	Test Engineer-Software
NSQF Level	7

ISCO 08 Unit Group Details:

Code	2512
Title	Software Developers

2512.0203

Design Engineer (Product Engineer)

Design Engineer is responsible for conceptualizing and developing a product based on customer/market needs. Involvement is in all aspects of software development including requirement analysis, design, implementation and testing.

Qualification Pack Details:

QP NOS Reference	SSC/Q6601
QP NOS Name	Design Engineer
NSQF Level	7

ISCO 08 Unit Group Details:

Code	2512
Title	Software Developers

2512.0204

Software Developer-Application Development

Software Developer is responsible for development of software applications and interfaces as well as enhancements to existing packaged applications or pre-engineered templates. The job also involves providing support to custom applications, debugging, maintenance and documentation.

Qualification Pack Details:

QP NOS Reference	SSC/Q0501
QP NOS Name	Software
	Developer-
	Application
	Development

QP NOS Name	Engineer Trainee –
	IT Services
NSQF Level	7

ISCO 08 Unit Group Details:

Code	2512
Title	Software Developers

2512.0205**Junior Software Developer**

Junior Software Developer is one of the many entry level roles in the software industry including support and help desk, testing, user interaction design, maintenance, enhancement, development and documentation. They are responsible for assisting in performing the key activities and tasks involved in the assigned role.

Qualification Pack Details:

QP NOS Reference	SSC/Q0508
QP NOS Name	Junior Software
	Developer

NSQF Level 4

ISCO 08 Unit Group Details:

Code	2512
Title	Software Developers

2512.0206**Engineer Trainee-IT Services**

Engineer Trainee is responsible for supporting the work area/domain they are aligned to by assisting in performing the key activities and tasks involved.

Qualification Pack Details:

QP NOS Reference	SSC/Q0507
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ISCO 08 Unit Group Details:

Code	2512
Title	Software Developers

2512.0207**Engineer Trainee-Engineering Analysis**

Engineer Trainee supports engineering analysis activities such as engineering analysis, hardware and software development, research, testing etc.

Qualification Pack Details:

QP NOS Reference	SSC/Q4202
QP NOS Name	Engineer Trainee –
	Engineering Analysis

NSQF Level 7

ISCO 08 Unit Group Details:

Code	2512
Title	Software Developers

2512.0300**Programmer Analyst**

Programmer Analyst plans, develops, tests, and documents computer programs, applying knowledge of programming techniques and computer systems: Evaluates user request for new or modified programs, such as for financial or human resource management system, clinical research trial results, statistical study of traffic patterns, or analysing and developing specifications for bridge design, to determine feasibility, cost and time required, compatibility with current system, and computer capabilities. Consults with user to identify current operating procedures and clarify program

objectives. Reads manuals, periodicals, and technical reports to learn ways to develop programs that meet user requirements. Formulates plan-outlining steps required to develop programs, using structured analysis and design. Submits plans to user for approval. Prepares flowcharts and diagrams to illustrate sequence of steps that a program must follow and to describe logical operations involved. Designs computer terminal screen displays to accomplish goals of user request. Converts project specifications, using flowcharts and diagrams into sequence of detailed instructions and logical steps for coding into a language that can be processed by a computer, applying knowledge of computer programming techniques and computer languages. Enters program codes into the computer system. Enters commands into computer to run and test programs. Reads computer printouts or observes display screen to detect syntax or logic errors during program test, or uses diagnostic software to detect errors. Replaces, deletes, or modifies codes to correct errors. Analyses, reviews, and alters programs to increase operating efficiency or adapt to new requirements. Writes documentation to describe program development, logic, coding, and corrections. Writes manual for users to describe installation and operating procedures. Assists users to solve operating problems. Recreates steps taken by user to locate source of problem and rewrites programs to correct errors. May use computer-aided software tools, such as flowchart design and code generation, in each stage of system development. May train users to use a program. May oversee installation of hardware and software. May provide technical assistance to program users. May install and a test program at the user site. May monitor performance of the

program after implementation. May specialize in developing programs for business or technical applications.

ISCO 08 Unit Group Details:

Code	2512
Title	Software Developers

2512.0301 Software Developer-Product Development and Delivery

Software Developer is responsible for using specialized knowledge of software programming languages, software integration and delivery platforms to build software products and deliver business solutions. The job also involves application enhancement, debugging, maintenance and documentation.

Qualification Pack Details:

QP NOS Reference	SSC/Q6702
QP NOS Name	Software Developer
NSQF Level	7

ISCO 08 Unit Group Details:

Code	2512
Title	Software Developers

2512.0401 FPGA Design Engineer

FPGA Design Engineer is also called, ‘FPGA Programmer’, the FPGA Design Engineer compiles, edits, links and debugs programs to design the FPGA and loads it into the hardware. The individual at work develops the architectural design and compiles programs in programming languages such as Verilog, VHDL and loads the program into the FPGA.

Qualification Pack Details:

QP NOS Reference	ELE/Q8201
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QP NOS Name	FPGA Design
	Engineer
NSQF Level	6

ISCO 08 Unit Group Details:

Code	2512
Title	Software Developers

2512.0501**Embedded Software Engineer**

Embedded Software Engineer is also called ‘Embedded Software Developer’, the Embedded Software Engineer is responsible for developing software module for the embedded system. The individual at work assesses the embedded systems’ specification requirement, develops software, tests and validates the software in co-ordination with Design Engineers for system integration.

Qualification Pack Details:

QP NOS Reference	ELE/Q1501
QP NOS Name	Embedded Software
	Engineer
NSQF Level	5

ISCO 08 Unit Group Details:

Code	2512
Title	Software Developers

2512.0601**Design Engineer-Engineering Analysis**

Design Engineer-EA is responsible for carrying out engineering analysis problems like stress calculations, static and dynamic analysis, thermal analysis, etc. They also provide support in the assessment and testing of advanced technology systems, subsystems and components.

Qualification Pack Details:

QP NOS Reference	SSC/Q4401
QP NOS Name	Design
	Engineer-EA
NSQF Level	7

ISCO 08 Unit Group Details:

Code	2512
Title	Software Developers

2512.0701**Application Maintenance Engineer**

Application Maintenance Engineer is responsible for ensuring the availability of an application or product for end users. Such roles provide on-going/ad-hoc support for software products or customized applications aimed towards correction of faults/bugs or improvement of performance

Qualification Pack Details:

QP NOS Reference	SSC/Q0201
QP NOS Name	Application
	Maintenance
	Engineer
NSQF Level	7

ISCO 08 Unit Group Details:

Code	2512
Title	Software Developers

2512.0800**Programmer, Engineering and Scientific/System Programmer**

Programmer, Engineering and Scientific converts scientific, engineering, and other technical problem formulations to format that can be processed by a computer: Resolves symbolic formulations, prepares flow charts and block diagrams, and encodes resultant equations for processing by applying extensive

knowledge of branch of science, engineering, or advanced mathematics, such as differential equations or numerical analysis, and understanding of capabilities and limitations of computer. Confers with other engineering and technical personnel to resolve problems of intent, inaccuracy, or feasibility of computer processing. Enters the program into a computer system. Reviews results of computer runs with the concerned personnel to determine necessity for modifications or reruns. Develops new subroutines or expands program to simplify statement, programming, or coding of future problems. May direct and co-ordinate activities of COMPUTER PROGRAMMERS working as part of the project team.

ISCO 08 Unit Group Details:

Code	2512
Title	Software Developers

Family 2513 Web and Multimedia Developers

Web and Multimedia Development Professionals combine design and technical knowledge to research, analyse, evaluate, design, program and modify websites, and applications that draw together text, graphics, animations, imaging, audio and video displays, and other interactive media.

2513.0101 Web Developer

Web Developer is responsible for designing and maintaining web-based applications that include static and dynamic content. This includes the design, layout and coding of a website. They may work standalone or along with application/functional developers as part

of the overall solution that includes a web based component.

Qualification Pack Details:

QP NOS Reference	SSC/Q0503
QP NOS Name	Web Developer
NSQF Level	5

ISCO 08 Unit Group Details:

Code	2513
Title	Web and Multimedia Developers

2513.0201 User Interface Developer

UI Developer is responsible for creating complex user interfaces for a variety of applications, such as computer programs, databases and websites.

Qualification Pack Details:

QP NOS Reference	SSC/Q0502
QP NOS Name	UI Developer
NSQF Level	7

ISCO 08 Unit Group Details:

Code	2513
Title	Web and Multimedia Developers

2513.0301 Media Developer-Product Development and Delivery

Media Developer-Product Development and Delivery is responsible for designing and improving the look and feel, functionality and visual appeal of the developed application. They may work independently or along with application/functional developers to improve the aesthetics of the application being developed.

Qualification Pack Details:

QP NOS Reference SSC/Q6703
 QP NOS Name Media Developer
 NSQF Level 5

ISCO 08 Unit Group Details:

Code 2513
 Title Web and Multimedia
 Developers

2513.0302**Media Developer-Application Development**

Media Developer-Application Development is responsible for designing and improving the look and feel, functionality and graphics appeal of the developed application. They may work standalone or along with application/functional developers to improve the aesthetics of the application being developed.

Qualification Pack Details:

QP NOS Reference SSC/Q 0504
 QP NOS Name Media Developer
 NSQF Level 5

ISCO 08 Unit Group Details:

Code 2513
 Title Web and Multimedia
 Developers

Family 2514**Application Programmers**

Application Programmers write and maintain programmable code outlined in technical instructions and specifications for software applications and operating systems.

2514.9900**Computer Programmers, Other**

Computer Programmers, Other are computer programmers who write, test and maintain computer programs to meet the needs of users of computer systems and all other Computer Programmers not elsewhere classified.

ISCO 08 Unit Group Details:

Code 2519
 Title Software and Applications
 Developers and Analysts
 Not Elsewhere Classified

Family 2519**Software and Application Developers and Analysts, Not Elsewhere Classified**

This unit group covers software and applications developers and analysts not classified elsewhere in minor group 251, Software and applications developers and analysts. For instance, the group includes those professionals specialising in quality assurance including software testing.

2519.0100**System Programmer**

System Programmer co-ordinates installation of computer operating system software and tests, maintains, and modifies software, using computer terminal: Reads loading and running instructions for system software, such as task scheduling, memory management, computer file system, or controlling computer input and output, and loads tape into tape drive or transfers software to magnetic disk. Initiates test of system programs and observes readout on monitor of computer system to detect errors or work stoppage. Enters code

changes into computer system to correct errors. Analyses performance indicators, such as system's response time, number of transactions per second and number of programs being processed at once, to ensure that system is operating efficiently. Changes system software so that system performance meets objectives. Reviews computer system capabilities, workflow, and scheduling limitations to determine if requested changes to operating system are possible. Writes description of steps taken to modify system and procedures required to implement new software. Assists users having problems with use of system software. May train users, to use system software. May prepare workflow charts and diagrams to modify system software. May visit vendors to observe demonstration of systems software. May administer and monitor computer program that controls user access to system. May review productivity reports and problem records to evaluate performance of computer systems.

ISCO 08 Unit Group Details:

Code	2519
Title	Software and Applications
	Developers and Analysts
	Not Elsewhere Classified

2519.0300 Quality Assurance Analyst (Computers)

Quality Assurance Analyst (Computers) evaluates and tests new or modified software programs and software development procedures used to verify that programs function according to user requirements and conform to establishment guidelines. Writes, revises, and verifies quality standards and test procedures for program design and product evaluation to attain quality of

software economically and efficiently. Reviews new or modified programs, including documentation, diagram, and flow chart, to determine whether the program performs according to user request and conforms to guidelines. Recommends program improvements or corrections to programmers. Reviews computer-operating log to identify program processing errors. Enters instructions into the computer to test program for validity of results, accuracy, reliability, and conformance to establishment standards. Observes computer monitor screen during program test to detect error codes or interruption of program and corrects errors. Identifies differences between establishment standards and user applications and suggests modifications to conform to standards. Sets up tests at request of user to locate and correct program operating error following installation of the program. Conducts compatibility tests with vendor-provided programs. Monitors program performance after implementation to prevent reoccurrence of program operating problems and ensures efficiency of operation. Writes documentation to describe program evaluation, testing, and correction. May evaluate proposed software or software enhancement for feasibility. May develop utility programs to test, track, and verify defects in software programs. May write programs to create new procedures or modify existing procedures. May train software program users.

ISCO 08 Unit Group Details:

Code	2519
Title	Software and Applications
	Developers and Analysts
	Not Elsewhere Classified

2519.0301

Quality Assurance Engineer-IT Services

QA Engineer IT Services is responsible for co-ordination with the support and operations teams to maintain quality related schedules like audits, records and reports. The job involves setting quality standards for products, systems and processes within the organization, followed by ensuring their effective implementation.

Qualification Pack Details:

QP NOS Reference	SSC/Q1302
QP NOS Name	QA Engineer – IT Services
NSQF Level	7

ISCO 08 Unit Group Details:

Code	2519
Title	Software and Applications Developers and Analysts Not Elsewhere Classified
NSQF Level	7

2519.0302

Test Engineer-IT Services

Test Engineer is responsible for development and co-ordination of scheduled and unscheduled test plans and conducting software compatibility tests with programs, hardware, operating systems, or network environments. The job involves documenting, reporting and tracking software defects using manual testing software.

Qualification Pack Details:

QP NOS Reference	SSC/Q1301
QP NOS Name	Test Engineer – IT Services
NSQF Level	5

ISCO 08 Unit Group Details:

Code	2519
Title	Software and Applications Developers and Analysts Not Elsewhere Classified

2519.0401

Quality Assurance Engineer-Software Products

QA Engineer is responsible for designing and implementing Quality Assurance, norms, standards and guidelines which are to be followed across the organization.

Qualification Pack Details:

QP NOS Reference	SSC/Q7002
QP NOS Name	QA Engineer – Software Products
NSQF Level	7

ISCO 08 Unit Group Details:

Code	2519
Title	Software and Applications Developers and Analysts Not Elsewhere Classified
NSQF Level	7

2519.0402

Test Engineer-Software Products

Test Engineer-Software Products are responsible for development and co-ordination of scheduled and unscheduled test plans and conducting software compatibility tests with programs, hardware, operating systems, or network environments. The job involves documenting, reporting and tracking software defects using manual testing software.

Qualification Pack Details:

QP NOS Reference	SSC/Q7001
QP NOS Name	Test Engineer-Software Products

NSQF Level 5

ISCO 08 Unit Group Details:

Code 2519
 Title Software and Applications Developers and Analysts Not Elsewhere Classified

2519.0501**Quality Engineer**

Quality Engineer is responsible for designing and implementing quality assurance initiatives for an organization. They focus on process re-engineering, statistical quality control and other quality initiatives such as Six-Sigma and Kaizen.

Qualification Pack Details:

QP NOS Reference SSC/Q4801
 QP NOS Name Quality Engineer
 NSQF Level 7

ISCO 08 Unit Group Details:

Code 2519
 Title Software and Applications Developers and Analysts Not Elsewhere Classified

Group 252**Database and Network Professionals**

Database and Network Professionals design, develop, control, maintain and support the optimal performance and security of information technology systems and infrastructure, including databases, hardware and software, networks and operating systems.

Occupations in this Group are classified into the following Families:

2521 Database designers and Administrators
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2522 Systems Administrators
2523 Computer Network Professionals
2529 Database and Network Professionals, Not Elsewhere Classified

Family 2521
Database Designers and Administrators

Database Designers and Administrators design, develop, control, maintain and support the optimal performance and security of databases.

2521.0100**Database Design Analyst**

Database Design Analyst Designs logical and physical databases and co-ordinates database development as part of project team, applying knowledge of database design standards and database management system. Reviews project request describing database user needs. Estimates time and cost required to accomplish project. Determines if project requires creating series of new programs or modifying existing programs that access data stored in databases. Attends specification meeting with project team workers to determine scope and limitations of a project. Reviews workflow chart developed by PROGRAMMER-ANALYST to understand the tasks a computer will perform, such as updating records. Reviews procedures in database management system manuals for making changes to database, such as defining, creating, revising, and controlling database. Revises company definition of data as defined in data dictionary (information about data, including name, description, source of data item, and key words for categorising and searching for

data item descriptions). Determines and enters changes to data dictionary descriptions, including type, structure, and intended use of data within the system, using a computer or assigns data entry work to programmers. Develops data models describing data elements and how they are used, following procedures and using pen and template or computer software. Creates description to enable PROGRAMMER ANALYST to understand how programs should access data. Writes a description of how a user can access data, referred to as logical database. Writes physical database descriptions, such as location, space requirements, and access method, to protect company data resources against unauthorized access and accidental destruction, according to computer industry standards and knowledge of database management systems. May specialize in adding, deleting, and modifying data items in data dictionary. Workers typically specialize in one or more types of database management systems.

ISCO 08 Unit Group Details:

Code	2521
Title	Database Designers and Administrators

2521.0202

Junior Data Associate

Junior Data Associate is responsible for designing and implementing processes and layouts for complex, large-scale data sets used for modelling, data mining, and research purposes. Responsibilities also include designing and implementing statistical data quality procedures around new data sources.

Qualification Pack Details:

QP NOS Reference	SSC/Q0401
QP NOS Name	Junior Data Associate
NSQF Level	7

ISCO 08 Unit Group Details:

Code	2521
Title	Database Designers and Administrators

Family 2522

Systems Administrators

Systems Administrators develop, control, maintain and support the optimal performance and security of information technology systems.

2522.0100

Database Administrator

Database Administrator co-ordinates physical changes to computer databases; and codes, tests, and implements physical database, applying knowledge of database management system: Designs logical and physical databases or reviews description of changes to database design to understand how changes to be made affect physical database (how data is stored in terms of physical characteristics, such as location, amount of space, and access method). Establishes physical database parameters. Codes database descriptions and specifies identifiers of database to database management system or directs others in coding database descriptions. Calculates optimum values for database parameters, such as amount of computer memory to be used by database, following manuals and using calculator. Specifies user access level for each segment of one or more data items, such as insert, replace, retrieve, or delete data. Specifies which

users can access databases and what data can be accessed by user. Tests and corrects errors, and refines changes to database. Enters codes to create production database. Selects and enters codes of utility programs to monitor database performance, such as distribution of records and amount of available memory. Directs programmers and analysts to make changes to database management systems. Reviews and corrects programs. Answers user questions. Confers with co-workers to determine impact of database changes on other systems and staff cost for making changes to the database. Modifies database programs to increase processing performance, referred to as performance tuning. Workers typically specialize in one or more types of database management systems. May train users.

ISCO 08 Unit Group Details:

Code 2522
 Title Systems Administrators

2522.0201 Security Analyst

Security Analyst is responsible for protecting information and information systems from unauthorized access, use, disclosure, disruption, modification, perusal, inspection, recording, or destruction. They also need to ensure the confidentiality, integrity and availability of data to the 'right' users within/outside of the organization.

Qualification Pack Details:

QP NOS Reference SSC/Q0901
 QP NOS Name Security Analyst
 NSQF Level 7

ISCO 08 Unit Group Details:

Code 2522

Title Systems Administrators

Family 2523

Computer Network Professionals

Computer Network Professionals research, analyse and recommend strategies for network architecture and development, implement, manage, maintain and configure network hardware and software, and monitor, troubleshoot and optimise performance.

2523.0100

Data Communication Analyst/Network Administrator

Data Communication Analyst researches, tests, evaluates, and recommends data communications hardware and software: Identifies areas of operation which need upgraded equipment, such as modems, fibre optic cables and telephone wires. Conducts survey to determine user needs. Reads technical manuals and brochures to determine equipment which meets establishment requirements. Visits vendors to learn about available products or services. Tests and evaluates hardware and software to determine efficiency, reliability, and compatibility with existing system, using equipment such as computer terminal and modem. Analyses test data and recommends hardware or software for purchase. Develops and writes procedures for installation, use, and solving problems of communications hardware and software. Monitors system performance. Trains users in use of equipment. Assists users to identify and solve data communication problems. May write technical specifications to send to vendors for bid. May oversee or assist in

the installation of communications hardware. May perform minor equipment repairs.

ISCO 08 Unit Group Details:

Code	2523
Title	Computer Network Professionals

of equipment to control dust, temperature, and humidity in area of system installation. May specialize in one area of system application or in one type or make of equipment. May train users to use new or modified equipment. May monitor functioning of equipment to ensure system operates in conformance with specifications.

2523.0200

Computer System Hardware Analyst/Hardware Engineer

Computer System Hardware Analyst analyses data processing requirements to plan data processing systems that provide system capabilities required for projected workloads and plans layout and installation of new system or modification of existing system. Confers with Data Processing and Project Managers to obtain information on limitations and capabilities of existing system and capabilities required for data processing projects and projected work load. Evaluates factors such as number of departments serviced by data processing equipment, reporting formats required, volume of transactions, time requirements and cost constraints, and need for security and access restrictions to determine hardware configurations. Analyses information to determine, recommend, and plan layout for type of computers and peripheral equipment, or modifications to existing equipment and system, that will provide capability for proposed project or work load, efficient operation, and effective use of allotted space. May enter data into computer terminal to store, retrieve, and manipulate data for analysis of system capabilities and requirements. May specify power supply requirements and configuration. May recommend purchase

ISCO 08 Unit Group Details:

Code	2523
Title	Computer Network Professionals

2523.0301

Tester/Test Engineer-Hardware

Tester/Test Engineer-Hardware tests hardware and verifies that the device operates as expected under defined conditions independently, or as part of a system. Individuals in this role perform tests to see how a newly designed device will interact with another device from another vendor or developer. The individual also develops and executes test plans and conducts testing to ensure quality outputs are generated.

Qualification Pack Details:

QP NOS Reference	SSC/Q5001
QP NOS Name	Tester/Test
	Engineer-Hardware

NSQF Level	7
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ISCO 08 Unit Group Details:

Code	2523
Title	Computer Network Professionals

2523.0401

Design Engineer

Design Engineer performs complex assignments pertaining to the design, testing and assessment of mechanical and

electrical devices and systems to assist in the production or packaging process. They also develop prototypes for testing; provide feasibility testing on new and current designs under modification. They help in functional reviews of product architecture to assure design integrity and compliance with company specifications and recognized industry design practices.

Qualification Pack Details:

QP NOS Reference	SSC/Q4201
QP NOS Name	Design Engineer
NSQF Level	7

ISCO 08 Unit Group Details:

Code	2523
Title	Computer Network Professionals

2523.0501

Hardware Engineer

Hardware Engineer is responsible for design, development and testing of computer hardware. They oversee the installation of computer systems, chips and circuit boards as well as peripherals including keyboards, routers and printers.

Qualification Pack Details:

QP NOS Reference	SSC/Q4701
QP NOS Name	Hardware Engineer
NSQF Level	7

ISCO 08 Unit Group Details:

Code	2523
Title	Computer Network Professionals

2523.9900

Computer Network Professionals, Other

Computer Network Professionals, Other Covers computing professionals not classified elsewhere in Group 213, Computing Professionals.

ISCO 08 Unit Group Details:

Code	2523
Title	Computer Network Professionals

Family 2529

Database and Network Professionals, Not Elsewhere Classified

This unit group covers database and network professionals elsewhere in Minor group 252, Database and network professionals. For instance, the group includes information and communications technology security specialists.

Sub Division 26

Legal, Social and Cultural Professionals

Legal Professionals conduct research on legal problems, advise clients on legal aspects of problems, plead cases or conduct prosecutions in courts of law, preside over judicial proceedings in courts of law, and draft laws and regulations.

Tasks performed usually include: giving clients legal advice, undertaking legal business on clients' behalf, and conducting litigation when necessary, or presiding over judicial proceedings-and pronouncing judgement in courts of law. Supervision of other workers may be included.

Occupations in this Sub Division are classified into the following Groups:

261	Legal Professionals
262	Librarians, Archivists and Curators
263	Social and Religious Professionals
264	Authors, Journalists and Linguists
265	Creative and Performing Artists

Group 261

Legal Professionals

Legal Professionals conduct research on legal problems, advise clients on legal aspects of problems, plead cases or conduct prosecutions in courts of law, preside over judicial proceedings in courts of law, and draft laws and regulations

Occupations in this Group are classified into the following Families:

2611	Lawyers
2612	Judges
2619	Legal Professionals, Not Elsewhere Classified

Family 2611

Lawyers

Lawyers give clients legal advice on a wide variety of subjects, draw up legal documents, represent clients before administrative boards or tribunals and plead cases or conduct prosecutions in courts of justice, or instruct barristers to plead in higher courts of justice.

2611.0100

Attorney General of India

Attorney General of India functions as highest legal adviser to Government of India and is consulted by Government of India on legal matters of highest

importance involving such matters as interpretation of constitution and other laws. Studies references made to him by Solicitor General of India bearing comments of Ministry of Law and relevant instruction of administrative Ministry. Considers legal aspects of issue and advises Government as necessary. Studies briefs referred to him and appears in Supreme Court on behalf of Government to conduct important cases, especially those involving interpretation of constitution or other laws. Attends Parliament or any of its Committees when matters involving legal aspects are under consideration. May advise President on constitutional issues. May address or otherwise take part in Parliament for clarifying legal issues. May appear in any court of India.

ISCO 08 Unit Group Details:

Code	2611
Title	Lawyers

2611.0200

Solicitor General of India

Solicitor General of India advises Government of India on legal matters and submits statement of important cases to Attorney General of India for their opinion or appearance in Supreme Court as necessary. Studies cases referred to them along with comments of Ministry of Law and instructions of Administrative Ministry. Examines merit of case, legal issues involved, interpretation of constitution or other laws and advises Government accordingly. Prepares statements of cases and submits them to Attorney General for India for their opinion or for conducting case in Supreme Court as appropriate. Files appeal or affidavit in Supreme Court as necessary and assists Attorney General of India or

Government lawyer in conducting case. May appear in Supreme Court on behalf of Government for interpretation of constitution or other laws.

ISCO 08 Unit Group Details:

Code	2611
Title	Lawyers

2611.0300

Advocate General

Advocate General functions as Advocate of State Government and advises Government in legal matters referred to him including proposed legislation. Represents Government in suits and proceedings in original and appellate side of High Court. Appears on behalf of Government before High Court, Special Bench in Supreme Court or any other court as required. Advises Government on legal matters, and proposed legislation and performs other duties of legal character as may be assigned to him from time to time. Attends meetings of Legislature or Legislative Council and Committees thereof, as required. Gives opinion in matters referred to him by Legal Remembrancer, Government Advocate, Public Prosecutor and Heads of Secretariat Department. May advise Government Pleader in conducting criminal cases and act as leading counsel if directed by Government. May appear in private cases to which Government is not party.

ISCO 08 Unit Group Details:

Code	2611
Title	Lawyers

2611.0400

Legal Remembrancer

Legal Remembrancer advises State Government on legal matters, drafts bills and interprets legislative enactments, statutes and rules. Gives opinion on legal matters raised by Government departments. Interprets statutes, drafts bill for legislation and performs such other duties of legal character as are assigned to him by State Government. May act as Secretary to Government in Law Department.

ISCO 08 Unit Group Details:

Code	2611
Title	Lawyers

2611.0500

Government Advocate

Government Advocate, High Court, Standing Counsel High Court conducts cases and pleads on behalf of Government in criminal appeals and civil cases in High Court and gives opinion on matters referred to him by Legal Remembrancer and Public Prosecutor. Appears and defends Government in appeal cases and other criminal matters heard on appellate side of High Court. Presents appeals on behalf of Government for prosecution in cases of acquittal or lightening of sentence. Appears in any criminal case heard on appellate side of High Court in which Government's proprietary interests are concerned and applies for adjournment to get full information from appropriate District Officers before case is finally heard. Appears in civil appeals and original cases filed in High Court on behalf of Government. Gives advice in legal matters to Government Pleaders of different districts under jurisdiction of High Court and gives opinion on matters referred to him by Legal Remembrancer. May appear on behalf of Government in Mofussil Courts. May do private legal

practice where Government is not involved.

ISCO 08 Unit Group Details:

Code	2611
Title	Lawyers

2611.0600

Public Prosecutor

Public Prosecutor; Government Pleader; District Government Counsel represents State in sessions cases and lends advice to officers in districts in all legal matters when called for. Studies records of cases sent to Sessions Court by Trial Magistrate and ensures against omission and irregularities, which might vitiate proceedings in court. Presents evidence, conducts cross-examination and argues case for prosecution. Appears and pleads on behalf of prosecution in all appeal cases, application for reduction of sentences etc. Advises Government Officers in district regarding any civil or criminal proceedings and matters concerning Government interests. Allots legal work to Assistant Public Prosecutors. May appear for Government in civil and revenue cases if designated as GOVERNMENT PLEADER. May advise Government to withdraw prosecution in appropriate cases.

ISCO 08 Unit Group Details:

Code	2611
Title	Lawyers

2611.0700

Police Prosecutor

Police Prosecutor; Assistant Public Prosecutor represents and conducts cases on behalf of Police Department in Magisterial Courts. Studies and examines

charges prepared by investigating police officer. Prepares briefs and introduces further any evidence obtained after charges are formulated by police. Examines probable witnesses. Attends Court and conducts prosecution on behalf of police. Guides testimony of prosecution witnesses and introduces exhibits in support of case. Conducts preliminary arguments for framing of charges. Cross-examines defence witnesses. Argues prosecution case. May be called upon to discharge executive duties to maintain law and order.

ISCO 08 Unit Group Details:

Code	2611
Title	Lawyers

2611.0800

Attorney at Law

Attorney at Law; Solicitor gives advice in legal matters, prepares case for Advocates for conducting it on behalf of client and files legal proceedings in court of law. Receives instructions from clients and obtains necessary details from them. Studies documents or papers involved in case. Interviews witnesses, gathers full information and prepares case. Files case in court. Secures writ of summons and obtains court order permitting him to inspect and examine relevant documents. Collects testimony of witnesses and prepares brief for hearing before Judge. Discusses case with Advocate concerned and submits brief to him. Advises Advocate, attends court and assists Advocate in presenting case before judge. May function as Notary Public if so appointed by Government. May appear in court on behalf of client.

ISCO 08 Unit Group Details:

Code	2611
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Title	Lawyers	QP NOS Name	IP Executive
		NSQF Level	7

2611.0900**Advocate**

Advocate; Pleader; Bar-at-law; Vakil gives advice on legal matters, files legal proceedings in court of law and pleads and acts on behalf of client in Court, income tax office, sales tax office, municipal office, tribunals, etc. on payment of fees. Studies facts and available documents pertaining to case and decides line of action. Advises client to procure evidence, further documents, etc. in support of case. Studies social customs and relevant acts, rules, rulings and precedents of courts of similar nature. Examines witnesses in chamber, gathers full information regarding case and prepares brief. Prepares and files plaint, complaint, written statement, affidavits, etc. on behalf of client, or defends accused in court of law. Examines and cross-examines witnesses of both sides in court and submits exhibits in support of their case. Advises party regarding course to be followed from time to time. Argues case for client. Performs conveyancing work such as preparing notices, bonds, wills, agreements, for clients.

ISCO 08 Unit Group Details:

Code	2611
Title	Lawyers

2611.1001**Intellectual Property Executive**

IP Executive is responsible for drafting and maintaining licensing and commercial agreements to ensure protection of the company's intellectual property/patent.

Qualification Pack Details:

QP NOS Reference	SSC/Q6201
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ISCO 08 Unit Group Details:

Code	2611
Title	Lawyers

2611.1002**Legal Associate**

Legal Associate is responsible for reviewing and analysing large volumes of litigation documents and providing research support to corporate legal departments.

Qualification Pack Details:

QP NOS Reference	SSC/Q2902
QP NOS Name	Legal
Associate	
NSQF Level	7

ISCO 08 Unit Group Details:

Code	2611
Title	Lawyers

2611.9900**Lawyers, Other**

Lawyers, Other include lawyers not classified elsewhere.

ISCO 08 Unit Group Details:

Code	2611
Title	Lawyers
Family	2612

Judges

Judges preside over civil and criminal proceedings in courts of law.

2612.0100**Judge, Supreme Court**

Judge, Supreme Court sits on bench of Supreme court and decides cases in original and appellate jurisdiction of Supreme Court. Hears preliminary arguments for admitting cases. Obtains relevant records and judgement from High Court and issues notices to other party. Hears arguments of both parties and studies records and judgement of High Court. Discusses with other JUDGES on bench salient features of records, Judgement and arguments to arrive at decision. Delivers majority opinion of JUDGES on bench; while minority opinion is delivered later by dissident JUDGES separately. May consult with Attorney General of India particularly in constitutional cases. May allow persons to appear as amicus curiae (advisers to parties who act as consultants and suggest or state matter of law for assistance) to assist court in solving legal and constitutional points of national importance. Is designated as CHIEF JUSTICE, SUPREME COURT, if functions as head of judiciary in country and administers oath to President and Vice President of India. Renders judicial advice to President on constitutional matters referred to him by President and advises President on appointment of Supreme Court and High Court judges.

ISCO 08 Unit Group Details:

Code	2612
Title	Judges

2612.0200

Judge, High Court

Judge, High Court; Puisne Judge presides over court and decides, sitting singly or in bench of two or more judges, original or appeal cases allotted to him by CHIEF JUSTICE, HIGH COURT. Delivers judgement and issues directions, orders or writs to parties concerned. Hears pleadings of

counsels of both sides and frames issues in dispute. Examines documents tendered by parties and admits relevant items as exhibits. Listens to arguments advanced by counsels of both sides and decides cases sitting singly or on bench of two or more judges in appeal cases. Examines records and judgement of lower court. Hears arguments of counsels, passes orders and delivers judgement. May discuss minor issues in chamber with counsels of both parties. Recommends to President appointments of PUISNE JUDGES, administers oath to them and to Governor on fresh appointment, constitutes benches for hearing cases, allots work to PUISNE JUDGES and advises Government regarding their appointments, transfers, promotions and other administrative matters of judiciary, if functions as head of judiciary in State and designated as CHIEF JUSTICE, HIGH COURT. May remand cases to lower court for retrial or refer matters for investigation if more facts are needed. May examine persons as court witnesses. May act as Administrative Judge and inspect lower courts such as session, civil and munsif courts.

ISCO 08 Unit Group Details:

Code	2612
Title	Judges

2612.0300

District and Session Judge

District and Sessions Judge functions as administrative and judicial head of all civil and criminal courts other than magisterial court in their district(s) and decides civil and criminal cases. Tries original civil cases and criminal cases committed to their court by magisterial courts. Listens to arguments of counsels of both sides, examines documents and formulates

charges. Explains charges to accused in criminal cases and issues to litigants in civil cases. Records evidence of witnesses and admits documents as exhibits. Listens to arguments of counsels and delivers judgement. Hears appeals against judgement of lower courts, examines records and judgements, listens to arguments of counsels and delivers judgement. Attends to administrative matters and inspects subordinate courts as head of judiciary in district. May transfer cases from one court to another. May grant bail to accused in criminal cases. May allocate sessions cases between their court and civil and sessions court.

ISCO 08 Unit Group Details:

Code	2612
Title	Judges

2612.0400

Munsif

Munsif tries and delivers judgement on civil cases of their sub-division filed in court. Hears preliminary arguments and examines documents in support of complaint. Issues notices to other parties for filing written statements supported by affidavits. Frames issues, records evidence and admits relevant documents as exhibits. Records evidence of plaintiff, defendant and their witnesses, listens to arguments of counsels of both sides and delivers judgement. May try criminal cases while under training.

ISCO 08 Unit Group Details:

Code	2612
Title	Judges

2612.0500

Judge, Sub-ordinate Court

Judge, Subordinate Court tries and delivers judgement on cases filed in court. Hears preliminary arguments and records statement of plaintiff to determine if *prima facie* case is made. Causes notices against other party to file replies duly supported by affidavits. Frames issues, proceeds with trial, records evidence of plaintiff and defendants' witnesses and admits relevant documents as exhibits. Listens to arguments of both sides and delivers judgement. May examine persons as court witnesses. Is designated as CIVIL JUDGE or SUB-JUDGE if tries only civil cases. Is designated as CIVIL AND SESSIONS JUDGE if vested with sessions power to try criminal cases. Is designated as SPECIAL JUDGE if presides over special courts.

ISCO 08 Unit Group Details:

Code	2612
Title	Judges

2612.0600

Magistrate

Magistrate presides over criminal court, decides cases and delivers judgement on judicial matters filed in or transferred to the court. Records statement of complainant to decide cognisance of *prima-facie* case. Issues summons or warrants to accused according to nature of alleged crime and grants remand to police to keep accused in police custody for investigation. Fixes dates of hearing. Issues summons to prosecution and defence witnesses, Records evidence of witnesses under oath, examines their statements given before police and admits documents or material as exhibits. Hears preliminary arguments of prosecution and defence counsels to decide as to whether any case has been made out against accused. Commits accused to stand trial in

sessions court if offence is beyond competence of the court, or dismisses complainant if no case is made by prosecution. Proceeds with case if alleged offence is made out and within competence of court. Formulates charges and explains them to accused. Records defence testimony of accused, evidence and cross examination of prosecution and dis-allows irrelevant questions. Hears arguments of counsels of both sides, evaluates evidence and delivers judgement. May inspect site of alleged offence. May call persons as court witnesses. May grant bail to accused at any stage of trial and exempt accused from personal appearance. May promulgate executive orders for maintenance of law and order. May do patrol duties with police. May order firing in serious disturbances. May be official witness at hangings in jail. May conduct identification proceedings in jail. Is designated as DISTRICT MAGISTRATE, CHIEF PRESIDENCY MAGISTRATE, JUDICIAL MAGISTRATE, CITY MAGISTRATE, according to authority vested in him. Is designated as RAILWAY MAGISTRATE if engaged in trying offences committed by ticketless travellers.

ISCO 08 Unit Group Details:

Code	2612
Title	Judges

2612.0700

Magistrate, Juvenile Court

Magistrate Juvenile Court presides over Juvenile Court and gives findings and observations on offences committed by juveniles. Presides over court and studies complaint made by police. Commits delinquents to custody of Probation Officer and orders investigation of charges made. Studies report of Probation Officer

and examines witnesses to find circumstances under which crime was committed and decides whether accused should be sent to Probation School or After Care Association or released in custody of guardians or receive medical treatment. Tries to maintain relaxed friendly atmosphere in court.

ISCO 08 Unit Group Details:

Code	2612
Title	Judges

2612.0800

Chairman, Administrative Tribunal

Chairman Administrative Tribunal functions as administrative head of Administrative Tribunal and adjudicates disputes referred to it under various laws relating to service conditions, promotions, seniority, pay anomalies, administrative disputes etc. Presides over Tribunal and examines cases referred to it. Listens to arguments advanced by parties or their Advocates and notes important points. Records oral evidence and admit as exhibits documents tendered by parties. Evaluates all factors, makes decision and submit it to Government for implementation.

ISCO 08 Unit Group Details:

Code	2612
Title	Judges

2612.0900

Member, Administrative Tribunal

Member, Administrative Tribunal gives decision in administrative disputes referred to the court under various service rules and Acts. Listens to arguments advanced by parties or their Advocates and notes important points. Records oral evidence and admits as exhibits documents tendered by parties. Visits

place of work or establishment if necessary for studying occupations, processes and working conditions. Gives decision in disputes after considering all material on record.

ISCO 08 Unit Group Details:

Code	2612
Title	Judges

2612.1000

President, Industrial Tribunal

President, Industrial Tribunal; Presiding Officer Industrial Tribunal; functions as administrative head of Industrial Court, Labour Court or Industrial Tribunal and adjudicates disputes referred to it under various laws such as Industrial Relations Act and Industrial Disputes Act. Presides over Court or Tribunal and examines cases referred to it. Listens to arguments advanced by parties or their Advocates and notes important points. Records oral evidence and admits as exhibits documents tendered by parties. Evaluates all factors, makes decision and submits it to Government for implementation. Adjudicates disputes in appeal arising from decision given by Labour Court or subordinate authorities as provided under Act. Constitutes Benches where necessary. Exercises administrative control over Labour Court and subordinate offices. May visit place of work or establishment to study process of work, working conditions or cause of dispute.

ISCO 08 Unit Group Details:

Code	2612
Title	Judges

2612.1100

Member, Industrial Tribunal

Member, Industrial Tribunal gives decision in industrial disputes referred to the court under Industrial Relations Act and Industrial Disputes Act. Listens to arguments advanced by parties or their Advocates and notes important points. Records oral evidence and admits as exhibits documents tendered by parties. Visits place of work or establishment if necessary for studying processes and working conditions. Gives decision in disputes after considering all material on record. Functions as ADJUDICATOR (Industrial Tribunal) under Industrial Disputes Act and decides disputes referred to him under Act in some manner. Hears and decides matters or disputes in appeal including criminal charges arising from decisions given by Labour Court or subordinate authorities as provided under Act.

ISCO 08 Unit Group Details:

Code	2612
Title	Judges

2612.1200

President, Consumer Redressal Forum

President, Consumer Redressal Forum responsible for enabling consumer to secure speedy and inexpensive redressal of grievances, disputes and protecting large body of consumers from exploitation. Adjudicates consumer disputes referred to it under the consumer protection Act. Presides over Consumer Court and examines cases referred to it. Listens to arguments advanced by parties or their Advocates and notes important points. Records oral evidence and admits as exhibits documents tendered by parties. Evaluates all factors and makes decision in providing Redressal to consumer grievances in the

matter of transport, telephones, electricity, constructions, banking, insurance, medical treatment etc.

ISCO 08 Unit Group Details:

Code	2612
Title	Judges

2612.1300

Member, Consumer Redressal Forum

Member, Consumer Redressal Forum gives decision in consumer disputes referred to the court under Consumer Protection Act. Listens to arguments advanced by parties or their Advocates and notes important points. Records oral evidence and admit as exhibits documents tendered by parties. Visits place of work or establishment if necessary for studying consumer products, services and consultancy processes/conditions. Gives decision in disputes after considering all material on record. Functions as quasi-judicial machinery under Consumer Protection Act and decides disputes referred to him under the Act in same manner. Hears and decides matters or disputes in the matter of transport, telephones, electricity, constructions, banking, insurance, medical treatment etc.

ISCO 08 Unit Group Details:

Code	2612
Title	Judges

2612.9900

Judges and Magistrates, Other

Judges and Magistrates, Other includes all other judges and magistrates not classified elsewhere.

ISCO 08 Unit Group Details:

Code	2612
Title	Judges

Family 2619

Legal Professionals, Not Elsewhere Classified

This unit group covers legal professionals not classified elsewhere in Minor group 261, Legal professionals. For instance, the group includes those who perform legal functions other than pleading or prosecuting cases or presiding over judicial proceedings.

2619.0100

Prothonotary and Senior Master

Prothonotary and Senior Master; Registrar (Original Side High Court) controls all offices of Original side of High Court. Ensures proper filing of cases and appeals from Original side of High Court, scrutinises applications such as consent orders for adjournment, issue of writs, issue of certified copies etc. Exercises judicial powers delegated to him/her, such as issuing interlocutory orders in suit matters, entertaining of application under Company Law, issuing Pauper-Petitions, appointing of guardian ad-litem of minors and lunatics, settling index of Appeal Paper Books, acceding of plaints, and executes other functions assigned to him by Chief Justice and other Judges. Attends to important general correspondence of office and allots work to subordinates and ensures that they are properly executed. May look after accounts matters, sealing and keeping of records of original side of High Court, Examination of title of properties before sale, submission of report to court etc.

ISCO 08 Unit Group Details:

Code	2619
Title	Legal Professionals, n.e.c.

2619.0200**Registrar (Appellate Side, High Court)**

Registrar (Appellate Side, High Court) functions as head and controlling officer of Appellate Side of High Court. Attends to all administrative matters pertaining to subordinate courts and to correspondence with Government, other High Courts and district and subordinate courts. Recommends postings of District, Sessions and Assistant Judges to Government as directed by Chief justice. Exercise quasi-judicial powers in respect of admission of appeals, granting time for filing of process fee, written process, deficit court fee, printing cost and making cases ready for hearing by bench. Attends to enrolment and disciplinary matters regarding Advocates and District Pleaders. Controls expenditure and acts as custodian of moneys deposited. Audits monthly returns received from district and subordinate courts. Supervises compilation of administrative report of Civil and Criminal Justice and High Court publications. Allots various court work to subordinates and ensures their proper execution.

ISCO 08 Unit Group Details:

Code 2619

Title Legal Professionals, n.e.c.

2619.0300**Registrar**

Registrar; Clerk of the Court; Clerk of the State assists Chief or Principal Judge in all administrative matters relating to court and functions as head of office of court. Reviews plaints, petitions, appeals, etc. received from parties and ensures that they are in proper order (that is court fee is properly levied, necessary documents are attached, appeal is competent and

within time limit, etc.). Places papers before Chief Judge and admits them to file on his orders. Issues notices, summons, etc. to parties concerned and ensures that relevant papers are filed and gets Paper-Book prepared. Allots cases to Judges in consultation with Chief Judge and prepares advance schedule of cases. Examines drafts of decrees and orders passed by Court and ensures their correctness. Issues certified copies of judgement to Lower Courts and to High Courts in cases of appeals. Accepts affidavits, declarations, etc. Allots work to Deputy Registrars or Assistant Registrars and ensures proper execution of work. Answers correspondence addressed to court and keeps control over establishment and accounts of court. May also exercise certain judicial powers delegated to him such as granting of adjournment, deciding judicially certain matter, etc.

ISCO 08 Unit Group Details:

Code 2619

Title Legal Professionals, n.e.c.

2619.0400**Master Official Referee and Registrar in Equity and Commissioner for taking Accounts (High Court)**

Master Official Referee and Registrar in Equity and Commissioner for taking Accounts (High Court) decides matters judicially, relating to accounts in administration suits, mortgage suits, breach of contract matters, etc. referred to him by Judges sitting on Original Side of High Court. Examines accounts in administration suits and determines shares of parties. Settles particulars and conditions of sale of immovable property and conducts auction sale of property in

mortgage suits. Determines amount of damage to be paid, etc. in breach of contract cases and submits report of findings to court when directed. May scrutinise accounts filed by guardians of minors and lunatics and Court Receiver, and Liquidator. May receive and record evidence if necessary and give decisions on points in dispute. May conduct proceedings either in general way or as specified in court order.

ISCO 08 Unit Group Details:

Code 2619
Title Legal Professionals, n.e.c.

2619.0500 Taxing Master

Taxing Master (High Court) taxes parties, according to law, costs of Attorneys or costs ordered by court. Receives statements of cost from party and the Attorney or from winning party and losing party or bills payable to parties concerned from fund of particular estate or trust. Scrutinises bills and taxes according to set table of fees prescribed by rules of High Court on Original Side; and uses their discretion as regards item of fees payable to Attorney or Solicitor according to labour involved. Decides disputes regarding valuation of suits for purpose of court fees Hears Attorneys and gives decision in disputed cases of taxation. May suggest amount for which bill tendered should be settled.

ISCO 08 Unit Group Details:

Code 2619
Title Legal Professionals, n.e.c.

2619.0600 Insolvency Registrar

Insolvency Registrar: Insolvency Judge (High Court) functions as principal ministerial officer of Insolvency Court which sits in High Court on specified days for deciding matters relating to insolvents. Holds public examination of insolvents. Draws up orders of court and ensures that notice relating to them are published in High Court Gazette and newspapers. Prepares schedule of cases to be heard and attends each session of court. Entertains applications and issues insolvency notices after proper scrutiny. Exercises limited judicial functions delegated to him by Insolvency Court, such as adjudicating the debtor declaring insolvency on the application and holding public examination, etc.

ISCO 08 Unit Group Details:

Code 2619
Title Legal Professionals, n.e.c.

2619.0700 Official Assignee (High Court)

Official Assignee (High Court) takes charge of insolvent estate and administers it under direction of court. Investigates affairs and conduct of insolvent in private examination and thereafter in public examination before insolvency Judge and submits report to court. Tries to convert insolvent's estate into as much money as possible and distributes it among various creditors according to law. Receives, scrutinises and admits or rejects claims of creditors as appropriate. Receives and scrutinises any scheme of settlement suggested by the insolvent, discusses it amongst creditors and reports their opinion to court.

ISCO 08 Unit Group Details:

Code 2619
Title Legal Professionals, n.e.c.

2619.0800**Court Receiver and Liquidator**

Court Receiver and Liquidator: takes charge, administers and safeguards property in dispute and liquidates assets of company in liquidation for meeting claims of creditors. Collects rent, makes repairs, pays out taxes and conducts disbursements in respect of property placed under his charge by order of Court. Effects sale of property to execute court decrees or orders. Takes charge of estate of company in liquidation and investigates into its affairs. Receives and scrutinises claims of creditors as well as shareholders and submits his report to Court with recommendations. Converts estate into money under orders of court and distributes money realised amongst creditors according to law. Submits accounts of money realised through sale of estates to court for scrutiny and obtains formal orders of court for winding up company.

ISCO 08 Unit Group Details:

Code 2619

Title Legal Professionals, n.e.c.

2619.0900**Sheriff**

Sheriff functions as honorary officer of State in big cities or towns for maintaining peace, administering justice under direction of courts and executing writs and other processes of court. Reads proclamation based on Government orders in important public places. Meets high officials of State to convey public opinion to them and public area. Entertains officially and convenes public meetings on request from citizens. Ensures proper serving executing and

returning of all processes issued by High Court and maintenance of peace in courtrooms of High Court. Receives money during execution proceedings and makes payment pursuant to orders of Court. Is designated as DEPUTY SHERIFF if given power of attorney and functions on behalf of SHERIFF. Is designated as MARSHALL OF PRIZE COURT if engaged in execution of all processes of Prize Court, usually performed during war such as seizure of enemy ships, arrest of persons engaged in subversive acts etc.

ISCO 08 Unit Group Details:

Code 2619

Title Legal Professionals, n.e.c.

2619.1000**Coroner**

Coroner presides over Coroner's Court and holds inquest on bodies of persons alleged to have died by violence or accident. Hears testimony of doctor and any witnesses who may have been present at time of death. Examines relevant evidence and decides probable cause of death. Gives permission to dispose of dead body. Authorises police to arrange post-mortem examination in civil hospital in suspected cases. Sends records of findings to appropriate authorities for further investigation and trial if necessary. May visit site of occurrence to ascertain facts.

ISCO 08 Unit Group Details:

Code 2619

Title Legal Professionals, n.e.c.

2619.9900**Legal Professionals, Other**

Legal Professionals, Other includes all other legal professionals not classified elsewhere.

ISCO 08 Unit Group Details:

Code 2619
Title Legal Professionals, n.e.c.

Group 262

Librarians, Archivists and Curators

Librarians, Archivists and Curators develop and maintain the collections of archives, libraries, museums, art galleries, and similar establishments.

Occupations in this Group are classified into the following Families:

2621 Archivists and Curators
2622 Librarians and Related Information Professionals

Family 2621

Archivists and Curators

Archivists and Curators collect, appraise and ensure the safekeeping and preservation of the contents of archives, artefacts and records of historical, cultural, administrative and artistic interest, and of art and other objects. They plan, devise and implement systems for the safekeeping of records and historically valuable documents.

2621.0100

Archivist

Archivist acquires, maintains and supplies for reference manuscripts and supplies records of historical importance. Scrutinises public records and documents transferred to archives, according to

historical significance, and enduring value. Recommends weeding unimportant material and analyses and prepares brief descriptions of contents of records and documents. Arranges them in chronological order department wise and prepares indices, guides, bibliographies and microfilm copies or documents as reference media. Acquires on payment or otherwise, documents of archival importance from private sources. Safeguards and preserves records, adopting modern means such as fumigation, lamination, air cleaning, microfilming etc. Acts as consultant to government agencies, academic institutions, research scholars by making available information and documents and locating reference materials obtainable elsewhere. Prepares compendia on selected subjects relating to public administration for use of administration.

ISCO 08 Unit Group Details:

Code 2621
Title Archivists and Curators

2621.0200

Curator (Museum)

Curator; (Museum), collects, prepares and preserves objects or materials of historical, biological, geological, archaeological and antique importance and displays them for public view in museums or exhibition halls. Undertakes extensive tours of country and collects rare objects and materials of historical importance. Classifies collections under appropriate heads according; to genus, family and species (if animals) or to periods (if monuments). Prepares or gets prepared material for proper and effective display. Labels specimens or objects with proper descriptions. Preserves specimens in special media like Lysol, Formalin, etc.

Displays objects in various exhibition hall of museum to give better effect. Conducts or carries out research to trace history of objects. Publishes research reports relating to museum collection for use by scholars. Provides facilities to research workers in identification and classification of objects. May conduct visitors to museum and explain to them history of articles, etc.

ISCO 08 Unit Group Details:

Code 2621
Title Archivists and Curators

2621.0300

Restorer, Painting

Restorer Painting; restores damaged and faded paintings and preserves paintings, using techniques based on knowledge of art and art materials: Examines surfaces of painting, using magnifying device, and performs tests to determine factors, such as age, structure, pigment stability, and probable reaction to various cleaning agents and solvents. Removes painting from frame. Applies select solvents and cleaning agents and uses predetermined method to clean surface of painting and remove accretions, discolorations, and deteriorated varnish. Stretches new linen backing, applies paste material to back of painting, and laminates parts together, using laminating press. Dries laminated painting under controlled conditions to prevent shrinkage. Applies beeswax or other substance to damaged or faded areas where restoration is needed. Studies style, techniques, colours, textures, and materials used by artist to maintain consistency in reconstruction or retouching procedures. Reconstructs or retouches damaged areas and blends area into adjacent areas to restore painting to original condition. Applies varnish or other

preservative to surface of painting and dries under controlled conditions. May remove paint layer from backing and remount on canvas, wood, or metal support using pressure and special adhesives. May apply neutral colour powder to damaged areas for restoration.

ISCO 08 Unit Group Details:

Code 2621
Title Archivists and Curators

2621.0400

Restorer, Lace and Textile

Restorer, Lace and Textiles restores and prepares ancient textile and lace materials for display in textile museum: Cleans fabric, using cleaning compounds and techniques based on historical knowledge of fabric manufacture and effect of cleaning upon fabric. Develops new cleaning compounds and methods when available means are inadequate or tend to harm fabric. Repairs and reweaves worn, torn, and decayed fabrics, using techniques based on knowledge of weaving and lace methods. Mounts fabric in frame or suitable background.

ISCO 08 Unit Group Details:

Code 2621
Title Archivists and Curators

2621.0500

Restorer, Ceramics

Restorer, Ceramic Cleans, preserves, restores, and repairs objects made of glass, porcelain, china, fired clay, and other ceramic materials: Coats excavated objects with surface-active agents to loosen adhering mud or clay and washes objects with clear water. Places cleaned objects in dilute hydrochloric acid or other solution to remove remaining deposits of

lime or chalk, basing choice of solution on knowledge of physical and chemical structure of objects and destructive qualities of solvents. Cleans glass, porcelain, or similar objects by such methods as soaking objects in lukewarm water with ammonia added, wiping gilded or enamelled objects with solvent-saturated swab, or rubbing objects with paste cleanser. Rubs objects with jewellers' rouge or other mild cleanser, soaks objects in distilled water with bleach or solvent added, or applies paste or liquid solvent, such as magnesium silicate or acetone, basing choice of method and material on age, condition, and chemical structure of objects, to remove stains from objects. Recommends preservation measures, such as control of temperature, humidity, and exposure to light, to curatorial and building maintenance staff to prevent damage to or deterioration of object. Impregnates surfaces with diluted synthetic lacquers to reduce porosity of material to increase durability of ancient earthenware. Restores or simulates original appearance of objects by such methods as polishing surfaces to restore translucency, removing crackled glaze and applying soluble synthetic coating, grinding or cutting out chipped edges and re-polishing surfaces, or applying matt paints, gold leaf, or other coating to object, basing methods and materials used on knowledge of original craft and condition of objects. Repairs broken objects, employing such techniques as bonding edges together with adhesive, inserting dowel pins in sections and cementing together, or affixing adhesive coated strips to inner portions of broken objects. Replaces missing sections of objects by constructing wire frames of missing sections, shaping plasticine or other materials over frames, affixing modelled sections to objects with dowels or adhesive, and painting attached

sections to reproduce original appearance. Constructs replicas of archaeological artefacts or historically significant ceramic ware, basing construction design on size, curvature, and thickness of excavated shards or pieces of objects available and knowledge of techniques and designs characteristic of period.

ISCO 08 Unit Group Details:

Code	2621
Title	Archivists and Curators

2621.0600

Restorer, Paper and Prints

Restorer, Paper-and-Prints cleans, preserves, restores, and repairs books, documents, maps, prints, photographs, and other paper objects of historic or artistic significance: Examines or tests objects to determine physical condition and chemical structure of paper, ink, paint, or other coating, in order to identify problem and plan safest and most effective method of treating material. Cleans objects by such methods as sprinkling crumbled art gum or draft powder over surface and rotating soft cloth over cleaning agent to absorb soil (dry cleaning), immersing objects in circulating bath of water or mild chemical solution (wet cleaning), or applying solvent to remove rust, fly specks, mildew, or other stains, basing choice of method on knowledge of physical and chemical structure of objects and effects of various kinds of treatment. Preserves or directs preservation of objects by such methods as immersing paper in de-acidification baths to remove acidity from papers and ink to prevent deterioration, sealing documents or other papers in cellulose cases and passing sealed objects through heated rollers to laminate them, spraying

objects, storage containers, or areas with fungicides, insecticides, or pesticides, and controlling temperature, humidity, and exposure to natural or artificial light in areas where objects are displayed or stored. Restores objects to original appearance by such methods as immersing papers in mild bleach solution to brighten faded backgrounds, removing old varnish from such art works as engravings and mezzotints, or strengthening papers by resizing in a bath of gelatine solution. Repairs objects by such methods as mending tears with adhesive and tissue, patching and filling worm holes, torn corners, or large tears by chamfering, inserting, affixing, and staining paper of similar weight and weave to simulate original appearance, or retouching stained, faded, or blurred watercolours, prints, or documents, using colours and strokes to reproduce those of original artist or writer.

ISCO 08 Unit Group Details:

Code 2621
Title Archivists and Curators

2621.0700

Restorer, Furniture

Restorer, Furniture restores and preserves historical furniture in collection of museum or similar institution, using variety of hand tools and power tools and applying knowledge of antique fabrics and wood furniture: Examines furnishings to determine type of material, extent of deterioration or damage, or date of construction to verify authenticity and plan restoration. Sets up and operates variety of woodworking machines to fabricate, repair, reinforce, and replace parts of furniture. Cuts, shapes, and attaches parts according to blueprints or drawings, using hand tools. Matches

materials for colour, grain, and texture. Strips old finish from furnishings, using solvents and abrasives. Fills cracks, depressions, and other blemishes, using plastic wood or lacquer stick. Treats warped or stained surfaces to restore original contour and colour. Glues or replaces veneer sections. Smooths surfaces, using power sander or abrasive material. Washes or bleaches furniture surfaces to prepare surface for application of finish. Selects coatings, such as stain, lacquer, or varnish according to type wood, and brushes or sprays material onto surface to protect surface and produce desired appearance. Polishes, sprays, or waxes finished pieces. Removes damaged or deteriorated coverings from upholstered furniture. Repairs, reinforces, or replaces components, such as springs, webbing, and padding. Selects fabric for new covering, using knowledge of period and style of furniture or following instructions of CURATOR (museums). Tacks, sews, glues, or staples covering to furniture frame to attach upholstery. Refurbishes leather coverings of furnishings, using softeners, solvents, adhesives, stains, or polishes. Replaces damaged coverings with leather pieces of appropriate colour, grain, and weight. Stencils, gilds, emboss, or paint designs or borders on restored pieces to reproduce original appearance. May advise curatorial staff on environmental conditions necessary for preservation of furnishings in exhibit and storage areas. May fabricate replicas of period furniture for use in exhibits.

ISCO 08 Unit Group Details:

Code 2621
Title Archivists and Curators

2621.9900

Archivists and Curators, Other

Archivists and Curators, other include all other Archivists and Curators engaged in preserving and maintaining books, manuscripts, magazines, fossils, old seals and objects of historical, scientific and literary importance, not elsewhere classified.

ISCO 08 Unit Group Details:

Code 2621
Title Archivists and Curators

Family 2622

Librarians and Related Information Professionals

Librarians and Related Information Professionals collect, select, develop, organize and maintain library collections and other information repositories, organize and control other library services and provide information for users.

2622.0100

Librarian

Librarian organizes and maintains systematic collection of books, periodicals and other printed matter in library and issues them to readers. Selects publications to be purchased and receives priced or complimentary copies of books, periodicals and other publications from authors or publishers. Classifies or supervises classification, indexing, cataloguing, shelving of books and other publications and maintains records of stock and issues. Guides readers in selecting books or in finding information required by them. Issues publications to readers. Examines books periodically for damage, if any, and decides which books are to be repaired or re-bound. Gives information from library sources on

subjects of general or special interest to individuals or groups. Maintains liaison with other libraries and library associations. May make abstracts and summaries of important articles from incoming periodicals. May determine library policy. May look after the organization and administration of academic, public and research libraries.

ISCO 08 Unit Group Details:

Code 2622
Title Librarians and Related Information Professionals

2622.0200

Librarian (Film)

Librarian (Film) organizes and maintains collection of processed motion pictures for future use or reference. Receives films both 55 mm and 16 mm positive and negative as well as master positive, reference prints, library prints, etc. Prepares complete catalogue index and stores mms by tide or scene reference. Selects and issues films as per requisitions received from various departments such as editing, sound, direction, etc. Makes arrangement for loaning of films to private parties. Attends to queries received for purchase of stock shots and stock sound effects. May cut and assemble portions of positive films.

ISCO 08 Unit Group Details:

Code 2622
Title Librarians and Related Information Professionals

2622.0300

Tape Librarian/Librarian Digital/Librarian Media

Tape Librarian Maintains data on computer storage media such as magnetic

tapes, floppies, discs, cartridge tapes, video discs, microfilms, maintains indexed cards, catalogues of the above stored data, issues the data devise to users; keeps accounts of issues and receipts of data devices; weeds out obsolete data as per instructions given by data owners/controlling officers; ensures required storing conditions and reports deficiencies to controlling officer; indents for gadgets and fixtures for maintaining the data devices. May be designated as Librarian, Tape; Media, Librarian.

ISCO 08 Unit Group Details:

Code 2622
Title Librarians and Related Information Professionals

2622.0500 News Librarian

News Librarian manages information resources library stored in files, on tape or microfilm, or in computers for use by news and editorial staff in publishing establishments, such as newspaper and magazine publishers, and in broadcasting establishments, such as radio and television stations: Directs activities of workers engaged in clipping, classifying, cataloguing, indexing, storing, editing, and retrieving library information, or performs these activities as needed. Researches, retrieves, and disseminates information in resource library or commercial databases in response to requests from news or editorial staff, using knowledge of classification system or computer database. Maintains records and statistics on use of databases and information services provided. May manage in-house database of news information, assign classification terms to news articles, input news articles into database, and research news information in in-house database.

May develop databases for data storage and retrieval, according to needs of news staff. May hire, train, schedule, and evaluate library staff. May prepare library budgets. May promote and market library products and services to public. May co-ordinate activities of library with activities of other departments. May select and purchase reference books for library collection. May manage graphics library, assign classification terms to graphics, and research graphics.

ISCO 08 Unit Group Details:

Code 2622
Title Librarians and Related Information Professionals

2622.0601 Document Coder/Processor

Document Coder/Processor is responsible for cataloguing or indexing legal documents so as to be easily retrieved, sorted, reviewed or prioritized.

Qualification Pack Details:

QP NOS Reference	SSC/Q2901
QP NOS Name	Document Coder/Processor
NSQF Level	7

ISCO 08 Unit Group Details:

Code 2622
Title Librarians and Related Information Professionals

2622.9900 Librarians and Related Information Professionals, Other

Librarians and Related Information Professionals, Other include all other Librarians engaged in cataloguing, preserving and maintaining books, manuscripts, magazines, of historical,

scientific and literary importance, not elsewhere classified.

ISCO 08 Unit Group Details:

Code 2622
Title Librarians and Related Information Professionals

Group 263

Social and Religious Professionals

Social and Religious Professionals conduct research, improve or develop concepts, theories and operational methods, or apply knowledge relating to philosophy, politics, economics, sociology, anthropology, history, philology, languages, psychology, and other social sciences, or they provide social services to meet the needs of individuals and families in a community.

Occupations in this Group are classified into the following Families:

2631 Economists
2632 Sociologists, Anthropologists and Related Professionals
2633 Philosophers, Historians and Political Scientists
2634 Psychologists
2635 Social Work and Counselling Professionals
2636 Religious Professionals

Family 2631

Economists

Economists conduct research, monitor data, analyse information and prepare reports and plans to resolve economic and business problems and develop models to analyse, explain and forecast economic behaviour and patterns. They provide advice to business, interest groups and governments to formulate solutions to

present or projected economic and business problems.

2631.0100

Economist

Economist makes studies, conducts research, prepares reports and formulates plans designed to aid in solution of economic problems arising from production and distribution of goods and services. Studies whole process through which man makes living and satisfies his wants for products, shelter, service or amusement and conditions favouring or hampering economic development. Devices methods for collection and analysis of economic and statistical data and compiles and interprets such data. Prepares reports and formulates plans based on studies in economic field and Interpreted and analysed data. Advises and consults private industrial concerns or government agencies on matters such as operating efficiency, marketing methods and fiscal problems. May specialize in any branch of economics, such as agricultural, financial or industrial, international trade, labour or prices, or in taxation or market research and be designated accordingly.

ISCO 08 Unit Group Details:

Code 2631
Title Economists

2631.0200

Energy Economist

Energy Economist undertakes policy research and formulates policies and programmes for efficient use of energy and its conservation, strengthens energy auditing/energy management capabilities in the country. Assists in implementation of energy efficiency programmes, benchmarks energy consumption in industry, power generation, transmission

and distribution, promotes energy efficient technologies, designs and implements Standard and Labelling programmes for appliances. Assists in preparation of Energy Conservation Building Codes and co-ordinates with State Authorities in implementation. Promotes awareness and implements programmes for school children, develops performance contract and promotes Energy Service Companies. Develops innovative financial mechanism for adoption of energy efficiency in industries and commercial organizations.

ISCO 08 Unit Group Details:

Code	2631
Title	Economists

2631.0300

Home Economist

Home Economist organizes and conducts consumer education service or research programme for equipment, food, textile, or utility companies, utilising principles of home economics: Advises homemakers in selection and utilisation of household equipment, food, and clothing, and interprets homemakers' needs to manufacturers of household products. Writes advertising copy and articles of interest to homemakers, tests recipes, equipment, and new household products, conducts radio and television homemakers' programmes, and performs other public relations and promotion work for business firms, newspapers, magazines, and radio and television stations. Advises individuals and families on home management practices, such as budget planning, meal preparation, and energy conservation. Teaches improved homemaking practices to homemakers and youths through educational programmes, demonstrations,

discussions, and home visits. May engage in research in government, private industry, and colleges and universities to explore family relations or child development, develops new products for home, discovers facts on food nutrition, and tests serviceability of new materials. May specialize in a specific area of home economics.

ISCO 08 Unit Group Details:

Code	2631
Title	Economists

2631.9900

Economists, Other

Economists, other include those economists engaged in research on economic problems not elsewhere classified.

ISCO 08 Unit Group Details:

Code	2631
Title	Economists

Family 2632

Sociologists, Anthropologists and Related Professionals

Sociologists, Anthropologists and Related Professionals investigate and describe the structure of societies, the origin and evolution of societies, and the interdependence between environmental conditions and human activities. They provide advice on the practical application of their findings in the formulation of economic and social policies.

2632.0100

Sociologist, General

Sociologist, General investigates origin and development of community life and social relationships of groups of human beings. Studies origin and development and relationship of groups of human beings. Collects or supervises collection and tabulation of data relating to development of community organizations, social customs, etc. Processes and interprets data for use by administrators, law makers, educators and other individuals and organizations engaged in solving social problems. Studies urban problems such as unemployment, begging, suicide and collects data, assesses trend and attitude of society and observes social change in time and space. May specialize in any branch of sociology such as Social Pathology, Industrial Sociology, Tribal Welfare and Administration, Educational sociology, etc. and may be designated accordingly.

ISCO 08 Unit Group Details:

Code 2632
 Title Sociologists,
 Anthropologists and
 Related Professionals

2632.0200

Social Ecologist

Social Ecologist investigates effects of environments on distribution and activities of individuals and groups. Studies symbolic behaviour and social behaviour, interdependence of organism and environment leading to adjustments. Studies effects of environment on urban and rural growth, distribution, mobility and activities of individuals and groups. Assesses changes caused by various environment and evolves means for proper adjustment.

ISCO 08 Unit Group Details:

Code 2632
 Title Sociologists,
 Anthropologists and
 Related Professionals

2632.0300

Clinical Sociologist

Clinical Sociologist develops and implements corrective procedures to alleviate group dysfunctions: Confers with individuals and groups to determine nature of group dysfunction. Observes group interaction and interviews group members to identify problems related to factors such as group organization, authority relationships, and role conflicts. Develops approaches to solution of group's problems, based on findings and incorporating sociological research and study in related disciplines. Develops intervention procedures, utilising techniques such as interviews, consultations, role-playing, and participant observation of group interaction, to facilitate resolution of group problems. Monitors group interaction and role affiliations to evaluate progress and to determine need for additional change.

ISCO 08 Unit Group Details:

Code 2632
 Title Sociologists,
 Anthropologists and
 Related Professionals

2632.0400

Demographer

Demographer collects and analyses vital statistics related to population changes, such as births, marriages and mortality, and forecasts trends of increase or decrease in population. Analyses data on

mortality, fertility, and migration of human population to study their level and trends. Evolves techniques of measuring population phenomena and evaluates their application. Studies customs, modes of living, nuptial procedures, fertility rates, birth control and public health measures, affecting demographic phenomena. Constructs life tables and studies economic and social characteristics of population in prescribed area. Writes reports on results of studies and maintains familiarity with other studies to improve techniques of analysis, refine concepts used, and methods of population analysis.

ISCO 08 Unit Group Details:

Code	2632
Title	Sociologists, Anthropologists and Related Professionals

2632.0500

Criminologists

Criminologist investigates origin, nature and causes of crimes and suggests methods of prevention. Studies social conditions and statistics of crime and traces origin, nature and causes of crime. Collects data and statistics about various types of conducts which constitute crime. Correlates crime prevalent in particular community under particular social conditions with actual crime committed. Views problems with socio-legal angle and suggest measures to prevent crimes through effective and modern penal mechanism. Evolves institution in society for preventing individuals from indulging in criminal behaviour.

ISCO 08 Unit Group Details:

Code	2632
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Title	Sociologists, Anthropologists and Related Professionals
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2632.0600

Penologist

Penologist investigates and studies punishment of various crimes, discipline and management of penal institutions and rehabilitation of criminal offenders. Studies theory and objectives of punishment and criminality as suggested by Criminologist. Assigns different punishments for various crimes according to their nature and intensity, appropriate to crime and criminal. Individuals' punishment with corrective treatment of criminals through proper prison management, maintenance of Juvenile institutions and settlement for habitual offenders. Enforces punishment with reformative and rehabilitative ideals, devising preventive measures.

ISCO 08 Unit Group Details:

Code	2632
Title	Sociologists, Anthropologists and Related Professionals

2632.0700

Anthropologist, General

Anthropologist, General investigates evolution of human race by studying development of physical characteristics, religious and cultural practices, etc. at different periods of time. Identifies cultural periods with date in history by studying remains of culture recorded on stones, pottery, bones, etc. Undertakes excavations or exploration of pre-historic sites; preserves, reconstructs and classifies museum objects of cultural, physical, technological aid aesthetic life of man, and arranges for their proper display

and exhibition. Studies biological aspects of man within broad racial groups, traces genetic identity, similarities of physical characteristics amenable to accurate measurement and correlation between pathological phenomena and bodily form. Determines inter-relationship of psychological reactions to stresses of natural and social environment. Studies formation of language and discusses historical events, reflected in process and identifies independent stems in vocabulary of various languages to trace links between languages and cultures. Studies forms of social organizations and institutions like family and state, traces their development and conducts comparative studies to infer relationship between social requirements and institutional structures. Plans, organizes and conducts sample surveys and case studies where necessary for collection of relevant data and utilises data collected to identify various characteristics of community and culture. Evaluates cause; and form of resistance to external change within community. May utilise data for application in solution of social problems involving change and adaptation. May specialize in any particular field of anthropology and be designated as Physical Anthropologist, Cultural Anthropologist or Archaeologist.

ISCO 08 Unit Group Details:

Code	2632
Title	Sociologists, Anthropologists and Related Professionals

2632.0800

Anthropologist, Physical

Anthropologist, Physical studies physical nature of man by observation and measurement of bodily variation and

physical attributes of existing and pre-historical human types. Identifies and classifies human beings into broad types on basis of their physical characteristics by conducting field investigations. Studies in laboratory physical, physiological and biological characteristics, amenable to accurate measurement and comparison by tracing relationship between genetic structure and other physical characteristics like colour and structure of hair, eyes, ears, etc., and by observing correlation between pathological conditions of parts of body and bodily form. Identifies groups connected genealogically by genetic studies conducted among individuals related by blood. Plans, organizes and conducts field investigation by various methods and techniques to obtain data on blood characteristics, genetic composition and physical measurements of body. Conducts bio-chemical studies of different parts of body to isolate and identify characteristics of cellular structure of different parts of body. Obtains measurements of bony structures of body like capacity of cranium, length of different bones with instruments, like spreading and sliding calliper. Observes other characteristics, which are easily identifiable and can be accurately measured for purposes of comparison between types. Studies characteristics of different parts of skin, specially ridges, patterns or whirls of palms of hand and sole of foot for purposes of identification and comparison. Infers relationship between environment and development of physical characteristics, traces relationship between man and higher animals like apes and monkeys for comparative studies by identifying similarities between physical characteristics and origin and spread of different racial group. Reconstructs fossil-remains after proper measurements, etc.

ISCO 08 Unit Group Details:

Code 2632
 Title Sociologists,
 Anthropologists and
 Related Professionals

2632.0900
Anthropologist, Cultural

Anthropologist Cultural; Social Anthropologist plans, organizes and conducts investigations into physical, social and mental characteristics of both past and present groups of human beings. Identifies regularities governing human cultural life and interprets cultural phenomena over large geographical areas and long time spans. Identifies and isolates cultural groups spread over large regions, and studies differences and similarities in characteristics of different cultural groups. Evaluates social institutions fulfilling requirements of human needs in different cultures. Identifies value systems, motivations and expressions of various human urges and requirements through institutional set ups. Initiates pilot studies into attitudes, values, technology, personality, etc., of cultural group by employing suitable scientific methods like interview, questionnaire, participant observation and genealogical studies to obtain detailed understanding of social structure and culture of particular group. Classifies data collected, analyses and writes reports. Makes comparison between different cultural groups to define typology of each culture and derives principles of group behaviour, forms of motivation, values upheld in different cultures for purposes of guidance and control in problems of social engineering. Traces cultural evolution and pattern of change over time, by studying re-mains of ancient cultures and records in history,

changes in institutions, technology, law, religion, etc. Seeks application of data on special implications of cultural change and social adaptation in fields of education, tribal and rural community development, health and medicine, industrial relations and administration. May study folk dance, drama and music of tribal and peasant communities.

ISCO 08 Unit Group Details:

Code 2632
 Title Sociologists,
 Anthropologists and
 Related Professionals

2632.1000
Genealogist

Genealogist conducts research into genealogical background of individual or family in order to establish descent from specific ancestor or to discover and identify forebears of individual or family: Consults different genealogical tables and publications and documents, such as church and court records, for evidence of births, baptisms, marriages, deaths, and legacies in order to trace lines of descent or succession. Constructs chart showing lines of descent and family relationships. Prepares history of family in narrative form or writes brief sketches emphasising points of interest in family background.

ISCO 08 Unit Group Details:

Code 2632
 Title Sociologists,
 Anthropologists and
 Related Professionals

2632.1100
Archaeologist

Archaeologist, studies ancient art, architectural relics, monuments,

excavations and other materials to determine social habits customs, religious practices, living conditions, etc., as existed in past and their influence on modern civilization. Visits place of antiquity to study monuments, relics and other materials that were in use in early times. Examines and analyses findings to determine period to which they belong. Conducts exploration, survey and systematic excavation work of ancient sites to discover hidden cities, structures and other antiquities. Collects objects of art, pottery, beads, ornaments and other relics from excavation bearing pre-historic or proto-historic culture. Classifies them according to period to which they belong. Undertakes research on findings and publishes reports on historical importance. Inspects and preserves ancient monuments like temples, forts, mosques, etc. in good order for architectural value. Prepares descriptive catalogues of articles collected and other exhibits in museums. May deliver lectures to students and other interested in archaeology. May undertake architectural survey of temples and monuments to study form and style of different periods.

ISCO 08 Unit Group Details:

Code	2632
Title	Sociologists, Anthropologists and Related Professionals

2632.1200 Geographer

Geographer studies characteristics and use of earth's surface relating and interpreting inter-action of physical and cultural phenomena. Investigates nature of physical and climate environment of selected areas by obtaining data with application of various sciences such as

physics, geology, oceanography, meteorology and biology. Analyses human activity in its social aspects, such as political, economic, movement and growth of population etc. and deduces relationship between such activity and geographical environment. Conducts cartographic surveys and draws maps to required scales. Provides expert opinion to Government and other organizations on problems of economic exploitation of geographic regions determination of political boundaries and related problems. May specialize in any branch of geography such as study of relationship of economic activities to geographical location and climate movement of population, problems of land utilisation in urban growth and town planning preparation of maps, geographical factors influencing national and international problems and may be designated as ECONOMIC GEOGRAPHER, POLITICAL GEOGRAPHER, PHYSICAL GEOGRAPHER, URBAN GEOGRAPHER, CLIMATOLOGIST, GEOMORPHOLOGIST, METHODOLOGIST etc.

ISCO 08 Unit Group Details:

Code	2632
Title	Sociologists, Anthropologists and Related Professionals

2632.9900

Sociologists, Anthropologists and Related Professionals, Other

Sociologists, Anthropologists and Related Professionals, Other include all other professionals who investigate and describe the social structure of societies, the origin and evolution of humanity, and the interdependence between environmental conditions and human activities, and make the knowledge

obtained available as a basis for policy decisions not elsewhere classified.

ISCO 08 Unit Group Details:

Code	2632
Title	Sociologists, Anthropologists and Related Professionals

Family 2633

Philosophers, Historians and Political Scientists

Philosophers, historians and political scientists conduct research into the nature of human experience and existence, phases or aspects of human history, and political structures, movements and behaviour. They document and report on findings to inform and guide political and individual actions.

2633.0100

Historian

Historian studies, interprets and prepares chronological records dealing with past and current events connected with origin and progress of nation, state, region, institution, etc. Visits places of historical importance, collects historical data from different sources such as archives, court records, diaries, files and other published and unpublished materials. Evaluates data on authenticity and relative significance. Assembles historical data in systematic form relating them to time, place and sequence of cause and effects. Aims at objective statement of facts and writes history in narrative form from assembled data to denote events as they occurred. May specialize in writing history of a

particular country or period of time. May conduct research.

ISCO 08 Unit Group Details:

Code	2633
Title	Philosophers, Historians and Political Scientists

2633.0200

Biographer

Biographer studies life of important person and narrates events, interests, behaviour, activities and achievements of individual which enable proper understanding of his character and constitution. Specializes in writing career or phase of life of an individual from available records and other materials. Collects materials from news accounts, diaries, personal paper, correspondence and other details giving account of events in which participated. Consults friends and relatives of individual to get further particulars about person whose biography is to be written. Writes in narrative form life history of person portraying his character and events. May reveal through biography relevant events and developments of contemporary time.

ISCO 08 Unit Group Details:

Code	2633
Title	Philosophers, Historians and Political Scientists

2633.0300

Epigraphist

Epigraphist studies inscriptions on ancient monuments, temple walls, stone slabs, rocks, copper plates and other media and deciphers writing to depict historical evolution of country, people and place and to reveal lost history of past and early rulers, their culture, social and religious

systems etc. Visits historical and other important places and examines inscriptions on rocks, copper plates, temple walls, images, coins, seals, etc. Takes ink impression of inscriptions found on walls, stone slabs, pillars, etc. on paper; deciphers or decodes contents of such inscriptions written in various languages and scripts. Publishes results of investigations reflecting on history on civilisation. May furnish required information to scholars and research workers.

ISCO 08 Unit Group Details:

Code 2633

Title Philosophers, Historians and Political Scientists

2633.0400

Numismatist

Numismatist specializes in collection, reading inscription, study and interpretation of rare old coins of historical and antique importance. Tours country, collects rare coins and reads and deciphers old coins. Classifies coins according to period of existence. Arranges and displays coins in exhibition halls, museums etc. Undertakes research on origin and history of old coins and publishes reports and articles in scientific journals. Conducts visitors around exhibits and explains historical importance of coins to them. May sell rare coins for profit. May deliver lectures on historical and cultural importance of coins.

ISCO 08 Unit Group Details:

Code 2633

Title Philosophers, Historians and Political Scientists

2633.0500

Philatelist

Philatelist; Stamp Collector specializes in collection of postage stamps for study or resale. Collects used and unused postage stamps relating to different periods and pertaining to different countries. Classifies them according to periods of issue and country of origin. Conducts exhibition of stamp collection for public view. May undertake systematic research in postal history, printing methods, difference in papers, etc. May sell stamps for profit.

ISCO 08 Unit Group Details:

Code 2633

Title Philosophers, Historians and Political Scientists

2633.0600

Political Scientist

Political Scientist studies development of political institutions and interprets various political events from national, international point of view and formulates political theories to deal with principles of Government or States. Supervises collection of information relating to origin, development and inter-relationship of political institutions. Studies effect of various phenomena such as political philosophy, public laws and administration, party systems, public opinion, relationship between Government and business, inter-national laws, civic administration, etc. Processes and interprets such data and information to formulate theories and principles for adoption by Government or political parties. May conduct survey of public opinion. May organize and mould public opinion. May specialize in any particular field.

ISCO 08 Unit Group Details:

Code 2633

Title Philosophers, Historians and Political Scientists

2633.9900

Philosophers, Historians and Political Scientists, Other

Philosophers, Historians and Political Scientists, Other include all other professionals who conduct research and describe past events and activities, including the development of social and economic structures, or cultural and political institutions and movements, and make the knowledge obtained available as a basis for political, diplomatic and related policies not classified elsewhere.

ISCO 08 Unit Group Details:

Code 2633

Title Philosophers, Historians and Political Scientists

Family 2634

Psychologists

Psychologists research into and study the mental processes and behaviour of human beings as individuals or in groups, and apply this knowledge to promote personal, social, educational or occupational adjustment and development.

2634.0100

Psychologist

Psychologist studies mental, emotional and cognitive characteristics of human beings and determines principles which govern human behaviour. Investigates factors that affect thought and conduct of human being, and growth and development of individual personality such as heredity, cultural and economic

environments, etc. Deals with psychological problems involved in diagnosis, treatment and prevention of mental illness and emotional and personality disorders. Conducts personal interviews or examines individuals to determine their maladjustment and to suggest corrective measures. Develops psychological tests and experiments designed to measure mental characteristics of human beings. Administers psychological and other tests to individuals to evaluate and measure their intelligence, aptitude, ability, interests and other personal characteristics. Formulates methods to train gifted or persons and children who are differently-abled (mentally and/or physically). May render individual counselling and group guidance to persons and students to assist them in selection of their career and courses, inter-personal relationship etc. May teach in institutions and do research work or perform administrative services. May assist Psychiatrist or Physician in diagnosing and treating mental cases. May be known as CHILD PSYCHOLOGIST, PSYCHOPATHOLOGIST, etc., according to area of specialisation in which engaged.

ISCO 08 Unit Group Details:

Code 2634

Title Psychologists

2634.0200

Psychometrist

Psychometrist; administers, score; and interprets intelligence, aptitude, achievement and other psychological tests. Acquires necessary psychological tests and keeps them in his personal custody. Gives psychological tests to individuals, as required by situation, under standard conditions. Times tests and

records results. Interprets test results in light of standard norms and limitations of test in terms of variability and reliability. May be engaged in construction and standardization of psycho-logical tests.

ISCO 08 Unit Group Details:

Code	2634
Title	Psychologists

2634.0300

Psychologist, Engineering

Psychologist, Engineering conducts research, development, application, and evaluation of psychological principles relating to human behaviour to characteristics, design, and use of environments and systems within which human beings work and live. Collaborates with equipment designers in design, development, and utilization of man-machine systems to obtain optimum efficiency in terms of human capabilities. Advises on human factors to be considered in design of man-machine systems, military equipment, and industrial products. Participates in solving such problems as determining numbers and kinds of workers required to operate machines, allocation of functions to machines and operators, and layout and arrangement of work sites. Analyses jobs to establish requirements for use in classification, selection, placement, and training of personnel. Develops training methods and materials, such as curriculums, lectures, and films, and prepares handbooks of human engineering data for use by equipment and system designers. May conduct research to develop psychological theories concerning such subjects as effects of physical factors (temperature, humidity, vibration, noise, and illumination) on worker's behaviour; functional design of

dials, scales, meters, and other instruments to minimize sensory requirements; specifications for optimal size, shape, direction and speed of motion, and location of equipment controls; and effects of environmental, organismic, and task or job variables on work behaviour and life quality.

ISCO 08 Unit Group Details:

Code	2634
Title	Psychologists

2634.0400

Psychologist, Educational

Psychologist, Educational investigates processes of learning and teaching and develops psychological principles and techniques applicable to educational problems to foster intellectual, social, and emotional development of individuals. Conducts experiments to study importance of motivation in learning, implications of transfer of training in teaching, and nature and causes of individual differences in mental abilities to promote differentiated educational procedures to meet individual needs of students. Analyses characteristics and adjustment needs of superior and inferior students and recommends educational programmes to promote maximum adjustment. Formulates achievement, diagnostic, and predictive tests to aid teachers in planning methods and content of instruction. Administers standardised tests to diagnose disabilities and difficulties among students and to develop special methods of remedial instruction. Investigates traits and attitudes of teachers to study conditions that contribute to or detract from optimal mental health of teachers. Studies effects of teachers' feelings and attitudes upon pupils, and characteristics of successful

teachers to aid school administrators in selection and adjustment of teachers. Collaborates with education specialists in developing curriculum content and methods of organizing and conducting classroom work. May specialize in educational measurement, school adjustment, school learning, or special education.

ISCO 08 Unit Group Details:

Code	2634
Title	Psychologists

2634.0500

Psychologist, Social

Psychologist, Social investigates psychological aspects of human interrelationships to gain understanding of individual and group thought, feeling, and behaviour, utilising behavioural observation, experimentation, or survey techniques: Evaluates individual and group behaviour, developing such techniques as rating scales and sampling methods to collect and measure data. Conducts surveys and polls to measure and analyse attitudes and opinions as basis for predicting economic, political, and other behaviour, using interviews, questionnaires, and other techniques, and adhering to principles of statistical sampling in selecting people. Observes and analyses relations of individuals to religious, racial, political, occupational, and other groups to evaluate behaviour of individuals toward one another in groups, attitudes that exist in groups, and influence of group on individual. Investigates social behaviour of individuals to study such problems as origin and nature of prejudice and stereotyping, transmission of values and attitudes in child rearing, and contribution of factors in social environment to individual mental health and illness. Conducts experimental

studies on motivation, morale and leadership and prepares reports on findings.

ISCO 08 Unit Group Details:

Code	2634
Title	Psychologists

2634.0600

Clinical Psychologist

Clinical Psychologist diagnoses or evaluates mental and emotional disorders of individuals, and administers programmes of treatment. Interviews patients in clinics, hospitals, prisons, and other institutions, and studies medical and social case histories. Observes patients in play or other situations, and selects, administers, and interprets intelligence, achievement, interest, personality, and other psychological tests to diagnose disorders and formulate plans of treatment. Treats psychological disorders to effect improved adjustments utilising various psychological techniques, such as milieu therapy, psychodrama, play therapy and hypnosis. Selects approach to use in individual therapy, such as directive, nondirective, and supportive therapy, and plans frequency, intensity, and duration of therapy. May collaborate with PSYCHIATRIST and other specialists in developing treatment programmes for patients. May instruct and direct students serving psychological internships in hospitals and clinics. May develop experimental designs and conduct research in fields of personality development and adjustment, diagnosis, treatment, and prevention of mental disorders. May serve as consultant to industrial, social, educational, welfare, and other agencies on individual cases or in evaluation, planning, and development of mental health programmes. May

specialize in behaviour problems and therapy, crime and delinquency, group therapy, individual diagnosis and therapy, mental deficiency, objective tests, projective techniques, or speech pathology.

ISCO 08 Unit Group Details:

Code	2634
Title	Psychologists

2634.0700

Industrial – Organizational Psychologist

Industrial Organizational Psychologists apply principles of psychology to personal, administration, management, sales, and marketing problems. Activities may include policy planning, employee screening, training and development, and organizational development and analysis. May work with management to reorganize the work setting to improve worker productivity. Analyses data, using statistical methods and applications, in order to evaluate the outcomes and effectiveness of workplace programmes. Conducts research studies of physical work environments, organizational structures, communication systems, group interactions, morale, and motivation in order to assess organizational functioning. Develops and implements employee selection and placement programmes. Develops interview techniques, rating scales, and psychological tests used to assess skills, abilities, and interests for the purpose of employee selection, placement, and promotion. Formulates and implement training programmes, applying principles of learning and individual differences. Identifies training and development needs. Observes and interviews workers in order to obtain information about the physical, mental,

and educational requirements of jobs as well as information about aspects, such as job satisfaction.

ISCO 08 Unit Group Details:

Code	2634
Title	Psychologists

2634.0800

Psychologist, Counselling

Psychologist, Counselling provides individual and group counselling services in universities and colleges, schools, clinics, rehabilitation centres and industry to assist individuals in achieving more effective personal, social, educational, and vocational development and adjustment. Collects data about individual through use of interview, case history, and observational techniques. Selects and interprets psychological tests designed to assess individuals' intelligence, aptitudes, abilities, and interests, applying knowledge of statistical analysis. Evaluates data to identify causes of problem of individuals and to determine advisability of counselling or referral to other specialists or institutions. Conducts counselling or therapeutic interviews to assist individual to gain insight into personal problems, define goals, and plan action reflecting interests, abilities, and needs. Provides occupational, educational, and other information to enable individual to formulate realistic educational and vocational plans. Follows up results of counselling to determine reliability and validity of treatment used. May engage in research to develop and improve diagnostic and counselling techniques. May administer and score psychological tests.

ISCO 08 Unit Group Details:

Code	2634
Title	Psychologists

2634.9900**Psychologists, Other**

Psychologists, other includes all other psychologist, who study mental processes and behaviour of human beings as individuals or in groups, and apply this knowledge to promote personal, social, educational or occupational adjustment and development not elsewhere classified.

ISCO 08 Unit Group Details:

Code 2634
Title Psychologists

Family 2635**Social Work and Counselling Professionals**

Social Work and Counselling Professionals provide advice and guidance to individuals, families, groups, communities and organizations in response to social and personal difficulties. They assist clients to develop skills and access resources and support services needed to respond to issues arising from unemployment, poverty, disability, addiction, criminal and delinquent behaviour, marital and other problems.

2635.0100**Labour Welfare Officer**

Labour Welfare Officer executes policy regarding working conditions, welfare, etc., of workers in industrial undertakings, maintains liaison between management and labour and promotes harmonious relations between them. Brings grievances of workers to notice of management. Interprets labour laws to workers and advises management on various statutory

obligations. Promotes harmonious relations between management and workers to ensure efficiency in production, help in formation of welfare activities such as recreational facilities, sanitation, education of children, etc. Helps in formulating employment and recruitment policies in consultation with management and workers' representatives. Uses his good office to bring about settlement by conciliation in event of dispute between workers and management. Ensures all administrative action on part of management in case of labour trouble. May assist employees in their personal problems.

ISCO 08 Unit Group Details:

Code 2635
Title Social Work and Counselling Professionals

2635.0200**Women's Welfare Officer**

Women's Welfare Officer guides and supervises social and welfare activities of women, encourages them to develop community life and utilise their spare time in useful trades and crafts to supplement their family income. Visits welfare centres and institutions and guides their activities. Formulates and implements welfare measures according to need of women workers in factories, institution, prisons, etc. Supervises work of Women's Welfare Organizations and Gram Sevikas. Recommends proposals of welfare institutions applying for Government aids. Investigates cases of deserted wives, destitute widows, orphans, etc., and recommends admission to care institution in deserving cases. Contacts institutions and persons to secure employment, hospitalisation, and admission to schools, etc. Assists in marketing of finished articles prepared by women welfare

organizations. May maintain case history; of women-prisoners and functions as medium of communication between them and their relatives outside, if engaged as LADY WELFARE OFFICER in jail.

ISCO 08 Unit Group Details:

Code 2635

Title Social Work and Counselling Professionals

2635.0300

Probation Officer

Probation Officer, Aftercare Officer, Probation studies and investigates problems of ex-convicts and suggests and undertakes suitable measures towards their rehabilitation as useful citizens. Studies back ground and environments of offenders to ascertain causes of delinquency and maladjustment and reports to court to determine their probation period and corrective measures to be taken. Undertakes aftercare of ex-inmates of certified and juvenile schools. Encourages discharged prisoners to join aftercare homes and service centres to learn craft or profession. Assists ex-convicts in their rehabilitation. May maintain information of convict to ensure that they do not turn habitual offenders. May be designated as WELFARE OFFICER (Jails) if looks after welfare of prisoners in jail and their families outside and maintains liaison between them.

ISCO 08 Unit Group Details:

Code 2635

Title Social Work and Counselling Professionals

2635.0400

Medical Social Worker

Medical Social Worker assists in solving social and emotional problems of individuals in relation to illness. Acts as Liaison between patients and Physicians, Occupational Therapists and other medical service workers to facilitate treatment. Discusses with physicians so that their understanding of patient's social problems is adequate. Visits homes to assist in preparing proper environment for patients. Assists patients and their families in developing mental and emotional adjustments to illness. Attempts to eliminate fears, prejudice and other attitudes that are obstacles to acceptance of medical care and continuation of treatment. Facilitates effectiveness of treatment or recuperation by assisting patients to regulate their lives so that harmful factors such as overwork, strenuous recreational activities, inadequate diet and worries are removed. Refers patients to community resources that may expedite their rehabilitation. May participate in research programmes related to medico-social problems.

ISCO 08 Unit Group Details:

Code 2635

Title Social Work and Counselling Professionals

2635.0500

Child and Family Social Worker

Child and Family Social Workers provide social services and assistance to improve the social and psychological functioning of children and their families and to maximise the family well-being and the academic functioning of children. May assist single parents, arrange adoptions, and find foster homes for abandoned or abused children. Interview clients individually, in families, or in groups,

assessing their situations, capabilities, and problems, to determine what services are required to meet their needs. Counsel individuals, groups, families, or communities regarding issues including mental health, poverty, physical abuse, rehabilitation, social adjustment, child care, and/or medical care. Maintain case history records and prepare reports. Consult with parents, teachers, and other school personnel to determine causes of problems such as truancy and misbehaviour, and to implement solutions. Counsel parents with child rearing problems, interviewing the child and family to determine whether further action is required. Develop and review service plans in consultation with clients, and perform follow-ups assessing the quantity and quality of services provided. Collect supplementary information needed to assist client, such as medical records, or school reports. Address legal issues, such as child abuse and discipline, assisting with hearings and providing testimony to inform custody arrangements. Provide, find, or arrange for support services, such as child care, prenatal care, substance abuse treatment, job training, counselling, or parenting classes, to prevent more serious problems from developing.

ISCO 08 Unit Group Details:

Code 2635

Title Social Work and Counselling Professionals

2635.0600

Health Educator

Health Educators Promote, maintain, and improve individual and community health by assisting individuals and communities to adopt healthy behaviours. Collect and analyse data to identify community needs

prior to planning, implementing, monitoring, and evaluating programmes designed to encourage healthy lifestyles, policies and environments. May also serve as a resource to assist individuals, other professionals, or the community, and may administer fiscal resources for health education programmes. Collaborate with health specialists and civic groups to determine community health needs and the availability of services, and to develop goals for meeting needs. Design and conduct evaluations and diagnostic studies to assess the quality and performance of health education programmes. Develop and present health education and promotion programmes, such as training workshops, conferences, and school or community presentations. Develop operational plans and policies necessary to achieve health education objectives and services. Develop, conduct, or co-ordinate health needs assessments and other public health surveys. Prepare and distribute health education materials, including reports, bulletins, and visual aids, such as films, videotapes, photographs, and posters. Provide guidance to agencies and organizations in the assessment of health education needs, and in the development and delivery of health education programmes. Provide programme information to the public by preparing and presenting press releases, conducting media campaigns, and/or maintaining programme-related web sites. Develop and maintain cooperative working relationships with agencies and organizations interested in public health care. Develop and maintain health education libraries to provide resources for staff and community agencies.

ISCO 08 Unit Group Details:

Code 2635

Title Social Work and Counselling Professionals

2635.0700 Women's Welfare Organizer

Women's Welfare Organizer attends to activities relating to welfare of women such as teaching better methods of housekeeping, hygiene and sanitation, helpings to learn crafts to improve their earnings, assisting in getting medical aid, conducting classes to promote and improve literacy, etc. Visits women at home or in women's welfare institutions and advises them on childcare, sanitation, diet, etc. Conduits community service centres encouraging women to participate in them. Assists in conducting classes to promote and improve literacy or craft skill. Arranges admission of children to schools, orphanages etc., where required. Investigates cases of deserted wives, widows etc. for monetary grant or other assistance.

ISCO 08 Unit Group Details:

Code 2635

Title Social Work and Counselling Professionals

2635.0800 Child Welfare Organizer

Child Welfare Organizer develops programme content, organizes and leads activities planned to aid parents with child rearing problems and children with difficulties in social adjustments. Visits homes in slum areas and crowded quarters to investigate home conditions to protect children from harmful environment and disseminate information on rearing children in healthy condition. Helps parents through individual or group conferences to understand, accept and follow medical recommendations on child

welfare and hygiene. Arranges exhibitions and film shows on child health. Organizes 'Balwadis' (children play centres) and arranges day-care-service for children. May place children in foster homes, institutions, medical treatment centres and provide counselling to children and parents on social adjustment. May work in collaboration with other social organizations. May refer juveniles to community agencies and health clinics for mental, physical and social rehabilitation and be designated as SOCIAL WORKER, DELINQUENCY PREVENTION.

ISCO 08 Unit Group Details:

Code 2635

Title Social Work and Counselling Professionals

2635.0900 Family Planning Organizer

Family Planning Organizer advises married couples in spacing children and to limit size of family by adopting various birth control methods. Visits homes and community centres; collects necessary data and enlightens clients on benefits of Planned Parenthood. Advises clients in use of contraceptives and assists them to visit family planning centres. Suggests surgical operations or other methods to limit size of family and guides them to family planning clinics. Undertakes follow-up action to obtain results and reports cases to appropriate authorities. Participates in family planning exhibitions and related publicity campaigns and distributes relevant literature and materials. May demonstrate use of contraceptives by diagrams and models.

ISCO 08 Unit Group Details:

Code 2635

Title Social Work and Counselling Professionals

2635.1000 Vocational Rehabilitation Counsellor

Vocational Rehabilitation Counsellor Counsels differently-abled individuals to provide vocational rehabilitation services. Interviews and evaluates differently-abled applicants, and confers with medical professional personnel to determine the type and degree of disability, eligibility for service, and feasibility of vocational rehabilitation. Accepts or recommends acceptance of suitable candidates. Determines suitable job or business consistent with applicant's desires, aptitudes, and physical, mental, and emotional limitations. Plans and arranges for the applicant to study or train for the job. Assists the applicant with personal adjustment through rehabilitation programmes. Aids applicant in obtaining medical and social services during training. Promotes and develops job openings and places qualified applicant in employment. May specialize in type of disability, such as mental, hearing and visual impairment.

ISCO 08 Unit Group Details:

Code 2635

Title Social Work and Counselling Professionals

2635.1100 Counsellor, Marriage and Family

Counsellor, Marriage and Family provides individual, marital, and family counselling services to adults and children, to assist clients to identify personal and interactive problems, and to achieve effective personal, marital, and family development

and adjustment. Collects information about clients (individuals, married couples, or families), using interview, case history, and observation techniques, appraisal and assessment methods. Analyses information collected to determine advisability of counselling or referral to other specialists or institutions. Reviews notes and information collected to identify problems and concerns. Consults reference material, such as textbooks, manuals, and journals, to identify symptoms, make diagnoses, and develop treatment plan. Counsels clients, using counselling methods and procedures, such as psychotherapy and hypnosis, to assist clients in gaining insight into personal and interactive problems, to define goals, and to plan action-reflecting interests, abilities, and needs. Evaluates results of counselling methods to determine reliability and validity of treatment used.

ISCO 08 Unit Group Details:

Code 2635

Title Social Work and Counselling Professionals

2635.9900 Social Work Professionals, Other

Social Work Professionals, other include workers engaged in social welfare activities such as welfare of slum dwellers, organizing social functions in honour of distinguished persons, etc. not elsewhere classified.

ISCO 08 Unit Group Details:

Code 2635

Title Social Work and Counselling Professionals

Family 2636**Religious Professionals**

Religious Professionals function as perpetuators of sacred traditions, practices and beliefs. They conduct religious services, celebrate or administer the rites of a religious faith or denomination, provide spiritual and moral guidance and perform other

2636.0100**Priest**

Priest, Clergyman; Minister; Pastor; Rector; Father; Parish Priest conducts religious worship and performs rites in accordance with religious scriptures and recognised practices in temple, church, mosque or other places of worship. Arranges and conducts regular prayers in places of worship, delivers sermons, recites verses, mantras from holy books and performs Baptism, Communion. Matrimony, etc. according to one's religion and faith. Administers sacraments, last rites etc. Helps community responsibilities by taking part in committees, delivering addresses etc. and undertakes charitable works. May visit sick, poor to render necessary help. May administer property of Parishes or religious institutions. May teach in school, college or any religious institutions. May inspect schools under orders of Diocese or Archdiocese and be placed in charge of an ecclesiastical district. Is designated as Pujari when professes Hindu faith; Padre; Father; Reverend; Bishop etc. if belongs to Christianity; Imam or Moulvi if belongs to Islam. Dastoor if belongs to Zoroastrianism; Rabbi if follower of Judaism, Granthi if follower of Sikhism, etc.

ISCO 08 Unit Group Details:

Code 2636

Title Religious Professionals

2636.0200**Purohit**

Purohit performs religious rites and ceremonies of Hindus on behalf of persons engaging him on religious and other social occasions such as marriage, birth of child, sacred thread ceremony, and religious festivals. Performs rites, marriage, birth of child, sacred thread ceremony, etc. by chanting religious hymns. Passages from scriptures and or performing Havans, Kirtans, etc. to invoke divine blessing. May worship a particular Deity in the temple.

ISCO 08 Unit Group Details:

Code 2636

Title Religious Professionals

2636.9900**Non-Ordained Religious Workers**

Non-Ordained Religious Workers, other assist Ordained Religious Workers in conducting worship, performing religious rites in places of worship and on special occasions such as marriages, births, deaths, etc. and include those not elsewhere classified and is designated as: Maha Brahmin; Mahapatra if performs last rites of deceased persons belonging to Hindu faith at cremation ground. Sets pyre, chants religious hymns. May maintain record of dead bodies cremated. May arrange for firewood, ghee and other articles required for cremation. Moazzen calls Azan (Prayer call) in mosques at fixed times before each prayer. Looks after cleanliness of mosque and makes arrangements of water for worshippers to wash before prayer (wazoo). May lead

prayer in absence of Imam (leader in group prayers). Sexton looks after church property; rings church bell for periodic services, and takes care of church graveyard. May assist Pastor or priest in performance of religious rites.

ISCO 08 Unit Group Details:

Code 2636
Title Religious Professionals

Group 264

Authors, Journalists and Linguists

Authors, Journalists and Linguists conceive and create literary works, interpret and communicate news and public affairs through the media and translate or interpret from one language into another.

Occupations in this Group are classified into the following Families:

2641 Authors and Related Writers
2642 Journalists
2643 Translators, Interpreters and Other Linguists

Family 2641

Authors and Related Writers

Authors and Related Writers plan, research and write books, scripts, storyboards, plays, essays, speeches, manuals, specifications and other non-journalistic articles (excluding material for newspapers, magazines and other periodicals) for publication or presentation.

2641.0100

Author

Author writes original literary works such as articles, stories, fictions, dramas, essays, poems, plays etc. Collects necessary data, arranges it in required form for writing. Writes stories essays, poems, plays, etc. in literary or in his own style. May write on technical subjects. May be known as Novelist, Poet, Essayist, and Playwright etc. according to type of literature written.

ISCO 08 Unit Group Details:

Code 2641
Title Authors and Related Writers

2641.0200

Critic

Critic; Reviewer writes critical re-reviews on merits of literary or artistic works, for newspapers or periodicals. Reads books, attends art exhibits, or stage, screen, and musical performance and forms critical opinions of them based on knowledge, judgement and experience. Writes criticism, usually making comparisons with other works or productions and discussing such pertinent factors as artistic motif, expression and technique. May be designated according to major field of interest Art Critic; Book Critic; Drama Critic; Movie Critic and Music Critic.

ISCO 08 Unit Group Details:

Code 2641
Title Authors and Related Writers

2641.0300

Editor

Editor edits or directs editing of newspapers, journals, books and leading articles on contemporary events. Plans layout of publications, assigns and co-ordinates work of different sections and staff such as Sub Editor, Reporter,

Photographer, etc. Examines written material, Scrutinises and edits reports of meetings, important events etc., received from correspondents for publication. Writes leading articles on important subjects or events in accordance with prescribed policy. Is designated as News Editor if engaged in editing news items; Commercial Editor if engaged in editing commercial, financial or trade news; Sports Editor if editing sports news; Feature Editor if engaged in writing special feature articles; Literary Editor if engaged in reviewing literary works. Is also designated as Chief Editor; Assistant Editor according to level of responsibility held. May be known as Leader Writer if exclusively engaged in writing leading articles on topics of general interest.

ISCO 08 Unit Group Details:

Code 2641

Title Authors and Related Writers

2641.0302

Script Editor

Script Editor reads and assesses the script for the merit of the story, its dramaturgy and overall competence and offer feedback and notes for improvement to make the script production worthy.

Qualification Pack Details:

QP NOS Reference	MES/Q3001
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QP NOS Name	Script Editor
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NSQF Level	7
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ISCO 08 Unit Group Details:

Code 2641

Title Authors and Related Writers

2641.0400

Sub-editor

Sub-Editor selects and processes material for publication in conformity with policy

of management. Selects news reports, revises or summarises them to fit into space allotted, gives proper headlines, arranges report for effective display and corrects proof. May specialize in particular fields such as foreign news, sports, films, etc. and be designated accordingly. Is designated as Chief Sub-Editor if responsible for assigning co-co-ordinating and supervising work of different Sub-Editors.

ISCO 08 Unit Group Details:

Code 2641

Title Authors and Related Writers

2641.0500

Poet

Poet Writes narrative, dramatic, or lyric poetry for magazines, books, and other publications: Chooses subject matter and suitable form to express personal feeling and individual experience, or to narrate story or event. May write doggerel or other type verse.

ISCO 08 Unit Group Details:

Code 2641

Title Authors and Related Writers

2641.0601

Script Writer

Script Writer (Motion Picture) writes script (plan of shooting) to facilitate shooting of films. Studies story and divides it into different scenes and shots. Prepares data, scene by scene, including time and location of shooting, costumes and other details. Consults Director, Theatrical and Cinematographer. May visit location of shooting to make script more practicable.

Qualification Pack Details:

QP NOS Reference	MES/Q3002
QP NOS Name	Script-writer
NSQF Level	6

ISCO 08 Unit Group Details:

Code 2641
Title Authors and Related Writers

2641.0602**Script Researcher**

Script Researcher needs to provide research material to the scriptwriter and carry out research/develop story outlines to identify possible scripts/stories.

Qualification Pack Details:

QP NOS Reference	MES/Q3003
QP NOS Name	Script
Researcher	
NSQF Level	5

ISCO 08 Unit Group Details:

Code 2641
Title Authors and Related Writers

2641.0701**Associate-Editorial**

Associate-Editorial is responsible for checking grammatical errors and editing the research reports.

Qualification Pack Details:

QP NOS Reference	SSC/Q2701
QP NOS Name	Associate-Editorial
NSQF Level	7

ISCO 08 Unit Group Details:

Code 2641
Title Authors and Related Writers

2641.0801**Associate-Learning**

Associate-Learning is required to structure learning courseware, prepare online training materials and documents, and create content using software tools. It also involves structuring of e-learning courseware to facilitate effective, engaging and performance-enhancing learning.

Qualification Pack Details:

QP NOS Reference	SSC/Q2801
QP NOS Name	Associate-Learning
NSQF Level	7

ISCO 08 Unit Group Details:

Code 2641
Title Authors and Related Writers

2641.0901**Technical Writer-Product Documentation**

Technical Writer-Product Documentation is responsible for creating technical documentation related to an application like job-aids, help documents and training materials. These documents serve the core purpose of transferring knowledge between the application development teams and the user teams. The information may be presented in the form of user guides for software applications, reference manuals, training guides or online help incorporated into software and operating guides.

Qualification Pack Details:

QP NOS Reference	SSC/Q6801
QP NOS Name	Technical Writer
NSQF Level	5

ISCO 08 Unit Group Details:

Code 2641
Title Authors and Related Writers

2641.0902

Technical Writer-Application Development

Technical Writer-Application Development is responsible for creating technical documentation related to an application like job-aids, help documents and training materials. These documents serve the core purpose of transferring knowledge between the application development teams and the user teams. The information may be presented in the form of user guides for software applications, reference manuals, training guides or online help incorporated into software and operating guides.

Qualification Pack Details:

QP NOS Reference	SSC/Q0505
QP NOS Name	Technical Writer
NSQF Level	5

ISCO 08 Unit Group Details:

Code	2641
Title	Authors and Related Writers

2641.0903

Technical Writer-Technical Documentation/Writing

Technical Writer-Technical Documentation/Writing is responsible for creating technical documentation related to an application like job-aids, help documents and training materials. These documents serve the core purpose of transferring knowledge between the application development teams and the user teams. The information may be presented in the form of user guides for software applications, reference manuals, training guides or online help incorporated into software and operating guides.

Qualification Pack Details:

QP NOS Reference	SSC/Q4501
QP NOS Name	Technical Writer
NSQF Level	7

ISCO 08 Unit Group Details:

Code	2641
Title	Authors and Related Writers

2641.9900

Authors, Journalists and Other Writers

Authors, Journalists and Other Writers who write literary works for publication or presentation in dramatic form, appraise merits of artistic productions, or literary and other works of art, or write and edit news, stories and commentaries not classified elsewhere.

ISCO 08 Unit Group Details:

Code	2641
Title	Authors and Related Writers

Family 2642 Journalists

Journalists research, investigate, interpret and communicate news and public affairs through newspapers, television, radio and other media.

2642.0100

News Reporter

News Reporter; News Correspondent collects news by touring area allotted to him, interviewing persons, attending public functions and law courts, investigating events of public interest or by other means and transmits news to Editor for publication. Attends public meetings and press conferences, interviews important public men to collect

news and to ascertain their views on contemporary events. Reports or transmits news item to Editor giving background history and comments. May specialize in reporting particular types of news such as those relating to political events, commerce, sports, theatre etc. and be designated accordingly: Is designated as Chief Reporter if responsible for allocating and co-ordinating work of different Reporters.

ISCO 08 Unit Group Details:

Code	2642
Title	Journalists

2642.0200

Columnist

Columnist reviews events, developments etc. of public interest periodically in particular columns of newspapers or magazines. Reviews contemporary events by interviewing persons, observing events, attending public meetings, parliamentary debates etc. if necessary. May write in humorous or critical style.

ISCO 08 Unit Group Details:

Code	2642
Title	Journalists

2642.0300

Freelance Journalist

Freelance Journalist contributes to newspapers or magazines, occasionally, special articles on subjects of his choice for publication. Writes articles on selected subjects occasionally besides his normal avocation. May write feature articles.

ISCO 08 Unit Group Details:

Code	2642
Title	Journalists

2642.0400

Commentary Writer

Commentary Writer (Motion Picture) writes commentary to describe visuals of motion picture. Studies general background of material to be commented reads script and sees film to understand theme. Writes commentary to interpret or describe each event to assist audience to grasp meaning of theme of film. Uses literary acumen to make commentary more meaningful. Infuses emotional effect in writing to suit mood and tempo of visual.

ISCO 08 Unit Group Details:

Code	2642
Title	Journalists

2642.0500

Radio Commentator

Radio Commentator gives running commentary on events of national importance, sports events, festivals, etc. over broadcasting system. Obtains general background of events or occasion, which has to be covered, by consulting relevant literature, interviewing people and visiting locale. Occupies vantage position to obtain clear unobstructed view to what happens. Describes locale personalities, sequence of events, etc. pinpointing important aspects of occasion by modulating tone of speech. Nar-rates events commenting on important aspects of occasion and events to maintain continuous interest and provide comprehensive picture of event. May specialize in commenting on particular event(s). May keep themselves informed of important day-to-day happenings and events and broadcast his comments on radio according to set programme for general information. May record

commentary by speaking into portable tape recorder by visiting and moving about at the site of activity. May be designated as Television Commentator if engaged on rendering commentary in television programmes.

ISCO 08 Unit Group Details:

Code	2642
Title	Journalists

2642.0600

Commentator (Motion Picture)

Commentator (Motion Picture) gives running commentary to interpret or to describe visuals of motion picture. Obtains general background of material to be covered. Studies narration, and sees film to grasp subject, visuals and mood. Narrates events, synchronizing commentary with visuals using trained voice and tone to suit subject and mood. Dramatizes narration under guidance of Director Theatrical by infusing emotional effects in tone and in harmony with mood and tempo of visuals. May write the commentary.

ISCO 08 Unit Group Details:

Code	2642
Title	Journalists

Family 2643

Translators, Interpreters and Other Linguists

Translators, Interpreters and Other Linguists translate or interpret from one language into another and study the origin, development and structure of languages.

2643.0100

Language Specialist

Language Specialist; specializes in one or more Indian or foreign languages. Collects literature from archives, libraries on languages and studies their structure and development. Traces origin and evolution of words and deciphers writings and ancient languages found in archaeological remains of past civilisation. Analyses ancient languages and compares them with modern languages. Writes theses and prepares dictionaries. May be designated as PHILOLOGIST if engaged in study of structure and development of languages or LEXICOGRAPHER if engaged in compiling dictionary in one or more languages.

ISCO 08 Unit Group Details:

Code	2643
Title	Translators, Interpreters and Other Linguists

2643.0200

Translator

Translator translates written or printed material from one language to one or more other languages. Scrutinises reports, publications, journals, court judgements, rules and other documents written or printed in one language and translates them into required languages.

ISCO 08 Unit Group Details:

Code	2643
Title	Translators, Interpreters and Other Linguists

2643.0300

Interpreter

Interpreter interprets converts or elucidates spoken language or words into, one or other required languages for being

understood by those who do not understand that language. Listens to speaker attentively and renders quickly and fluently translation of spoken language in specified language. May take short notes to enable correct interpretation. May translate written or printed material into specified language.

ISCO 08 Unit Group Details:

Code	2643
Title	Translators, Interpreters and Other Linguists
2643.0401	

Language Translator-Software Products

Language Translator-Software Products is responsible for translating software into different languages that end-users may be well-verses with. These extend beyond regular language translator roles as they require understanding of the software languages and platforms.

Qualification Pack Details:

QP NOS Reference	SSC/Q6802
QP NOS Name	Language Translator
NSQF Level	7

ISCO 08 Unit Group Details:

Code	2643
Title	Translators, Interpreters and Other Linguists
2643.0402	

Language Translator-IT Services

Language Translator-IT Services is responsible for translating software into different languages that end-users may be well-verses with. These extend beyond regular language translator roles as they

require understanding of the software languages and platforms.

Qualification Pack Details:

QP NOS Reference	SSC/Q0506
QP NOS Name	Language
Translator	
NSQF Level	7

ISCO 08 Unit Group Details:

Code	2643
Title	Translators, Interpreters and Other Linguists

2643.9900

Philologists, Translators and Interpreters, Other

Philologists, Translators and Interpreters, other include all philologists, translators and interpreters who study the origin, development and structure of languages, and translate or interpret from one language in to another not classified elsewhere.

ISCO 08 Unit Group Details:

Code	2643
Title	Translators, Interpreters and Other Linguists
Group 265	

Creative and Performing Artists

Creative and Performing Artists communicate ideas, impressions and facts in a wide range of media to achieve particular effects; interpret a composition such as a musical score or a script to perform or direct the performance; and host the presentation of such performance and other media events.

Occupations in this Group are classified into the following Families:

2651	Visual Artists
2652	Musicians, Singers and Composers
2653	Dancers and Choreographers
2654	Film, Stage and Related Directors and Producers
2655	Actors
2656	Announcers on Radio, Television and Other Media
2659	Creative and Performing Artists, Not Elsewhere Classified

Family 2651 Visual Artists

Visual Artists create and execute works of art by sculpting, painting, drawing, creating cartoons, engraving or using other techniques.

2651.0100 Sculptor

Sculptor carves figures, statues, monuments and other imaginative designs in abstract forms by chiselling stone or carving wood or modelling clay or any other material either direct from original or from models prepared by him or Modeller. Selects material such as stone, wood, clay, ivory, marble, wax, etc. according to requirements. Sketches design and makes scale model in wax or plaster. Transfers measurements to block. Carves, or shapes block using different tools achieving unity and harmony. Is designated as Sthapathi if engaged in designing, carving and drilling holes in stones to make Idols for use in temples from mental perception as described in 'Shastras' (holy scriptures of Hindus) by

the use of hammer and chisels only. May sharpen tools by hand or on machine. May inscribe decorative lettering and monumental sculptures on models. May make clay or wax models and caste same in plaster of Paris or bronze.

ISCO 08 Unit Group Details:

Code	2651
Title	Visual Artists

2651.0200

Modeller (Except Stone)

Modeller (Except Stone) makes clay or plaster of Paris models of pottery, porcelain and models of anatomical studies according to drawing and specifications, for mass production. Prepares clay, wax or plaster of Paris foundation. Carves material, using shaping tools, lathe or potter's wheel to resemble model to exact size and other specifications. May prepare model of important persons by observing person's facial expression and features, and carving and shaping material to required size and form. May create own designs.

ISCO 08 Unit Group Details:

Code	2651
Title	Visual Artists

2651.0300

Stone Modeller

Stone Modeller; Stone Statue Maker carves out features, statues, models, idols and other artistic designs on stone slabs, blocks or pillars for construction of temples, monuments, fountains, buildings etc. using hand tools. Studies nature of carvings to be done from drawings, photographs, written descriptions etc. or receives instructions from Sthapathi or other appropriate authority. Forms

mental picture of carving to be done and selects required type of stone such as marble, soapstone, granite, green stone, etc. Chips off unwanted portions of stone with hammer and chisel and marks outline of figures with chalk, pencil or ochre solution by free hand sketching using drawing and measuring instruments. Places stone in working position, applies oil over its surface if working on granite and carefully carves out figures, statues, idols, models etc. as designed using hammer and chisels of different sizes. Marks portion with paint otherwise to indicate stages of work and facilitate carving and gives smooth and finishing touches to carved figures using fine chisels. Cuts slits and drills holes as designed using saw blades and hand drills or with hammer and chisels depending on specifications and nature of work done particularly for carvings of idols and images meant for temples. Brushes off dust and waste material from object and sprinkles water on it, as necessary, while carving. May carve numbers and letters and create designs. May make clay model of statue or image to be carved to ensure accuracy and facilitate working.

ISCO 08 Unit Group Details:

Code	2651
Title	Visual Artists

2651.0400

Painter, Fine Art

Painter, Fine Art paints portraits, scenery or depicts objects or scenes on different surfaces in oil, pastel or watercolour using brush. Prepares surface of canvas, wood, paper, wall or other material by priming it with starch, glue, gelatine, linseed oil, zinc oxide, etc. for painting. Selects and mixes paints to required colour and sketches preliminary outlines or drawing of object

to be painted on surface, Paints with required colours using brush to obtain clear line and design. Varnishes finished painting when dry for effect and preservation. May touch or re-touch faded portions of paintings with appropriate colour to give original effect. May use chemical colours for' painting on porcelain.

ISCO 08 Unit Group Details:

Code	2651
Title	Visual Artists

2651.0500

Renovator, Paintings

Renovator, Paintings restores damaged, soiled or faded paintings to original shape and colour by cleaning, repairing, retouching etc. Cleans faded or damaged portion to remove dirt using brush or duster. Mixes paint to required colour. Paints faded portions with appropriate colour to revive original appearance and shine. Renovates damaged painting or part thereof by transferring entire painting to fresh canvas by scientific method. Retouches blemishes and damaged parts of painting.

ISCO 08 Unit Group Details:

Code	2651
Title	Visual Artists

2651.0600

Cartoonist

Cartoonist draws cartoons or caricature of persons and events in humorous or satirical manner for publication in newspapers, journals etc. or for production of cartoon films. Reads news items, books etc. and observes events to obtain ideas for subject matter to be sketched. Draws out lines of caricature and sketches on paper or cardboard, using pencil, ink or brush. Completes caricature

or sketch by shadings with pen and brush. Sends cartoons to process department for engraving or for photographing. May discuss with employer regarding broad policies to be adopted in drawing cartoons to portray events. May give captions or descriptive titles to cartoons.

ISCO 08 Unit Group Details:

Code	2651
Title	Visual Artists

2651.9900

Visual Artists, Other

Sculptors, Painters and Related Artists, other include all other sculptures, painters and related artists engaged in specialized fields of painting, sculpture, modelling etc. not elsewhere classified.

ISCO 08 Unit Group Details:

Code	2651
Title	Visual Artists

Family 2652

Musicians, Singers and Composers

Musicians, singers and composers write, arrange, conduct and perform musical compositions.

2652.0100

Music Composer

Music Composer; Lyricist creates and writes classical or light songs and sets them to music. Studies different laws and principles of melodies, harmonies and other scientific aspects of music and transcribes songs in to musical notations. Writes original music compositions in different styles for radio, stage or screen. May write musical scores for Instrument

Musician. May conduct research in history of songs and musical compositions.

Qualification Pack Details:

QP NOS Reference
QP NOS Name
NSQF Level

ISCO 08 Unit Group Details:

Code	2652
Title	Musicians, Singers and Composers

2652.0200

Orchestra Conductor

Orchestra Conductor; Bandmaster conducts or directs orchestra, chorus or other musical performances by directing and controlling various instrumentalists in rendition of music. Selects musical composition to be rendered. Arranges location of different instrument players to get harmonious music. Directs group by beat of hand or other signals for rendering of music by all members in harmony and melody. May play one or more instruments. May conduct research in different types of musical composition and devise new types of music suitable for orchestra or other musical performances. May train musicians or bandsmen.

ISCO 08 Unit Group Details:

Code	2652
Title	Musicians, Singers and Composers

2652.0300

Singer

Singer; Vocal Musician; Vocalist sings Indian or Western music either alone or in-group, with or without musical accompaniments. Sings classical or light songs with other accompaniment such as violin, mridangam, sarangi, tabla, piano, flute, harmonium etc. May act and dance

while singing songs. May compose own poems and write books on music. May play on musical instruments while singing.

ISCO 08 Unit Group Details:

Code 2652

Title Musicians, Singers and Composers

2652.0400

Instrumental Musician, String Instrument

Instrumental Musician, String Instrument plays musical string instruments of Indian or Western origin by movement of fingers or bow on strings. Rehearses music on musical stringed instruments. Tunes instrument to required pitch and harmony with other instruments. Plays singly or in accompaniment with other singers or musicians as member of orchestra, by set movements of fingers or bow on strings. May compose own music or invent own instrument to produce special effects. May be designated according to instruments played such as VEENA PLAYER, SITAR PLAYER, SARANGI PLAYER, SAROD PLAYER, VIOLINIST/BASS PLAYER, HARPIST, etc.

ISCO 08 Unit Group Details:

Code 2652

Title Musicians, Singers and Composers

2652.0500

Instrumental Musician, Percussion Instrument

Instrumental Musician Percussion Instrument plays musical percussion instruments such as Tabla, Drum, Pakhawaj etc. by hands or sticks usually to provide rhythmic company to other musicians. Tunes instrument to required pitch by tightening or loosening cords holding leather pieces fixed atop or at

both ends of instrument. Plays instrument gently with hand or stick or both to provide rhythm, alone or in accompaniment to other musical instrument(s). May sing classical or light songs while playing instrument. May be known as TABLA PLAYER, DRUMMER, MRIDANGIST, PAKHAWAJ PLAYER, CYMBALIST, etc. according to instrument played.

ISCO 08 Unit Group Details:

Code 2652

Title Musicians, Singers and Composers

2652.0600

Instrumental Musician, Wind Instrument

Instrumental Musician, Wind Instrument; plays musical wind instruments of Indian or Western origin by blowing with mouth and using fingers to produce desired effect. Blows instrument by mouth and allows wind to pass through reeds by systematic movement of fingers on holes or keys of instrument to produce melodious tune. May play wind instrument alone or in accompaniment of other musicians. May be known as FLUTE (Bansuri) PLAYER; SHAHNAI PLAYER; Clarinettist: OBOIST; SAXOPHONIST; TRUMPETER: TROMBONIST; BAGPIPER, etc. according to instrument played.

ISCO 08 Unit Group Details:

Code 2652

Title Musicians, Singers and Composers

2652.9900

Musicians, Singers and Composers, Other

Composers, Musicians and Singers, other include all other composers, musicians

and singers engaged in composing, production and rendering music, not elsewhere classified.

ISCO 08 Unit Group Details:

Code 2652

Title Musicians, Singers and Composers

Family 2653

Dancers and Choreographers

Dancers and choreographers conceive and create or perform dances.

2653.0100

Choreographer

Choreographer designs dances, specially ballet, for stage or film production. Selects suitable theme for dance. Plans dance, works out movement and arrangement of dancers on stage by drawing sketches of sequences and different situations on paper and by observing dancers in action. Discusses requirements of stage setting; music and costumes with other stage specialists to convey correct interpretation of theme to audience. May conduct rehearsals and design costumes for dancers.

ISCO 08 Unit Group Details:

Code 2653

Title Dancers and Choreographers

2653.0200

Nattuvan

Nattuvan rehearses, teaches and conducts Bharatanatyam performances. Studies different types of musical compositions suitable for dance performance. Originates and plans dances. Teaches Dancer in the art of Bharatanatyam (movement of body and limbs to keep

step with rhythm to music). Trains and rehearses members of dance troupe according to required theme and gives personal demonstration to pupils in movement of limbs and facial expression to interpret moods, grace, pose, poise etc. Renders vocal music and or conducts orchestra for Dancer to dance according to music.

ISCO 08 Unit Group Details:

Code 2653

Title Dancers and Choreographers

2653.0300

Dancer

Dancer performs dances either alone, with partner or in groups to entertain audience. Puts on required dress and make-up and performs classical, modern or acrobatic dances, co-ordinating body movements and facial expressions with musical accompaniment to express theme of dance. Rehearses dance routines developed by Choreographer. May perform original dances. May sing and provide other forms of entertainment. May specialize in particular style of dancing and be designated according to speciality as BHARATANATYAM DANCER, if dances in "Bharatanatyam", style; KATHAKALI DANCER, if dances in "KATHAKALI", style; KATHAK DANCER, if dances in "Kathak", style; MANIPUR DANCER, if dances in "Manipur", style; BALLET DANCER, WESTERN STYLE, if dances in "Western style", expressing theme or story by moving on toes, rhythmic leaps, quick movement of body, legs and arms; ACROBATIC DANCER, performs style of dancing characterized by difficult gymnastic feats; BALL ROOM DANCER performs original or interpretative modern dances, usually

with opposite sex. May conduct classes to teach various dances.

ISCO 08 Unit Group Details:

Code	2653
Title	Dancers and Choreographers

2653.9900

Choreographers and Dancers, Other

Choreographers and Dancers, other includes all other choreographic and dancing professionals not classified elsewhere. NATIONAL CLASSIFICATION OF OCCUPATIONS

ISCO 08 Unit Group Details:

Code	2653
Title	Dancers and Choreographers

Family 2654

Film, Stage and Related Directors and Producers

Film, Stage and Related Directors and Producers oversee and control the technical and artistic aspects of motion pictures, television or radio productions and stage shows.

2654.0100

Director, Theatrical

Director, Theatrical selects suitable Actors and Actresses for motion picture or stage, interprets respective roles to them, directs rehearsals, supervises and co-ordinates activities of Cameramen, Scenery Designers, Sound Technicians, Property Man etc. Studies selected script or story, and selects Actors and Actresses and other technical staff according' to

requirements. Assigns roles to different Actors and Actresses according to their suitability. Holds rehearsals and directs actions, gestures, dialogues etc., of Actors and Actresses. Selects location for outdoor shooting of film, as necessary. Supervises setting up of sets and stage. Co-ordinates work of different staff engaged in producing film or stage performance. May attend to business' management, such as payment to staff, purchase of material, arranging transport for staff and equipment. May specialize in directing mythological, social or historical films or stage performances. May be known as FILM DIRECTOR, STAGE DIRECTOR OR STUDIO DIRECTOR, according to field of work.

ISCO 08 Unit Group Details:

Code	2654
Title	Film, Stage and Related Directors and Producers

2654.0200

Director, Music

Music Director selects music, singers and instrumental musicians in consultation with Director Theatrical and Music Composer for purposes of stage or film production and directs effective rendering of music. Consults Director Theatrical and Music Composer regarding music composed, and situations, events, scenes etc., where songs and music are to be played. Sets music to required tunes to portray particular situation or event. Selects and fixes suitable artist to render composed music to set tunes. Conducts rehearsals frequently with artists for proper rendition of songs. Supervises recording of playback music and its synchronization with story of film. May play one or more musical instruments or

render vocal music. May specialize in directing group or orchestral music.

ISCO 08 Unit Group Details:

Code	2654
Title	Film, Stage and Related Directors and Producers

2654.0300

Dance Director

Dance Director; selects dances, suitable dancers and orchestra for purposes of stage or film production, decides costumes settings and directs performance. Consults Director, Film regarding script, story and songs. Studies sequence scenery, situation of events etc. in motion picture and decide tunes, costumes and stage settings. Assigns different roles to dancers. Trains Dancers to display them and events. May specialize in oriental or western dances.

ISCO 08 Unit Group Details:

Code	2654
Title	Film, Stage and Related Directors and Producers

2654.0351

Live Action Director

Live Action Director establishes and drives the execution of the creative vision of the production with the support of the production, creative and technical teams

Qualification Pack Details:

QP NOS Reference	MES/Q 1301
QP NOS Name	Live Action
Director	
NSQF Level	5

ISCO 08 Unit Group Details:

Code	2654
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Title	Film, Stage and Related Directors and Producers
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2654.0400

Director, Research (Motion Picture, Radio and TV)

Director, Research (Motion Picture; Radio-TV) directs activities of motion picture or television production research department, and conducts research on various subjects to ensure historical authenticity of productions: Researches specific period, locality or historical event to obtain authentic background for production, such as customs, speech characteristics, or dress, and architectural style of era. Advises members of production staff on matters relating to historical details of subject being photographed or recorded. Reviews and collects data, such as books, pamphlets, periodicals, and rare newspapers, to provide source material for research. Approves or recommends purchase of library reference materials for department, and co-ordinates activities of workers engaged in cataloguing and filing materials. May translate or request translation of reference materials.

ISCO 08 Unit Group Details:

Code	2654
Title	Film, Stage and Related Directors and Producers

2654.0500

Manager, Recreation and Entertainment

Manager Recreation and Entertainment controls, co-ordinates and supervises, within authority delegated, efficient and economic utilisation of men, money and material in public and private

organizations, establishment etc., or one or more of its branches or departments, engaged in producing, distributing and exhibiting motion pictures; producing and presenting stage and circus shows; organizing and presenting radio and television broadcasts; operating carnivals and amusement parks; organizing games, hunting, fishing, excursions, competitions, etc., and providing other entertainment and recreation services. Included are: MANAGER, CINEMA. MANAGER, STUDIO. MANAGER, THEATRE. MANAGER, STAGE. MANAGER, CIRCUS MANAGER, VARIETY SHOW. MANAGER AMUSEMENT PARK. MANAGER, MAGIC SHOW. MANAGER, TOURNAMENT. MANAGER, STADIUM. MANAGER, CLUB. MANAGER, SWIMMING POOL. MANAGER, DANCE HALL. MANAGER, ORCHESTRA. MANAGER, EXHIBITION. MANAGER, CARNIVAL. MANAGER, RACE COURSE. MANAGER, GYMNASIUM.

ISCO 08 Unit Group Details:

Code	2654
Title	Film, Stage and Related Directors and Producers

2654.0600

Producer, Stage

Producer, Stage produces dramatic performances based on social, historical and mythological themes, for public entertainment. Studies script, consults Stage Director regarding selection of Actor and Actress and suitable costumes for proper stage performance. Visits various places and arranges for stage performances. Arranges rehearsals. May also function as Stage Director. May also act in absence of any Actor.

ISCO 08 Unit Group Details:

Code	2654
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Title	Film, Stage and Related Directors and Producers
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2654.0700

Producer, Film

Producer, Film; Motion Picture Producer, produces motion picture films of selected nature for public entertainment. Studies script, consults Film Director and ensures proper settings of studio. Co-ordinates activities of Film Director, Actors and Actresses, Cameraman, Music Director and Sound Recordist, etc., for proper production of films. Maintains liaisons with Film Distributors for display of films in different picture houses. May also function as Film Director.

ISCO 08 Unit Group Details:

Code	2654
Title	Film, Stage and Related Directors and Producers

2654.0800

Production Manager (Motion Picture)

Production Manager (Motion Picture) assists Producer Film in co-ordinating and controlling production of motion picture. Estimates time required and prepares time schedule for each stage of production of motion picture i.e. from story and script to shooting and printing of final copy of film in relation to manpower, equipment, facilities for shooting and processing of films, available. Arranges for advance hiring of studios and processing laboratories, if independent facilities not available. Conducts location surveys for outdoor shooting. Ensures supply of costumes, draperies, decorations etc., required for set at appropriate time, from own stock or hiring from other sources. Makes travel arrangement for units for out-door

shooting. Maintains constant liaison with Director Theatrical, Artists and others involved.

ISCO 08 Unit Group Details:

Code 2654

Title Film, Stage and Related Directors and Producers

2654.0901

Lighting Artist

Lighting Artist needs to add light and shadows to the production in accordance to the established creative style

Qualification Pack Details:

QP NOS Reference MES/Q 0404

QP NOS Name Lighting

Artist

NSQF Level 4

ISCO 08 Unit Group Details:

Code 2654

Title Film, Stage and Related Directors and Producers

2654.9900

Stage and Film Directors, Other

Stage and Film Directors, Other include all Other Stage and Film Directors engaged in directing and producing dramas, motion pictures of stage and television shows not elsewhere classified.

ISCO 08 Unit Group Details:

Code 2654

Title Film, Stage and Related Directors and Producers

Family 2655

Actors

Actors portray roles in motion pictures, television or radio productions and stage shows.

2655.0100

Actor and Actress

Actor and Actress play roles in dramatic, cinema, radio and television productions portraying characters and events by gestures or other actions. Rehearses frequently roles assigned and memorizes dialogues or actions to be portrayed. Puts on required dress and make-up. Acts or plays assigned role either before audience or before filming camera. Portrays different characters by dialogues, gestures and impersonation. May sing or dance.

ISCO 08 Unit Group Details:

Code 2655

Title Actors

2655.0200

Extra

Extra plays minor roles in dramatic or film production for maintaining continuity of story. Obtains instructions from Manager or Director, Theatrical regarding part to be played. Puts on appropriate costumes and make-up and plays assigned role. May perform different roles in same play. May perform both serious and humorous roles. May perform other duties such as prompting, setting of stage etc. NATIONAL CLASSIFICATION OF OCCUPATIONS

ISCO 08 Unit Group Details:

Code 2655

Title Actors

2655.0301

Voice over Artist

Voice over Artist needs to provide the voice for characters in various productions

Qualification Pack Details:

QP NOS Reference	MES/Q0101
QP NOS Name	Voice-over
Artist	
NSQF Level	4

ISCO 08 Unit Group Details:

Code	2655
Title	Actors

Family 2656

Announcers on Radio, Television and Other Media

Announcers on Radio, Television and Other media read news bulletins, conduct interviews, and make other announcements or introductions on radio, television, and in theatres and other establishments or media.

2656.0100

Programme Announcer

Programme Announcer announces radio programmes over radio broadcasting systems. Obtains relevant background information concerning the programme, to be broadcast and prepares material for announcement, pinpointing essential and interesting aspects of the programme and obtains its approval. Introduces broadcasting programme in accordance to set procedure. May be designated as News Reader if solely engaged in announcing edited news bulletins or Compere Programme if engaged in compering radio or television programmes.

ISCO 08 Unit Group Details:

Code	2656
Title	Announcers on Radio, Television and Other Media

2656.0200

Disc Jockey

Disc Jockey announces radio programmes of musical selections. Selects phonograph or tape recording to be played based on programme specialty, knowledge of audience taste, or listening audience requests. Comments on music and other matters of interest to audience, such as weather, time, or traffic conditions. May interview musical personalities. May interview members of listening audience who telephone for musical requests. May specialize in any one type of music, such as classical, pop, rock, or folk and western. May write entries into log to provide information on all elements aired during broadcast, such as musical selections and station promotions.

ISCO 08 Unit Group Details:

Code	2656
Title	Announcers on Radio, Television and Other Media

2656.9900

Radio, Television and Other Announcers, Other

Radio, Television and Other Announcers, Other include other associate professionals who read news bulletins, conduct interviews, and make other announcements or introductions on radio, television or in theatres and other establishments not elsewhere classified.

ISCO 08 Unit Group Details:

Code	2656
Title	Announcers on Radio, Television and Other Media

**Family 2659
Creative and Performing Artists,
Not Elsewhere Classified**

This unit group covers all creative and performing artists not classified elsewhere. For instance, the group includes clowns, magicians, acrobats and other performing artists.

**2659.0100
Rope Dancer**

Rope Dancer; Rope Balancer; Aerialist performs feats by walking, dancing, cycling, balancing on wire or rope stretched between two posts. Checks wire rope tied to posts are drawn to required tautness. Climbs pole or positions on attached platform to step over rope or wire with necessary aid such as umbrella or long pole for purpose of balancing. Walks, runs or rides cycle, singly or in pairs from one end to other end of rope and vice versa and performs other feats to entertain audience.

ISCO 08 Unit Group Details:

Code 2659
Title Creative and Performing Artists
Not Elsewhere Classified

**2659.0200
Acrobat**

Acrobat entertains audience by performing difficult and spectacular gymnastic feats such as jumping, tumbling, balancing, alone or as member of team. Performs different feats and tricks displaying physical strength, skill and agility such as somersault on ground or on bar, balancing on different postures on ground or on bar with various

movements of legs, hands and body, swinging and revolving round bar in various directions, leaping from bar to bar in different directions and postures, balancing other persons or weighty materials in different postures on hands, legs, shoulders, head, etc. May display feats in accompaniment of orchestra, drum, flute, etc. May give training in gymnastics to others.

ISCO 08 Unit Group Details:

Code 2659
Title Creative and Performing Artists
Not Elsewhere Classified

**2659.0300
Equestrian**

Equestrian; Circus Rider entertains audience by riding horses at circus, carnivals, exhibition, or horse show performing acrobatic stunts on saddle less horse or feats of equestrian skill and daring. Rides horse with or without saddles and reins, performing feats such as mounting and riding a horse while galloping, standing on its back, changing position from one to another horse, riding with one leg on back of one horse and another on other and performing other astonishing feats of skill and daring. May train horses in new and novel feats.

ISCO 08 Unit Group Details:

Code 2659
Title Creative and Performing Artists
Not Elsewhere Classified

**2659.0400
Contortionist**

Contortionist entertains audience by performing feats requiring abnormal bodily contortions. Wears appropriate dress exposing parts of body and muscles

to be displayed. Forces muscles out of normal shape by bending and twisting them or any part of body. Performs feats relating to bodily deformation such as making wheel of body, abnormal expansion of any portion of body for amusement of audience

ISCO 08 Unit Group Details:

Code 2659

Title Creative and Performing Artists
Not Elsewhere Classified

2659.0500

Circus Performers, Other

Circus Performer performs various speciality acts, based on some uniquely developed talent, tricks of illusion and spectacular physical feats in circuses and on theatrical stages. Entertains audiences through comedy, mimicry, actions etc.

ISCO 08 Unit Group Details:

Code 2659

Title Creative and Performing Artists
Not Elsewhere Classified

2659.0600

Ventriloquist

Ventriloquist entertains audience by producing through own vocal chords speeches, voices and sounds to imitate other human beings, animals, birds etc. Appears on stage and announces voices or sounds of objects to be imitated. Speaks or produces sound in such manner that voice appears to come from source other than own vocal chords. May entertain audience by speaking in manner that voice appears to come from dummy or hand puppet displayed during performance.

ISCO 08 Unit Group Details:

Code 2659

Title Creative and Performing Artists
Not Elsewhere Classified

2659.0700

Buffoon; Clown

Buffoon; Clown entertains audience by appearing in clown costume and make-up and performing original or stock comedy routines. Paints face with bright colours and wears funny costumes to draw attention and laughter from audience on appearance on stage or platform. Makes amusing tricks, ludicrous gestures and comic actions to suit occasion to amuse audience and enliven other items of show or play. May perform or imitate acrobatic feats of star performers in circus fairs carnivals or otherwise substitute artists where necessary.

ISCO 08 Unit Group Details:

Code 2659

Title Creative and Performing Artists
Not Elsewhere Classified

2659.0800

Mimic

Mimic entertains audience by impersonating another person or type of person, copying dress, voice, expression, mannerisms, exaggerating and ridiculing character imitated. Studies expressions mannerisms dresses, voice or speech of renowned persons selected for mimicking. Dresses, acts, talks and makes gestures similar to persons impersonated depicting peculiarities comically and ridiculously. Imitates animal voices, moving train or sound of character or thing impersonated. May cut jokes with audience to entertain them.

ISCO 08 Unit Group Details:

Code 2659

Title Creative and Performing Artists
Not Elsewhere Classified

2659.0900

Magician

Magician; Wizard; Jadugar performs original and stock tricks of illusion and sleight of hand to entertain and mystify audience. Displays articles such as sticks, cards, balls, and rings on table placed on stage. Performs amazing tricks by sleight-of-hand to turn stone into flowers, fruits, sweets, etc., thrusting stick into nose, swallowing iron balls and taking them out, changing colour of cards, making inanimate objects animate, pulling out bird animals etc., from empty bags or hats etc. May use members of audience in act and remove their valuables, such as jewellery, walks, or watches without their knowledge. May hypnotise audience to create illusion in their minds of objects or things shown or disappeared.

ISCO 08 Unit Group Details:

Code 2659
Title Creative and Performing Artists
Not Elsewhere Classified

2659.1000

Juggler

Juggler juggles and balances, objects such as balls, rings, bottles, cylinders, knives, plates and hats, to entertain audience. Arranges objects such as balls, rings, and plates, on table or ground. Takes objects one by one and throws them high up in quick succession and catches them while falling without dropping them on floor and performs various other feats of jugglery for amusement of audience. May use sharp weapons such as knives, spears to exhibit skill in performance. May perform, feats in solo, in pairs, or team.

ISCO 08 Unit Group Details:

Code 2659
Title Creative and Performing Artists
Not Elsewhere Classified

2659.1100

Snake Charmer

Snake Charmer plays pipe music (Pungi or Been) before snakes (Cobras) to raise their hoods to swing to and fro to entertain audience for consideration. Catches snakes from their hideouts and removes their fangs to make them harmless. Keeps snakes in covered baskets and exhibits them in fairs or other public places by playing music to entertain spectators for rewards. May help to catch snakes from public places and private houses on request for reward. May keep and train Mongoose to play with snakes for entertaining public.

ISCO 08 Unit Group Details:

Code 2659
Title Creative and Performing Artists
Not Elsewhere Classified

2659.1200

Puppeteer

Puppeteer; Putliwala originates puppet show and moves strings or wires of puppets to animate them for entertainment of audience. Carves or shapes parts of puppet, such as head, hands, and arms, from materials such as wood, plaster, or papier Mache. Sews together articles of clothing and assembles puppets using wire string and hand tools. Moves bar to which strings or wires are attached from position above stage to control movement of puppets during performance. Talks or sings during performance, giving illusion of voice to puppet.

ISCO 08 Unit Group Details:

Code 2659

Title Creative and Performing Artists
Not Elsewhere Classified**2659.1300****Trainer, Animal**

Trainer, Animal trains wild or domesticated animals and birds such as lions, tigers, bears, elephants, dogs, horses, pigeons and other birds to obey and perform tricks as pets or for entertainment of audience at circus or other exhibition. Rears young animals and birds and studies their characteristics and behaviour to learn how they should be handled and to detect signs of sickness. Teaches them to obey duties or perform tricks by verbal command or signal, evaluating their ability and performance. Directs animals or birds to perform tricks in circus ring, stage or at other exhibition. Supervises workers engaged in feeding, exercising and general care of them. May train dogs to lead people with visual impairment and to be watchdogs. May be designated according to type of animal trained as ELEPHANT TRAINER, LION TRAINER, BANDAR WALA, REECH WALA.

ISCO 08 Unit Group Details:

Code 3435

Title Other Artistic and Cultural Associate Professionals

2659.1400**Race Horse Trainer**

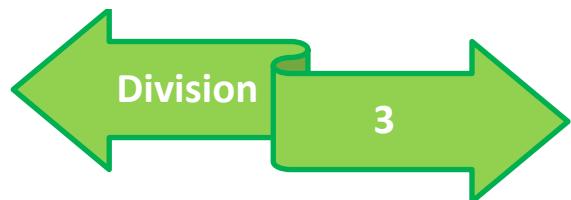
Race Horse Trainer trains horses for racing, following plans adapted to peculiarities to each horse. Studies characteristics of horses by riding to learn how they should be handled and trained for respective race events after consulting owner and Jockey. Familiarise horses with

race track starting device, harness, bridles, saddles and other riding equipment. Conditions horses for competitive racing by exercise and workouts to bring them to their best physical condition. Gives direction to stablemen and other workers engaged in grooming, feeding and general care of horses. Assists Jockey to saddle horse prior to racing event. May attend to minor ailments of horses and prescribe feed or medicine.

ISCO 08 Unit Group Details:

Code 3435

Title Other Artistic and Cultural Associate Professionals



Technicians and Associate Professionals

Technicians and Associate Professionals perform mostly technical and related tasks connected with research and the application of scientific or artistic concepts and operational methods, and government or business regulations.

Tasks performed by Technicians and Associate Professionals usually include: undertaking and carrying out technical work connected with research and the application of concepts and operational methods in the fields of physical sciences including engineering and technology, life sciences including the medical profession, and social sciences and humanities; initiating and carrying out various technical services related to trade, finance, administration, including administration of government laws and regulations, and to social work; providing

technical support for the arts and entertainment; participating in sporting activities; executing some religious tasks. Supervision of other workers may be included.

Occupations in this Division are classified into the following Sub Divisions:

31	Science and Engineering Associate Professionals
32	Health Associate Professionals
33	Business and Administration Associate Professionals
34	Legal, Social, Cultural and Related Associate Professionals
35	Information and Communications Technicians

Sub Division 31 **Science and Engineering Associate Professionals**

Science and Engineering Associate Professionals perform technical tasks connected with research and operational methods in science and engineering. They supervise and control technical and operational aspects of mining, manufacturing, construction and other engineering operations, and operate technical equipment including aircraft and ships

Tasks performed by workers in this sub-major group usually include: setting up, monitoring and operating instruments and equipment, conducting and monitoring experiments and tests of systems; collecting and testing samples; recording observations and analysing data; preparing, revising and interpreting technical drawings and diagrams; co-ordinating, supervising, controlling and scheduling the activities of other workers; operating and

monitoring switchboards, computerized control systems, and multi-function process control machinery; perform technical functions to ensure safe and efficient movement and operations ships aircraft and other equipment.

Occupations in this Sub Division are classified into the following Groups:

311	Physical and Engineering Science Technicians
312	Mining, Manufacturing and Construction Supervisors
313	Process Control Technicians
314	Life Science Technicians and Related Associate Professionals
315	Ship and Aircraft Controllers, and Technicians

Group 311 **Physical and Engineering Science Technicians**

Physical and Engineering Science Technicians perform technical tasks to aid in research on and the practical application of concepts, principles and operational methods particular to physical sciences including such areas as engineering, technical drawing or economic efficiency of production processes.

Occupations in this Group are classified into the following Families:

3111	Chemical and Physical Science Technicians
3112	Civil Engineering Technicians

3113	Electrical Engineering Technicians
3114	Electronics Engineering Technicians
3115	Mechanical Engineering Technicians
3116	Chemical Engineering Technicians
3117	Mining and Metallurgical Technicians
3118	Draughtspersons
3119	Physical and Engineering Science Technicians, Not Elsewhere Classified

Family 3111
Chemical and Physical Science
Technicians

Chemical and Physical Science Technicians perform technical tasks to aid in research in chemistry, physics, geology, geophysics, meteorology and astronomy, and in the development of industrial, medical, military and other practical applications of research results.

3111.0100
Laboratory Assistant, Physical

Laboratory Assistant, Physical assists and carries out routine duties in physical laboratory as directed by physicist in conducting experiments. Sets up required apparatus and instruments in position as directed for conducting experiments and research work. Makes necessary electrical connection to equipment and instruments as required. Records routine and other observations as indicated by instruments and makes necessary calculations as directed. Removes apparatus when not in use, cleans and maintains them in good condition. May do minor repairs to equipment and apparatus. May store and

maintain account of instruments, equipment, apparatus etc., if required.

ISCO 08 Unit Group Details:

Code 311
Title Physical and Engineering Science Technicians

3111.0200

Laboratory Assistant, Soil

Laboratory Assistant, Soil sets up apparatus and equipment, conducts routine soil tests in laboratory for determining soil characteristics to correct soil defects, raise fertility, etc. and assists Soil Scientist or Chemist as required. Collects samples of required type of soil. Gets them dried in oven and sieved to get soil of required size. Weighs fixed quantities of soil, sets apparatus and conducts routine tests to determine their physical and chemical properties, such as shear strength, permeability, composition, water content, percentage of nitrogen etc. Adds or eliminates chemicals and salts from soil as directed by Soil Technologist or Chemist to remove defects, raise fertility etc. to render better yield. Maintains record of reading and observations, for calculating and reference purposes. Prepares standard chemicals and solutions required for testing samples and maintains laboratory clean and tidy.

ISCO 08 Unit Group Details:

Code 311
Title Physical and Engineering Science Technicians

3111.0300

Laboratory Assistant, Chemical

Laboratory Assistant, Chemical arranges and sets various chemicals, instruments

and apparatus such as salts, acids, balances, heaters as desired by Chemists for conducting experiments in chemical laboratory. Sets up required apparatus and equipment as directed by Chemist. Performs routine tasks, such as preparations of standard solutions and common reagents, weighing and measuring of salts and chemicals, filtration, precipitation etc. and conducts simple tests as directed by Chemist. Cleans and maintains balances. Changes Kipps apparatus and maintains laboratory clean and tidy. Keeps required chemicals readily available and replenishes stock from stores. May clean special apparatus, if required.

ISCO 08 Unit Group Details:

Code 311
 Title Physical and Engineering
 Science Technicians

3111.0400 **Chemical Radiation Technician**

Chemical-Radiation Technician tests materials and monitors operations of nuclear-powered electric generating plant, using specialized laboratory equipment and chemical and radiation detection instruments. Collects samples of water, gases, and solids at specified intervals during production process, using automatic sampling equipment. Analyses materials, according to specified procedures, to determine if chemical components and radiation levels are within established limits. Records test results and prepares reports for review by supervisor. Assists workers to set up equipment and monitors equipment that automatically detects deviations from standard operations. Notifies personnel to adjust processing equipment, quantity of additives, and rate of discharge of waste

materials, when test results and monitoring of equipment indicate that radiation levels, chemical balance, and discharge of radio nuclide materials are in excess of standards. Carries out decontamination procedures to ensure safety of workers and continued operation of processing equipment in plant. Calibrates and maintains chemical instrumentation sensing elements and sampling system equipment, using hand tools.

ISCO 08 Unit Group Details:

Code 311
 Title Physical and Engineering Science
 Technicians

3111.0500 **Laboratory Assistant, Geological**

Laboratory Assistant, Geological sets and arranges apparatus and equipment in geological laboratory for conducting tests or experiments on rocks, ores, minerals etc. to determine location, structure, composition, percentage and specific gravity of mineral present and other necessary details. Arranges microscopes and sets necessary equipment for microscopic study of minerals. Cuts sections of rocks and mineral with diamond and special tools as required, for study of formation of rocks percentage and quality of mineral composition etc. Prepares micro sections of required thickness of rocks or by cutting rocks with special cutting tools and grinding sections over special grinders. Mounts sections on slides for microscopic examinations. Displays minerals, models, crystals etc. in museum giving correct descriptive nomenclatures. Accompanies students Geologists on excursions and assists them in collecting minerals, rocks, fossils etc. and classifying. May perform simple

chemical tests on rock, minerals, etc. under guidance of Geologist and report observations to him. May maintain stores and laboratory equipment.

ISCO 08 Unit Group Details:

Code 311
Title Physical and Engineering Science Technicians

3111.0600

Slide Examiner, Petrology

Slide Examiner, Petrology examines slides under polarising petrological microscope to identify and determine percentage of minerals present in rock. Studies texture of rock for its identification. Studies nature, petrogenesis (origin), petrography (identification), Para genesis (age determination), and other lithological aspects of rocks, minerals and ores and determines economic possibilities of minerals present in rock using microscope. Prepares suitable charts, tables for recording results of examination.

ISCO 08 Unit Group Details:

Code 311
Title Physical and Engineering Science Technicians

3111.0700

Slide Examiner, Palaeontology

Slide Examiner, Palaeontology collects rock samples and fossils and examines them under microscope to identify and record their lithology (composition of stones and rocks) and other characteristics. Collects rock samples and fossils and examines them under microscope. Studies fossil characteristic and discusses lithology of fossiliferous rocks. Maintains rockslides and records

data and frequency of occurrence of various fossils belonging to different geological horizons on prescribed charts to correlate findings and compile reports.

ISCO 08 Unit Group Details:

Code 311
Title Physical and Engineering Science Technicians

3111.9900

Physical Science Technicians, Other

Physical Science Technicians, other include workers performing technical tasks such as setting of apparatus in physical science laboratories, not elsewhere classified.

ISCO 08 Unit Group Details:

Code 311
Title Physical and Engineering Science Technicians

Family 3112

Civil Engineering Technicians

Civil Engineering Technicians perform technical tasks in civil engineering research, design, construction, operation, maintenance and repair of buildings and other structures, such as water supply and wastewater treatment systems, bridges, roads, dams and airports.

3112.0100

Overseer, Civil Engineering

Overseer, Civil Engineering supervises construction of buildings, roads, canals, dams, airfields, drainage systems, etc. according to specifications and attends to their repair and maintenance under guidance of Engineer In Charge. Receives drawings and instruction from Engineer In Charge and studies them. Inspects site,

prepares rough estimates and get them approved by senior officer. Undertakes contour surveys and conducts levelling operations. Marks lay out according to plan and instructions of Engineer In Charge, and commences work under his guidance and supervision. Checks materials and work frequently at every stage of construction to ensure their conformity with prescribed specifications. Measures completed portion of work and gets them checked and approved by the engineer concerned. Maintains accounts of departmental work and records of day to day measurements, labour engaged, materials used, etc. Gets-wage-bills of work charged establishment prepared. May prepare sketches, drawings, if necessary. May arrange plantation of road side trees and their maintenance.

ISCO 08 Unit Group Details:

Code	3112
Title	Civil Engineering Technicians

3112.0200

Permanent Way Inspector

Permanent Way Inspector maintains railway track in his jurisdiction in satisfactory and safe working condition by inspecting it regularly and getting necessary repairs carried out immediately. Inspects railway track under his charge regularly to ensure that track bridges and other structures are in good condition for safe traffic. Supervises repairing of railway track by getting worn out sleepers, rails replaced, and stone ballast spread on track. Arranges for storage of required materials such as sleepers, rails, nuts, bolts, working tools etc. Arranges for patrol of track during rains, snowfalls, floods etc. Reports to superior major damages to track, due to accidents,

floods, etc. Supervises laying of diversion track and speedy restoration of permanent track. Ensures that land on either side of railway line are not illegally encroached and reports to superiors about the cases of encroachment, if any, for voluntary or legal settlement. Maintains record of work done, sends periodical reports to superiors and arranges to keep accounts of payment of staff. May attend to laying of new rail track.

ISCO 08 Unit Group Details:

Code	3112
Title	Civil Engineering Technicians

3112.0300

Plain Tabler

Plain Tabler; Ground Surveyor prepares topographical and cadastral (ground) maps based on control points fixed by Surveyor, Topographical by plane tabling method (field operations involving use of plane-table, clinometers, magnetic compass, sight rule, etc.). Plots points in drawing conforming to points on ground using plane table and sight rule, in hills and planes with accuracy. Registers colour and light traces in drawings, project maps, flood surveys, cadastral surveys, etc. Visits area to be surveyed and carries out plotting, sketching, contouring, drawing etc. of territory on basis of control data and other relevant available material. Collects, records and interprets air photographs which lack in such details as small bridges, streams, rivulets, tracks or pillars on account of non-visibility from photographic distances.

ISCO 08 Unit Group Details:

Code	3112
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Title Civil Engineering
Technicians

3112.0400 **Topographical Auxiliary**

Topographical Auxiliary participates in field survey by traversing (computing direct distances) levelling, rectangulation (determining a point from four ends) recording angular and liner measurements and comparing readings with

ISCO 08 Unit Group Details:

Code 3112
Title Civil Engineering Technicians

3112.0500 **Computer Topographical**

Computer, Topographical, Computer Geodetic computes topographical data received from survey parties in connection with figure, shape and structure of earth for mapping. Carries out calculations using mathematical forms and tables, concerning geographical field, e.g. geomagnetism, gravity reduction tidal analysis and prediction, etc. for guidance of surveyors. Computes value of control points (longitudes and latitudes) established on ground. Works out and fixes triangulation of points (angles in relation to fixed locations) and of survey parties and guides survey parties to possible errors in establishing control points or triangulations of certain location. May use and construct mathematical table. May be known as Trigonometrical Computer according to degree of responsibility.

ISCO 08 Unit Group Details:

Code 3112
Title Civil Engineering Technicians

3112.0600

Surveyor, Tidal

Surveyor, Tidal prepares charts of tidal behaviour in particular region of sea or harbour for each year of coming five years. Sets tidal machine on sea for automatic registering of both high and low tides in graphic form. Interprets, computes and feeds data to time prediction machine to record tidal frequency, depth, strength and volume of each year.

ISCO 08 Unit Group Details:

Code 3112
Title Civil Engineering Technicians

3112.0701 **Assistant Laboratory and Field Technician**

Assistant Laboratory and Field Technician works in permanent, field and site laboratories. He is responsible to organize and arrange the sample collection from field or site and conduct the desired tests in laboratory as and when required either in field or permanent location utilizing the help and services of level-1 Technician under him.

Qualification Pack Details:

QP NOS Reference	CON/Q0402
QP NOS Name	Assistant Laboratory and Field Technician
NSQF Level	2

ISCO 08 Unit Group Details:

Code 3112
Title Civil Engineering Technicians

3112.9900

Civil Engineering Technicians, Other

Civil Engineering Technicians, other includes all other Civil Engineering Technicians engaged in construction, survey, and related fields of civil engineering, not elsewhere classified.

ISCO 08 Unit Group Details:

Code 3112
Title Civil Engineering Technician

Family 3113

Electrical Engineering Technicians

Electrical Engineering Technicians perform technical tasks to aid in electrical engineering research, and in the design, manufacture, assembly, construction, operation, maintenance and repair of electrical equipment, facilities and distribution systems.

3113.0101

Electrical Engineering, Technician/Maintenance Technician Electrical

Electrical Engineering, Technician; Overseer, Electrical Engineering receives instructions from senior engineer, studies blue print and working details and directs workers for proper execution of duties allotted. Receives instructions verbally or from duty chart, studies blueprints and working instructions as necessary and determines method of work to be adopted. Instructs workers such as Electricians, Electrical Fitters, Turbine Operator, Switch Board Operators, Lines Men etc. and supervises their work. Ensures correct manufacture and stipulated performance of equipment, or scheduled generation and supply of electricity, etc. according to nature of work in which employed. Checks

production, alterations or repairs using instruments such as voltmeter, ammeter, megger, etc. and has any defects corrected. Maintains prescribed records. May undertake complicated installation, maintenance and allied work personally to avoid mistakes and to train workers under him. May be designated as Shift Engineer, Power House; Maintenance Engineer, Electrical etc., according to nature of duties performed.

Qualification Pack Details:

QP NOS Reference	ASC/Q6803
QP NOS Name	Maintenance Technician Electrical Level 4
NSQF Level	4

ISCO 08 Unit Group Details:

Code 3113
Title Electrical Engineering
Technicians

3113.0102

Maintenance Technician Electrical

Maintenance Technician Electrical is responsible for providing assistance to the maintenance technicians in maintaining the Electrical/electronic systems of equipment and machinery.

Qualification Pack Details:

QP NOS Reference	ASC/Q6804
QP NOS Name	Maintenance Technician Electrical Level 3
NSQF Level	3

ISCO 08 Unit Group Details:

Code 3113
Title Electrical Engineering
Technicians

3113.0111

Technician Furnace Transformers: Ferro Alloys

Technician Furnace Transformers: Ferro Alloys maintains furnace transformers involved in Ferro Alloy operations. This includes main receiving sub-station and furnace transformers (both HT and LT).

Qualification Pack Details:

QP NOS Reference	ISC/Q1103
QP NOS Name	Technician Furnace Transformers: Ferro Alloys
NSQF Level	4

ISCO 08 Unit Group Details:

Code	3113
Title	Electrical Engineering Technicians

3113.0200 Electrical Technician (High Voltage)

Electrical Technician (High Voltage) draws up specifications and instructions for installation of voltage transformers, overhead or under-ground cables and related electrical equipment used, to conduct electrical energy from transmission lines or high-voltage distribution lines to consumers. Studies work order to determine type of service, such as lighting or power for installation. Visits site of proposed installation and draws rough sketch of location. Takes measurements, such as street dimensions, distances to be spanned by wire and cables or space available in existing buildings and underground vaults which affect installation and arrangement of equipment. Estimates materials, equipment and incidentals needed for installation. Draws master sketch-showing relation of proposed installation to existing facilities. Makes other sketches pertaining to wiring connections or cross

sections of underground cables, as required for instructions to installation crew. Consults Distribution Engineer on difficulties encountered. May draft sketches to scale. May estimate labour and material costs, using price lists and records on previous projects. May inspect completed installation of electrical equipment and related building circuits to verify conformance with specifications.

ISCO 08 Unit Group Details:

Code	3113
Title	Electrical Engineering Technicians

3113.0300

Energy Auditor

Energy Auditor inspects homes of utility company customers to identify conditions that cause energy waste and suggests actions to reduce waste. Interviews customer to obtain data relating to household energy use, such as type of heating system, number of persons at home during day and prior heating costs. Draws sketch of house, measures house perimeter, windows, and doors, using tape measure, and records dimensions on sketch for use in heat-loss calculations. Inspects areas of house, such as attics, crawl spaces, and basements, and notes conditions that contribute to energy waste, such as loose-fitting windows, uninsulated pipes, and deficient insulation. Reads geyser to ascertain tank heat-loss rating and determine need for tank insulation blanket. Confers with customer and recommends action to be taken to reduce energy waste, such as weather-stripping, reducing hot water temperature setting, and adding insulation. Gives customer pamphlets describing energy conservation improvements. Calculates area of windows and house volume, using

calculator, and records results on computer input form to provide data for computer calculation of heat-loss estimates that are sent to customer.

ISCO 08 Unit Group Details:

Code	3113
Title	Electrical Engineering Technicians

3113.0401

Machine Maintenance Technician

Machine Maintenance Technician is responsible for maintaining equipment and electrical systems used in the production process within factory premises. The individual at work undertakes preventive maintenance of machines as per the maintenance schedule and attends to any breakdown complaints raised by the production or testing departments.

Qualification Pack Details:

QP NOS Reference	ELE/Q3701
QP NOS Name	Machine Maintenance Technician
NSQF Level	4

ISCO 08 Unit Group Details:

Code	3113
Title	Electrical Engineering Technicians

3113.0501

Maintenance Executive

Maintenance Executive handles routine, preventive and breakdown maintenance of machines on the shop floor, thereby, ensuring trouble free production. The individual at work carries out scheduled maintenance of machines used on shop floor using manufacturers' manual and as

per training given by manufacturer in order to have zero un-scheduled downtime.

Qualification Pack Details:

QP NOS Reference	ELE/Q2501
QP NOS Name	Maintenance Executive
NSQF Level	4

ISCO 08 Unit Group Details:

Code	3113
Title	Electrical Engineering Technicians

3113.0601

Maintenance Technician

Maintenance Technician is responsible for maintaining and repairing machines, equipment and electrical systems installed at the factory premises. The individual at work undertakes periodical preventive maintenance of machines as per the set schedule for the electrical and mechanical systems installed in the factory. The individual is also responsible for attending to any breakdown and repairs to restore temporary or permanent functioning or call expert for significant down time problems.

Qualification Pack Details:

QP NOS Reference	ELE/Q4501
QP NOS Name	Maintenance Technician
NSQF Level	4

ISCO 08 Unit Group Details:

Code	3113
Title	Electrical Engineering Technicians

3113.0701

Customer Inspection Technician

Customer Inspection Technician carries out functional, environmental, safety and ruggedness tests of the final product in the presence of the customer, in order to approve for dispatch. The individual at work demonstrates the functioning of the final product manufactured to the customer and gets an approval for dispatch.

Qualification Pack Details:

QP NOS Reference	ELE/Q6501
QP NOS Name	Customer Inspection Technician
NSQF Level	4

ISCO 08 Unit Group Details:

Code	3113
Title	Electrical Engineering Technicians

3113.0801

In-process and Final Quality Engineer

Quality Engineer and Final Quality Engineer ensures that quality standards are followed during the assembly process and at the final stage before dispatch. The individual at work sample checks final PCB assembly for functional conformance as well as visually before they are packed and dispatched. The individual is responsible for ensuring total quality or IPC or ISO standards compliance during the assembly of PCBs.

Qualification Pack Details:

QP NOS Reference	ELE/Q5501
QP NOS Name	In-process and Final Quality Engineer
NSQF Level	5

ISCO 08 Unit Group Details:

Code	3113
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Title Electrical Engineering
Technicians

3113.0802

Final Testing Technician

Final Testing Technician inspects assembled or PCBs to check conformance with specified standards. The individual at work is responsible for testing completed PCB assemblies to ensure that they performance as per specifications.

Qualification Pack Details:

QP NOS Reference	ELE/Q5402
QP NOS Name	Final Testing Technician
NSQF Level	4

ISCO 08 Unit Group Details:

Code	3113
Title	Electrical Engineering Technicians

3113.0803

Automated Optical Inspection Machine Operator

Automated Optical Inspection Machine Operator is also called ‘AOI Inspector’; the Automated Optical Inspection (AOI) Machine Operator conducts non-contact tests on bare board and assembled printed circuit boards (PCB) at different stages of PCB assembly. The individual at work is responsible for testing the PCB at several stages of assembly by using the AOI machine as well as conducting a visual inspection to check for scratches, stains, open, short, thinning solder, missing components, incorrect components and incorrect placing of components – that is parts with limited or known variations.

Qualification Pack Details:

QP NOS Reference	ELE/Q5401
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QP NOS Name	AOI Machine Operator
NSQF Level	4

verifying its performance against quality standards.

ISCO 08 Unit Group Details:

Code	3113
Title	Electrical
Engineering Technicians	

3113.0901

Cluster In Charge

Cluster In Charge needs to ensure increase in site uptime and reduce energy cost; monitor preventive maintenance, corrective maintenance and on-site repair, through regular site visits and audits; maintain hygiene of the tower site; train site technicians; develop healthy relationship with landlords and vendors; handle all types of issues/fault on site and control other operational expenses.

Qualification Pack Details:

QP NOS Reference	TEL/Q4101
QP NOS Name	Cluster In Charge
NSQF Level	5

ISCO 08 Unit Group Details:

Code	3113
Title	Electrical Engineering Technicians

3113.1001

LED Luminaries Testing and Measurement Technician

LED Luminaries Testing and Measurement Technician is responsible for testing LED luminaries using different testing equipment. The individual at work performs various tests on LED luminary product to check specified parameters for

Qualification Pack Details:

QP NOS Reference	ELE/Q9301
QP NOS Name	LED Luminaries Testing and Measurement
NSQF Level	4

ISCO 08 Unit Group Details:

Code	3113
Title	Electrical Engineering Technicians

3113.1002

LED Light Repair Technician

LED Light Repair Technician is responsible for mending the non-functional LED light. The individual at work checks the non-functional LED light in a systematic manner to find out the fault; dismantles it; repairs the fault and reassemble the light to make it functional.

Qualification Pack Details:

QP NOS Reference	ELE/Q9302
QP NOS Name	Led Light Repair Technician
NSQF Level	4

ISCO 08 Unit Group Details:

Code	3113
Title	Electrical Engineering Technicians

3113.9900

Electrical Technicians, Other

Electrical Technicians, Other include all other Electrical Technicians engaged in research and testing in various fields of electrical engineering, not elsewhere classified.

Qualification Pack Details:

QP NOS Reference
 QP NOS Name
 NSQF Level

ISCO 08 Unit Group Details:

Code	3113
Title	Electrical
Engineering Technicians	

Family 3114 **Electronics Engineering Technicians**

Electronics Engineering Technicians perform technical tasks to aid in electronic research, and in the design, manufacture, assembly, construction, operation, maintenance and repair of electronic equipment.

3114.0100 **Electronics Technician**

Electronic Technician applies electronic theory, principles of electrical circuits, electrical testing procedures, engineering mathematics, physics and related subjects to layout, build, test; troubleshoot, repair and modify developmental and production electronic equipment such as computers, missile control instrumentation and machine tool numerical controls. Draws sketches to clarify design details and functional criteria of electronic units. Assembles experimental circuitry (bread board) or complete prototype model according to engineering instructions, technical manuals and knowledge of electronic systems and components and their functions. Recommends changes in circuitry or installation specifications to simplify assembly and maintenance. Sets up standard test apparatus or contrives test equipment and circuit, and conducts functional, operational, environmental and life tests to evaluate performance and

reliability of prototype or production model. Analyses and interprets test data. Adjusts, calibrates, aligns and modifies circuit and components and records effects on unit performance. Writes technical reports and develops charts, graphs and schematics to describe and illustrate systems operating characteristics, malfunctions, deviations from design specifications and functional limitations for consideration by professional engineering personnel in broader determinations affecting systems design and laboratory procedures. May operate bench lathes, drills and other machine tools to fabricate non-procurable items, such as coils, terminal boards and chassis. May check out newly installed equipment in airplanes, ships and structure to evaluate system performance under actual operating conditions. May instruct and supervise lower grade technical personnel

ISCO 08 Unit Group Details:

Code	3114
Title	Electronics
and Telecommunications Engineering	
Technicians	

3114.0200 **Television Chassis** **Inspector/Television Technician**

Television Chassis Inspector inspects television receivers during final assembly for defective reception, loose components and incorrect wiring. Connects set to electrical outlet and turns receiver controls, Examines reflection of televised picture in micro for specified horizontal and vertical hold tolerance, picture quality, contrast and lightness. Taps chassis and tubes with cork hammer and observes picture to note flutter that indicates defective components. Examines wiring, soldered joints and splices and

shakes components to locate defective connections. Traces wiring to verify connections between specified components and ensures that wires of specified colour codes follow wiring diagram. Marks type of defect requiring further testing adjustment or repair, on face of picture tube. May solder defective connections and replace defective components.

ISCO 08 Unit Group Details:

Code	3114
Title	Electronics and Telecommunications Engineering Technicians
3114.0601	

BSS Support Engineer

BSS/BTS Support Engineer is responsible for ensuring network uptime through preventive maintenance of BSC sites and effective fault management in case of fault occurrence. He also assists field engineers in performing their assigned activities at BTS locations.

Qualification Pack Details:

QP NOS Reference	TEL/Q6200
QP NOS Name	BSS Support Engineer
NSQF Level	6

ISCO 08 Unit Group Details:

Code	3114
Title	Electronics and Telecommunications Engineering Technicians
3114.0701	

Field Maintenance Engineer

Field Maintenance Engineer is responsible for co-ordinating with the NOC and transmission team to ensure fault free

network through periodic maintenance activities and assisting in fault management in case of fault occurrence at radio locations. He is also responsible for accepting new sites from Projects team and ensuring completion of upgrade/change activities as required.

Qualification Pack Details:

QP NOS Reference	TEL/Q6202
QP NOS Name	Field Maintenance Engineer
NSQF Level	3

ISCO 08 Unit Group Details:

Code	3114
Title	Electronics and Telecommunications Engineering Technicians
3114.0801	

ICT Engineer

ICT Engineer is responsible for installing and ensuring uptime of the assigned ICT node/network segment, by undertaking preventive maintenance and fault management activities. The ICT Engineer is also responsible for performing upgrades, capacity augmentation, configuration changes and Point Interconnect testing with minimal disruption of services. The ICT or Information and Communication Technology equipment are NodeB/eNodeB, IP and TDM transmission equipment, IP and Packet Core switch, Cloud and Data Centre equipment

Qualification Pack Details:

QP NOS Reference	TEL/Q6205
QP NOS Name	ICT Engineer
NSQF Level	6

ISCO 08 Unit Group Details:

Code	3114
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Title Electronics and
 Telecommunications Engineering
 Technicians

3114.0802 ICT Technician

ICT Technician is responsible to maintain the ICT nodes/installations live on 24x7 basis, observe and repair Level-1 faults/issues in installed ICT equipment at site, carry out specified preventive and corrective maintenance procedures and report relevant network incidents to the supervisor in time for information as well as response. ICT or Information and Communication Technology refers to NodeB/eNodeB, IP and TDM transmission equipment, IP and Packet Core switch, Cloud and Data Centre equipment.

Qualification Pack Details:

QP NOS Reference	TEL/NQ6206
QP NOS Name	ICT
Technician	
NSQF Level	4

ISCO 08 Unit Group Details:

Code	3114
Title	Electronics and Telecommunications Engineering Technicians

3114.0804 Broadband Technician

Broadband Technician is responsible for installation, configuration and testing of CPE (modem, routers and switches) for broadband access. He also establishes connectivity between CPE and end-user device (CPU, Laptop, tablets, Smart/IP TV etc.) at customer premises and carries out basic trouble-shooting for identifying, localizing and rectifying cable,

connectivity and equipment fault in co-ordination with NOC.

Qualification Pack Details:

QP NOS Reference	TEL/Q0102
QP NOS Name	Broadband
Technician	
NSQF Level	4

ISCO 08 Unit Group Details:

Code	3113
Title	Electrical Engineering Technicians

3114.0901 Installation Engineer-L2 & L3

Installation Engineer is responsible for installing L2 and L3 equipment in the site and carrying out site acceptance testing. As an optional responsibility the engineer may need to undertake commissioning of the site based on network topology.

Qualification Pack Details:

QP NOS Reference	TEL/Q6301
QP NOS Name	Installation
Engineer-L2 & L3	
NSQF Level	5

ISCO 08 Unit Group Details:

Code	3114
Title	Electronics and Telecommunications Engineering Technicians

3114.0902 Installation Engineer Installation Engineer-SDH and DWDM

Installation Engineer is responsible for installing SDH and DWDM equipment in the site and carrying out site acceptance testing. As an optional responsibility the engineer may need to undertake

commissioning of the site based on network topology.

Qualification Pack Details:

QP NOS Reference	TEL/Q6300
QP NOS Name	Installation Engineer-SDH & DWDM
NSQF Level	5

ISCO 08 Unit Group Details:

Code	3114
Title	Electronics and Telecommunications Engineering Technicians

3114.1101

Product Specialist Engineer

Product Specialist Engineer is responsible for supporting field teams in prompt restoration of services in case of critical and emergency faults. He also supports roll-out of critical upgrades and new technologies and provides trainings/reading material to ensure competence building in technical staff and customers.

Qualification Pack Details:

QP NOS Reference	TEL/Q6204
QP NOS Name	Product Specialist Engineer
NSQF Level	5

ISCO 08 Unit Group Details:

Code	3114
Title	Electronics and Telecommunications Engineering Technicians

3114.1201

Transmission Engineer

Transmission Engineer is responsible for maintaining uptime and quality of the network (both media and equipment) segment assigned to him by undertaking periodic preventive maintenance activities. He is to also ensure effective fault management in case of fault occurrence and periodically carry out upgrade, capacity augmentation activities as per transmission plan with no/minimal disruption of services.

Qualification Pack Details:

QP NOS Reference	TEL/Q6203
QP NOS Name	Transmission Engineer
NSQF Level	6

ISCO 08 Unit Group Details:

Code	3114
Title	Electronics and Telecommunications Engineering Technicians

3114.1301

Network Management Engineer

Network Management Engineer is responsible for provisioning of end to end circuit and managing network elements from a Centralized server called Network Management System.

Qualification Pack Details:

QP NOS Reference	TEL/Q6302
QP NOS Name	Network Management Engineer
NSQF Level	5

ISCO 08 Unit Group Details:

Code	3114
Title	Electronics and Telecommunications Engineering Technicians

3114.9900
Electronics and
Telecommunications Engineering
Technicians, Other

Electronics Technicians, Other include all other Electronics Technicians engaged in research and testing in various fields of electronic engineering, not elsewhere classified.

ISCO 08 Unit Group Details:

Code 3114
 Title Electronics and
 Telecommunications Engineering
 Technicians

Family 3115
Mechanical Engineering
Technicians

Mechanical Engineering Technicians perform technical tasks to aid in mechanical engineering research, and in the design, manufacture, assembly, construction, operation, maintenance and repair of machines, components and mechanical equipment.

3115.0101
Mechanical Engineering
Technician/Supervisor R&D Testing

Mechanical Engineering, Technicians; Overseer, Mechanical Engineering manufactures, erects, repairs or overhauls tools, equipment, machines, mechanical structure, etc. Receives instructions from appropriate authority. Studies drawings, sketches, specifications, available data, etc. and plans execution of work according to time schedule. Draws necessary stores, examines their suitability, issue them to respective workers or senior mechanic. Instructs them on machine and tools to be used,

accuracy required, process of work and other details to ensure correct manufacture, repairs, overhaul or erection work according to type of work to be done. Supervises workers, checks settings of machines, dimensions, dismantling, assembly, adjustments, etc., with appropriate gauges, tools and instruments at different stages of work and guides workers to ensure stipulated performance and accuracy. Checks completed work, makes any necessary adjustments or replacements and gets product approved. Maintains log book and other reports in prescribed form. May prepare sketches. May train workers for better performance. May conduct trade tests for recruitment or promotion of workers. May prepare estimates of materials and cost.

Qualification Pack Details:

QP NOS Reference	ASC/Q6504
QP NOS Name	Supervisor
R&D Testing	
NSQF Level	5

ISCO 08 Unit Group Details:

Code 3115
 Title Mechanical Engineering
 Technicians

3115.0102
Maintenance Technician-
Mechanical

Maintenance Technician-Mechanical is responsible for maintaining the mechanical systems of equipment and machinery. They use laid down procedures, and knowledge of the equipment to conduct routine maintenance and organize repairs. They are also involved in control and monitoring devices and occasionally in the

manufacture of items that will help in maintenance.

Qualification Pack Details:

QP NOS Reference	ASC/Q6802
QP NOS Name	Maintenance Technician-Mechanical Level 4
NSQF Level	4

ISCO 08 Unit Group Details:

Code	3115
Title	Mechanical Engineering Technicians

3115.0103

Maintenance Technician Assistant-Mechanical

Maintenance Technician-Mechanical is responsible for providing assistance to the Maintenance Technicians in maintaining the mechanical systems of equipment and machinery.

Qualification Pack Details:

QP NOS Reference	ASC/Q6805
QP NOS Name	Maintenance Technician-Mechanical Level 3
NSQF Level	3

ISCO 08 Unit Group Details:

Code	3115
Title	Mechanical Engineering Technicians

3115.0104

Body Shop In Charge

Body Shop In charge manages and supervises functioning of Body Shop and manages Body Shop personnel. The individual should maximise profit through

the effective operation of the Body shop by satisfying customers' expectations. The individual should promote and develop an environment where the employees can excel. The individual should also maximise the growth of revenue through new customers/accounts.

Qualification Pack Details:

QP NOS Reference	ASC/Q1413
QP NOS Name	Body Shop In Charge
NSQF Level	7

ISCO 08 Unit Group Details:

Code	3115
Title	Mechanical Engineering Technicians

3115.0105

Workshop Manager

Workshop Manager is also known as Workshop In charge or Service Manager. A Workshop Manager is responsible for the overall management and service aspects of a workshop. The individual manages repair and maintenance of the vehicles in the workshop and also ensures proper functioning of workshop as per the guidelines of the OEM and manages workshop personnel.

Qualification Pack Details:

QP NOS Reference	ASC/Q1606
QP NOS Name	Workshop Manager
NSQF Level	8

ISCO 08 Unit Group Details:

Code	3115
Title	Mechanical Engineering Technicians

3115.0201**Automotive Engineering
Technician/Testing Manager**

Automotive Engineering Technician sets up and operates equipment to test automobile parts and accessories according to standard procedures to discover design and fabrication faults. Studies drawings, sketches, specifications set, and installs units such as assemblies, gears, universal joints in testing equipment and machines and connects wiring, tubing, couplings and power sources using hand tools. Operates test equipment and machines to determine factors such as stress, strain, pressure, flow of fuel, oil and air, wear and usability of installed units under conditions of heat, cold, high speeds and load. Conducts investigations into and experimental tests in development of new automotive equipment and accessories to secure more economical operating basis and lowering manufacturing cost. Supervises assembly and repair work, effects necessary modifications and replacements of parts and checks completed assembly for efficiency of performances. Studies in detail costs involved and seeks lighter and stronger metal parts in auto. May specialize in testing or repairs of particular type of auto equipment and accessories.

Qualification Pack Details:

QP NOS Reference	ASC/Q8405
QP NOS Name	Testing
Manager	

7

ISCO 08 Unit Group Details:

Code	3115
Title	Mechanical Engineering Technicians

3115.0202**Test Engineer Product/Vehicle**

Test Engineer Product/Vehicle is responsible for conducting various indoor tests on automobile aggregates like engines, transmission system, braking system, fuel handling system, electrical and electronic components, body frames etc. as well as testing of built up vehicle prototypes in a simulated laboratory environment and on road setup, ensuring proper setup of test apparatus, documenting test results and presenting first level analysis report to the Test Manager.

Qualification Pack Details:

QP NOS Reference	ASC/Q8403
QP NOS Name	Test
Engineer Product/Vehicle	
NSQF Level	6

ISCO 08 Unit Group Details:

Code	3115
Title	Mechanical Engineering Technicians

3115.0301**Executive, Proto Manufacturing**

Executive, Proto Manufacturing needs to co-ordinate with different departments and functions for manufacturing of prototype vehicle/parts that will finally be used for testing and validation.

Qualification Pack Details:

QP NOS Reference	ASC/Q6501
QP NOS Name	Executive,
Proto Manufacturing	
NSQF Level	4

ISCO 08 Unit Group Details:

Code	3115
Title	Mechanical Engineering Technicians

3115.0401 Method Study Executive

Method Study Executive needs to design, develop, test, and evaluate integrated systems for managing industrial production processes including human work factors, quality control, inventory control, logistics and material flow, cost analysis, and production co-ordination.

Qualification Pack Details:

QP NOS Reference	ASC/Q6401
QP NOS Name	Method
Study Executive	
NSQF Level	5

ISCO 08 Unit Group Details:

Code	3115
Title	Mechanical Engineering Technicians

3115.0501

Manager Maintenance Mechanical and Electrical

Individuals at this job are responsible for maintaining status of continuous running of equipment and machinery. They use computerized systems to oversee routine maintenance and organize repairs. They are also involved in control and monitoring devices and occasionally in the manufacture of items that will help in maintenance.

Qualification Pack Details:

QP NOS Reference	ASC/Q6801
QP NOS Name	Manager
Maintenance Mechanical & Electrical Level 5	
NSQF Level	5

ISCO 08 Unit Group Details:

Code	3115
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Title Mechanical Engineering Technicians

3115.0601 Master Auto Service Technician/Auto Service Technician

An Auto Service Technician Level 5 is responsible for managing range of diagnosis and repairs with a wide range of specialized repair of mechanical, electrical and electronic faults.

Qualification Pack Details:

QP NOS Reference	ASC/Q1403
QP NOS Name	Auto Service
Technician Level 5	
NSQF Level	5

ISCO 08 Unit Group Details:

Code	3115
Title	Mechanical Engineering Technicians

3115.0602

Auto Service Technical Manager/Auto Service Technician

An Auto Service Technician Level 6 is responsible for managing advanced diagnosis and repairs. The individual carries out all types of diagnosis of faults and repairs and is responsible for supervising work of other Technicians/Senior Technicians.

Qualification Pack Details:

QP NOS Reference	ASC/Q1404
QP NOS Name	Auto Service
Technician Level 6	
NSQF Level	6

ISCO 08 Unit Group Details:

Code	3115
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Title Mechanical
 Engineering Technicians

3115.1000
Aeronautical Engineering
Technician

Aeronautical Engineering Technician; Laboratory Test Mechanic; Test Analyst, Aircraft sets up and operates equipment to test metal aircraft parts, according to standard procedures, to discover faults of design and fabrication. Installs units such as rib, assemblies, struts, landing gears, valves, ducts, universal joints and motors in testing equipment and machines and connects wiring, tubing, couplings and power sources using hand tools. Operates test equipment and machines to determine factors, such as stress, strain, pressure turbulences, velocities, flow of fuel, oil and air, wear and usability of installed units, under conditions of heat, cold, high speeds, torque and load. Measures induced variations from normal with precision instruments such as micrometres, venires, callipers, manometers, pressure gauzes, flow meters, strain gauzes, and dynamometers and records results for analysis by engineering department. May develop devices such as flat patterns, contour templates and forming block, using hand tools and machine tools, to make mechanical, sheet metal and plumbing parts and assemblies for experimental test projects.

ISCO 08 Unit Group Details:

Code 3115
 Title Mechanical Engineering
 Technicians

3115.1100
Heating, Ventilation and
Refrigeration Engineering
Technician

Heating, Ventilation and Refrigeration Engineering Technician tests efficiency of heating and air-conditioning equipment under stimulated operating conditions. Connects heating and air-conditioning equipment to facilities, such as heating unit, water lines and spray devices, to set up control temperatures and moisture conditions. Constructs cardboard air ducts and other accessories for use in testing equipment. Couples gauges and instruments to system and starts equipment. Observes and records readings of instruments such as thermometers, thermocouples, air flow meters, voltmeters ammeters, and pressure and draft gauges. Informs supervisor of unusual noise and instrument readings during operation of equipment. May plot recoded data.

ISCO 08 Unit Group Details:

Code 3115
 Title Mechanical Engineering
 Technicians

3115.1200
Die Designer

Die Designer develops plans for single stage or progressive stage dies for stamping, forming, forging, or extrusion presses, according to blueprints of product and knowledge of press characteristics and process limitations: Drafts drawings of dies necessary to form complete forging, stamping, or other part. Determines sequence and number of die stages in which single or progressive cutting, punching, and forming will be accomplished, and type of die sets

required to produce complete part, based on knowledge of dies, forming processes, and machines. Drafts scale drawings of each die set, delineating contours and dimensions for manufacture of die. Compares part drawings with wood patterns of cast dies to determine correctness of pattern dimensions and form. May observe setup and try out of newly developed die set in production machine to determine need for redesign or readiness for production use.

ISCO 08 Unit Group Details:

Code	3115
Title	Mechanical
Engineering Technicians	

3115.1301 Tool Designer

Tool Room Designer has to interpret the customer requirement of tools and simulate the same using 3D and 2D drawings through various computer aided design tools to create a graphical model on exact specifications for the manufacturing of Tool and Die

Qualification Pack Details:

QP NOS Reference	ASC/Q4001
QP NOS Name	Tool
Designer	
NSQF Level	5

ISCO 08 Unit Group Details:

Code	3115
Title	Mechanical Engineering Technicians

3115.1302 Tool Room Supervisor

Tool Room Supervisor oversees operations of different machine tools performed both manually and through automatic/CNC machines/robots. His role

primarily involves supervising all kinds of machining and in-line inspection activities for quality verification. He is also responsible for the various tool assembly processes.

Qualification Pack Details:

QP NOS Reference	ASC/Q4102
QP NOS Name	Tool Room
Supervisor	
NSQF Level	5

ISCO 08 Unit Group Details:

Code	3115
Title	Mechanical Engineering Technicians

3115.1400 Loco Foreman

Loco Foreman supervises and co-ordinates work of all employees of loco-shed under his charge, inspects loco-engine, gets scheduled repairs carried out, maintains ready required stock of loco-engine and details them according to instructions. Details engine crew for duty according to scheduled. Inspects locomotive before run to ensure that it is equipped with fuel, water and other supplies, and is in perfect running condition, examines locomotives after run by tapping parts such as rods, wheels and bolts with hammer to detect rupture, looseness or cracks. Measures wheel flanges with callipers and depth gauge to detect excessive wear or flat spots, directs or guides Fitter-Loco to undertake minor repairs. Reports major defects to superior officers for replacement of defective or broken stock of fuel such as coal, oil and other material etc. and arranges issues economically. Maintains and equips relief train and attends accidents and joint enquiries. May accompany Driver,

Locomotive on special occasions or in emergency.

ISCO 08 Unit Group Details:

Code	3115
Title	Mechanical Engineering Technicians

3115.1500

Yard Foreman, Railway

Yard Foreman Railway; supervises and co-ordinates activities of yard staff, engaged in formation and breaking up of goods and passenger trains in marshalling order, according to instructions of Yard Master, and arranges for washing and cleaning of coaches. Ascertains that shift workers report as scheduled, and obtains replacement if necessary. Ensures that all incoming and outgoing trains are properly attended and checked by rolling stock staff 'on duty, as well as stationery stock of empty coaches are kept clear and are properly cleaned and washed. May arrange formation of special trains required for special occasions such as melas, marriages and emergencies.

ISCO 08 Unit Group Details:

Code	3115
Title	Mechanical Engineering Technicians

3115.1600

Train Examiner

Train Examiner examines all trains and ensures that they are fit to run and that they fulfil required conditions. Attends to all incoming and outgoing trains at important railway stations. Supervises work of staff, details them for examination of couplings, wheels, hooks, vacuum pipes etc. of all passenger and goods trains, coaches and parts thereof of

important trains using hammer, gauges and other tools to detect mechanical defects or deficiencies, if any. Gets minor defects or deficiencies removed by Fitter Railway Carriage and Waggon and submits fitness certificates or defect report to higher authorities. Detaches coaches which are unsafe for further running or requiring major repairs. Refers complicated cases to Head Train Examiner.

ISCO 08 Unit Group Details:

Code	3115
Title	Mechanical Engineering Technicians

3115.9900

Mechanical Engineering Technicians, Other

Mechanical Engineering Technicians, other include all other Mechanical Engineering Technicians engaged in manufacture, research, testing and other fields of mechanical engineering, not elsewhere classified.

ISCO 08 Unit Group Details:

Code	3115
Title	Mechanical Engineering Technicians

Family 3116

Chemical Engineering Technicians

Chemical Engineering Technicians perform technical tasks to aid in chemical engineering research, and in the design, manufacture, construction, operation, maintenance and repair of chemical plant.

3116.0100

Laboratory Assistant, Glass and Ceramics

Laboratory Assistant, Glass and Ceramics conducts routine tests of silica, clay and other ingredients in laboratories for manufacturing glass and ceramic products. Sets up apparatus required for performing test to determine properties of clay, silica, etc. Prepares solution and reagents. Maintains charts and tables for data observed during experimentation. May undertake tests in laboratory independently.

ISCO 08 Unit Group Details:

Code	3116
Title	Chemical Engineering Technicians

3116.0200

Laboratory Assistant, Food and Beverages/Chemist/Analytical Supervisor/Lab Chemist

Laboratory Assistant, Food and Beverages sets equipment and apparatus and conducts routine test of food, drinks and other edible in laboratory to determine their properties, nutritional value, alcoholic contents etc. and to ensure that they conform to prescribed standards or have not been adulterated. Sets and operates required apparatus such as heaters, hydrometers, thermostats, vacuum pumps etc. depending on nature of test and type of material to be tested such as edibles, butter, milk, cold drinks etc. Performs routine tests of food, beverages, drinks and edibles by chemical processes for determining melting points, specific gravity, boiling point, reaction with chemicals and other factors as directed by Chemists or Food Technologist to find their properties, nutritional value, alcoholic contents etc. Ensures that food and beverages tested conform to prescribed standards, as stated on labels. Reports cases of adulteration,

fermentation, putrefaction etc. to senior officers. Washes and cleans apparatus, keeps them in safe custody and maintains records as necessary. Keeps laboratory clean and tidy. May prepare standard solution regents and other testing media.

ISCO 08 Unit Group Details:

Code	2145
Title	Chemical Engineers

3116.0300

Laboratory Assistant, Chemical Engineering General

Laboratory Assistant, Chemical Engineering, General conducts chemical and physical laboratory tests and makes qualitative and quantitative analysis of material for purposes such as development of new products, materials, and processing methods and for maintenance of health and safety standards, working under Biochemists; Chemists, Analytical; Chemists, Inorganic; Chemists, Organic; or Chemists, Physical. Sets up laboratory equipment and instruments, such as ovens, leaching drums, gas cylinders, kilns vacuum chambers autoclaves, pyrometers and gas analyser. Analyses products, such as drugs, plastics, dyes and paints to determine strength, purity and other characteristics of chemical contents. Tests ores, minerals, gases and other materials for presence and percentage of elements and substance, such as Carbon, Tungsten, nitrogen, iron, gold or nickel. Prepares chemical solutions for use in processing materials, such as textile, detergents, paper, felt etc., following standard formulas.

ISCO 08 Unit Group Details:

Code	3116
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Title **Chemical Engineering Technicians**

3116.0400

Core Analyst, Petrol and Natural Gas

Core Analyst, Petrol and Natural Gas analyses cores taken from sub-surface earth formations for porosity, permeability, oil or water saturation, combustible gas content and amount of gas by volume to determine productivity of oil or gas bearing formations. Cleans cores with knife or scraper or breaks off outside surface with hammer to remove drilling fluid deposits. Examines cores under ultra violet light for fluorescence indicating presence of oil. Heats cores in retort, condenses oil or vapours and measures volume of condensates using balance scales and other instruments. Interprets findings to evaluate productive potential of oil or gas bearing formation.

ISCO 08 Unit Group Details:

Code 3116

Title Chemical Engineering Technicians

3116.0500

Laboratory Assistant, Petroleum and Lubricants

Laboratory Assistant, Petroleum and Lubricants; Crude Tester; Oil Tester; Gas Analyst (Petroleum refining) tests and analyses samples of crude oil and petroleum products during processing stages, using laboratory apparatus and testing equipment and following standard test procedures to determine physical and chemical properties and ensures prescribed standards of products manufactured. Tests samples of crude and blended oils, gases, asphalts, and pressure distillates to determine characteristics,

such as boiling, vapour, freeze, condensation, flash and aniline points, viscosity, specific gravity, penetration, doctor solution, distillation and corrosion, using test and laboratory equipment, such as hydrometers, fractionators, fractional distillation apparatus and analytical scales. Analyses contents of products to determine presence of gases, such as propane, isobutane, butane, isopentane, and ethane using appropriate distillation columns. Determines hydro carbon composition of gasolines, blending stocks, and gases using fractional distillation equipment and mass spectrometer. Operates fractional columns to separate crude oil into oils with different boiling points to determine their properties. Analyses composition of products to determine quantitative presence of gum, sulphur, aromatics olefins, water and sediment. Compares colour of liquid product with charts to determine processing factors measurable by colour. Compares tests results with specifications and recommends processing changes to improve and control quality of products. May test sub-surface cores during drilling operations.

ISCO 08 Unit Group Details:

Code 3116

Title Chemical Engineering Technicians

3116.0600

Chemist, Water Purification/Water Treatment

Chemist, Water Purification; analyses water in purification plant to control chemical processes which soften it or make it suitable for drinking: Analyses samples of filtered water to ensure that quantities of solids left in suspension are below prescribed limits. Determines amounts of liquid chlorine to be used in

chlorinators to destroy microbes and other harmful organisms, basing amounts on findings of MICROBIOLOGIST. Determines kinds and amounts of chemicals to be used in removing minerals, acids, salts, and other inorganic compounds from water to soften it. Tests samples extracted from various points in distribution system, such as mains, tanks, pumps, and outlets, to discover possible sources of water contamination.

ISCO 08 Unit Group Details:

Code 3116

Title Chemical Engineering Technicians

3116.9900

Chemical Engineering Technicians, Other/Chemical Process Technicians

Chemical Engineering Technicians, Other include all other Chemical Engineering Technicians engaged in manufacture, research, processing and other fields of chemical engineering, not elsewhere classified.

ISCO 08 Unit Group Details:

Code 3116

Title Chemical Engineering Technicians

Family 3117

Mining and Metallurgical Technicians

Mining and Metallurgical Technicians perform technical tasks to assist in research and experiments related to metallurgy, in improving methods of extracting solid minerals, oil and gas, and in the design, construction, operation, maintenance and repair of mines and mine installations, of systems for

transporting and storing oil and natural gas, and for extraction of metals from ores.

3117.0100

Rock Slicer

Rock Slicer; Section Cutter Prepares thin sections of rocks or minerals and grain mounts for identification of rocks and ores and for microscopic study and analysis. Holds small chips of rocks and grinds them on rotating wheels with carborundum powder to reduce thickness. Polishes one surface of chip by hand grinding on glass plate and mounds (fixes) thin rock slice on glass slide with Canada balsam (gum). Grinds other surface of chip to attain desired thickness and then covers it on top with another glass slide (cover slip) with Canada balsam. Grinds other surface to attain desired thickness of chip. Covers section by cover glass with Canada balsam. Fixes labels for marking. Marks glass slide with diamond pencil for numbering. Makes section finally ready for microscopic study.

ISCO 08 Unit Group Details:

Code 3117

Title Mining and Metallurgical
Technicians

3117.0200

Petroleum and Natural Gas Extraction Technician

Petroleum and Natural Gas Extraction Technician records pressure, temperatures and other characteristics of oil and gas well boreholes of producing wells using special surface instruments and interprets findings for use in determining further drilling producing procedures. Directs workers in assembling wire-line hosting gear and attaching line

to instruments. Gives directions to Hoist Operator to lower clinograph (a form of adjustable setsquare, the two sides forming the right-angle being fixed while the third side is adjustable) into well to determine variation of well from vertical line (instrument records variation on chart). Informs Rotary Driller of variation from vertical line. Lowers weighted wire into well and reads depth of well from recording wheel. Lowers depth bomb into well that records pressure at various depths to determine rate of natural flow of oil from well. Lowers thermometers and other instruments with accompanying recording devices through tubing, casing, drill pipe or open bore hole. Raises instruments from well and removes chart recording. Measures, converts, records and interprets data for use by engineering personnel and management in determining drilling or production procedure. May calibrate recording devices. May repair and maintain instruments.

ISCO 08 Unit Group Details:

Code 3117
Title Mining and Metallurgical Technicians

3117.0300

Laboratory Assistant, Metallurgical

Laboratory Assistant, Metallurgical conducts routine tests of metals and alloys to determine their physical and chemical properties. Collects metallic wastes, metal samples or ores to be examined. Sets up scientific equipment required for testing. Assist Metallurgist in testing and analysing different types of metals, their by-products, waste and alloys. May conduct examination of metals on his initiative independently.

ISCO 08 Unit Group Details:

Code 3117
Title Mining and Metallurgical Technicians

3117.9900

Mining and Metallurgical Technicians, Other

Mining and Metallurgical Technicians, Other include all other mining and Metallurgical Technicians engaged in extraction and processing of minerals, manufacture, research, testing, etc. of metals and alloys, not elsewhere classified.

ISCO 08 Unit Group Details:

Code 3117
Title Mining and Metallurgical Technicians

Family 3118

Draughtspersons

Draughtspersons prepare technical drawings, maps and illustrations from sketches, measurements and other data, and copy final drawings and paintings onto printing plates.

3118.0100

Draughtsperson, Architectural

Draughtsman Architectural Prepares drawings of buildings, parks, gardens, monuments etc. from sketches, designs or data for construction. Studies notes, sketches and other engineering data of buildings, parks, gardens, monuments, etc. to be constructed. Draws sketches of required construction according to directions of Architect to suit purpose and environment; alters them if directed and get them approved by him. Draws to scale

drawings according to approved sketches showing plan, elevations, settings, arrangements etc. as necessary. May trace drawing and make blue prints. May prepare architectural designs, may prepare estimate schedules for material and labour. May prepare perspectives designs and render them in colour or monochrome. May prepare model of constructions work. May work as Draughtsman Civil.

ISCO 08 Unit Group Details:

Code	3118
Title	Draughtspersons

3118.0200

Draughtsperson, Civil

Draughtsman, Civil prepares drawings of buildings, stores, high ways, dams, culverts, etc. from sketches, notes or data for purposes of construction or alterations. Takes instructions from Civil Engineer studies sketches and calculates dimensions from notes or data. Draws to given scale different elevations, plan, sectional views etc. of desired construction using drawing instruments. Draws detailed drawings of specific portions as required. Indicates types of materials to be used, artistic and structural features, etc. in drawing as necessary. May do tracing and blue printing. May reduce or enlarge drawings. May prepare or check estimate schedules for cost of materials and labour. May prepare tender schedules and draft agreements. May work as Draughtsman Architectural.

ISCO 08 Unit Group Details:

Code	3118
Title	Draughtspersons

3118.0201

Plumbing Draftsman

Plumbing Draftsman is responsible for preparation of drawings of related to plumbing projects as per instructions.

Qualification Pack Details:

QP NOS Reference	PSC/Q0201
QP NOS Name	Plumbing
Draftsman	
NSQF Level	5

ISCO 08 Unit Group Details:

Code	3118
Title	Draughtspersons

3118.0300

Draughtsperson, Electrical

Draughtsman, Electrical prepares drawings, diagrams of wirings of buildings, factories, high tension and low tension lines, appliances, motors, generators and other electrical equipment and goods from sketches, designs, data or sample for purposes of manufacture, installation, operation or repairs. Receives instructions from appropriate authority and studies design, sketches, notes, data etc. Draws to scale wiring diagrams, assembly arrangement and other drawings showing electrical connections fittings, sectional view etc. as required. Paints (writes) necessary instructions on drawing such as number of wire, type of insulation etc. to clearly indicate required details. May calculate details from available information by application of standard formulae. May trace and prepare blue prints. May prepare plans of electrical lifts. May prepare estimates, tender schedules and draft agreements.

ISCO 08 Unit Group Details:

Code	3118
Title	Draughtspersons

3118.0301**Draftsman**

Draftsman is also called, ‘Design Developer’, the Draftsman makes/modifies electrical system drawings of control panels with application in various sectors. The individual at work develops electrical system drawings based on panel requirements of the customer, as communicated by the Design Engineer. This drawing is then verified by the Design Engineer and used by the production team in order to assemble the control panel.

Qualification Pack Details:

QP NOS Reference	ELE/Q7101
QP NOS Name	Draftsman
NSQF Level	5

ISCO 08 Unit Group Details:

Code	3118
Title	Draughtspersons

3118.0302**Physical Design Engineer**

Physical Design Engineer is responsible for converting the circuit design to a geometric representation for manufacturing the integrated circuit (IC). The individual at work understands the functional design of IC, converts them into geometric representation to enable Integrated Circuit manufacturing process. The individual is responsible for design, validation and verification of the integrated circuit layout.

Qualification Pack Details:

QP NOS Reference	ELE/Q1401
QP NOS Name	Physical
Design Engineer	
NSQF Level	5

ISCO 08 Unit Group Details:

Code	3118
Title	Draughtspersons

3118.0401**Draughtsperson, Mechanical**

Draughtsman, Mechanical prepares drawings of machines, plants, mechanical components, equipment, etc. from sketches, notes, data or sample for purposes of manufacture or repairs. Takes instructions from Mechanical Engineer and calculates dimensions as required, from available materials (notes, data etc.) or sample. Draws to scale detailed drawings, assembly drawings, showing plan, elevations, sectional views etc. according to nature of work and operations required. Prints (writes) dimensions, tolerances, material to be used and other details to give clear picture and facilitate understanding. Maintains copies of drawings and makes blue prints. May trace drawings. May design simple mechanical parts. May prepare estimates for materials and labour required. May specialize in making drawings of jigs and tools and be designated accordingly.

Qualification Pack Details:

QP NOS Reference	ASC/Q8201
QP NOS Name	Draughtsman
NSQF Level	4

ISCO 08 Unit Group Details:

Code	3118
Title	Draughtspersons

3118.0402**Draughtsman-Mechanical**

Draughtsman-Mechanical selects the appropriate equipment and drawing software to use based on the type and

complexity of the drawing functions to be carried out and the use of a CAD system linked bills of material, file management and associated customization of installed software including the use of macros, menus and default settings.

Qualification Pack Details:

QP NOS Reference	CSC/Q 0402
QP NOS Name	Draughtsman-Mechanical
NSQF Level	4

ISCO 08 Unit Group Details:

Code	3118
Title	Draughtspersons

3118.0500
Draught person, Structural

Draughtsman, Structural prepares drawings of bridges, steel structures, roof tresses etc. From sketches, designs or data for purposes of construction, alteration or repairs. Studies sketches, data, notes etc. and receives instructions from Structural or Mechanical Engineers regarding details and types of drawings to be made. Calculates dimensions as necessary from available notes, data etc. and by application of standard formulae. Draws to scale detail, assembly and arrangement drawings showing sectional plan and other views as directed and prints (writes) necessary instructions regarding materials to be used, limits, assembly etc. to clearly indicate all aspects of structure to be manufactured. May prepare estimate and operation schedules for labour and material costs. May prepare tender schedule and draft agreements. May prepare tables showing requirements of bars, their numbers, sizes and shapes. May trace and make blue prints.

ISCO 08 Unit Group Details:

Code	3118
Title	Draughtspersons

3118.0600
Draughtsperson, Topographical

Draughtsman, Topographical Sketches topographical drawings to scale in different colours using blue print prepared from field plane tables. Carries out independently projection of small scale map to predetermined size, incorporating features covered in survey, producing total geographical effect by hill shading, giving contours, profile, cross sections, authorised symbols, etc. Uses grid tables, projection table compasses, pantograph, planimeter, etc.

ISCO 08 Unit Group Details:

Code	3118
Title	Draughtspersons

3118.0700
Lithographic Designer

Lithographic Artist; Crayon Artist; crayon lithographer; lithographic designer produces key pattern by copying or creating original designs on prepared medium (polished or grained stone, zinc or aluminium, transfer or glazed paper) with soft greasy crayons for subsequent processing and printing.

ISCO 08 Unit Group Details:

Code	3118
Title	Draughtspersons

3118.0800
Tracer

Tracer makes copies of plans and drawings from original by spreading

tracing paper or cloth on original and tracing in ink or pencil. Places original drawing on drawing board and secures it with drawing pins. Spreads tracing paper (transparent paper) or tracing cloth on original drawings. Traces outlines and other details of original drawing on tracing paper with pencil or special ink. Checks and ensures that tracings contain complete and accurate details as shown in original. May trace drawings on tracing tables or tracing boxes fitted with reflected or electric light arrangement. May operate pantograph machine to make enlarged copies of maps, layouts, plans etc. and compute area. May print letters uniformly or plans and sketches using special printing set. May take out blue prints, ammonia prints and Ferro prints from tracings using printing frame or machine.

ISCO 08 Unit Group Details:

Code	3118
Title	Draughtpersons

3118.0900

Blue Printer

Blue Printer prepares prints of drawings and sketches on sensitized paper (blue printing paper) using printing frames or machines. Turns printing frame to get glass side facing ground. Places original drawing or sketch on glass of printing frame to serve as original and spreads sensitive paper (special type of blue printing paper) over it. Closes door of printing frame tightly using paper sheets and felt strips. Pushes trolley frame (in which printing frame is fitted) to sun light and tilts printing frame to bring glass surface to face sun light and tighten it there. Exposes frame to sun light for fixed period as directed depending on season and type of sensitive paper used.

Removes exposed paper from frame and develops it in fixing bath (developer). Washes fixed or printed paper (blue print) in water and dries it in shade or in hot chamber. May place role of sensitive paper and original together, expose for specified period and feedback original every time as it comes out of delivery and if engaged in preparing blue prints by automatic printing machine. May develop exposed sensitized paper with fumes of liquid ammonia either separately in special chamber or in second chamber of automatic printing machine if provided. May prepare sensitive paper with special chemical solution. May clean and oil printing trolley and frame. May be designated as Ferro-printer, Ammonia Printer, etc., according to type of printing material used.

ISCO 08 Unit Group Details:

Code	3118
Title	Draughtpersons

3118.9900

Draughtpersons, Other

Draughtpersons, Other includes all other draughtsmen engaged in preparing drawings, maps and like sketches, not elsewhere classified.

ISCO 08 Unit Group Details:

Code	3118
Title	Draughtpersons

Family 3119

Physical and Engineering Science Technicians, Not Elsewhere Classified

This family covers Physical and Engineering Science Technicians not classified elsewhere. For instance, the group includes those who assist scientists and engineers engaged in developing procedures or conducting research on safety, biomedical, environmental or industrial and production engineering.

3119.0100 Laboratory Assistant, Engineering

Laboratory Assistant, Engineering fits and sets model engine, machines, Theodolite, meters and other equipment for conducting experiments and for demonstration in engineering laboratory. Sets up in position required apparatus and instruments either inside laboratory or in open as necessary and makes necessary connections with pumps, gauges, vacuum pipe, electrical lines etc. as required. Conducts routine experiments to explain or establish theoretical principles or observe performance, determine horse power, forces focal length, speed, effect of magnetism, pressure, vacuum, etc. as required. Maintains records of observations for calculation and reference purposes. Assists engineers in conducting study or research on engineering problems. May clean lenses and instruments and oil and grease machinery to maintain them in good condition. May do minor repairs to equipment and apparatus. May maintain inventory of apparatus and equipment and replace defective ones. May specialize in any particular branch of engineering laboratory and be designated accordingly.

ISCO 08 Unit Group Details:

Code	3119
Title	Physical and Engineering Science Technicians, n.e.c

3119.0200 Forensic Science Technician

Forensic Science Technicians collects, identifies, classifies, and analyses physical evidence related to criminal investigations. Performs tests on weapons or substances, such as fibre, hair, and tissue to determine significance to investigation. May testify as expert witnesses on evidence or crime laboratory techniques. May serve as specialist in area of expertise, such as ballistics, fingerprinting, handwriting, or biochemistry. Analyses and classifies biological fluids using DNA typing or serological techniques. Analyses gunshot residue and bullet paths in order to determine how shootings occurred. Analyses handwritten and machine-produced textual evidence to decipher altered or obliterated text or to determine authorship, age, and/or source. Collects evidence from crime scenes, storing it in conditions that preserve its integrity. Collects impressions of dust from surfaces in order to obtain and identify fingerprints. Confers with ballistics, fingerprinting, handwriting, documents, electronics, medical, chemical, or metallurgical experts concerning evidence and its interpretation. Determines types of bullets used in shooting and if fired from a specific weapon. Examines physical evidence such as hair, fibre, wood or soil residues in order to obtain information about its source and composition.

ISCO 08 Unit Group Details:

Code	3119
Title	Physical and Engineering Science Technicians, n.e.c

3119.0300 Fingerprint Expert

Finger Print Expert examines fingerprints in criminal investigation and for identifying persons. Examines finger prints impressions visually or with magnifying glass and scientific apparatus to find out their characteristic. Classifies and arranges finger print impressions according to grouping depending on their characteristics. Compares these fingerprints with those on record to establish identity of persons. Examines finger print impressions found at scene of crime with powerful light and scientific apparatus such as magnifying, glass, microscope, etc. and gets them photographed. Checks and compares photo impressions with those of known criminals on file of police to establish identity. Assists court in identifying thumb impressions in forgery and impersonation cases by comparing disputed impressions with admitted ones. Attends court when required to give evidence in criminal or civil cases to prove identity of impressions. May examine palm and identify footprints by tracing, tracking, casting etc. May take photographs of impressions and develop them to locate fugitives, absconders, establish identity of dead persons etc.

ISCO 08 Unit Group Details:

Code 3119
Title Physical and Engineering Science Technicians, n.e.c

3119.0400

Handwriting Expert

Handwriting Expert; Document Examiner examines and identifies handwriting for detecting forgery. Studies hand written letters, documents, etc. to ascertain their genuineness. Examines and compares hand writing or signature on letters, documents etc. referred to with writings

or signature of concerned persons. Notes carefully suspicious retouching, erasures, obliterations, etc. Takes photograph of document under ultra violet ray or other filtered lights to make super imposed writing disappear to reveal original writing. Determines genuineness or forgery of signatures and writings by identifying feature using microscope. Reports findings with reasons to courts or other judicial authorities. Maintains record of photographs or interesting forged documents, signatures, letters; etc. May establish re-use of cancelled postage or other stamps. May attend court to give evidence.

ISCO 08 Unit Group Details:

Code 3119
Title Physical and Engineering Science Technicians, n.e.c

3119.0500

Impression Taker

Impression Taker (inscription) takes ink impression of inscriptions found on temple walls, stone slabs, pillars and other monuments on paper as required by Epigraphist. Places wet paper on inscribed portion of stone or metal plate. Beats paper over inscribed portion with hand brush so that paper gets into incision of engraved letters and applies black ink on surface of paper. Removes inked paper from stone inscription, showing real inscriptions in white against black background. Hands over paper containing inscription to Epigraphist for deciphering.

ISCO 08 Unit Group Details:

Code 3119
Title Physical and Engineering Science Technicians, n.e.c

3119.0600**Weather Observer**

Weather Observer; Meteorological Technician observes and records weather conditions for use in forecasting. Periodically observes general weather, sky and visibility conditions, and reads weather instruments including thermometers, barometers, and hygrometers to ascertain elements, such as temperature, barometric pressure, humidity, wind velocity, and precipitation. Transmits and receives weather data from other stations over fax machine or emails. May collect upper air data on temperature, humidity, and winds, using weather balloon and radio sound equipment. May conduct pilot briefings.

ISCO 08 Unit Group Details:

Code 3119

Title Physical and Engineering Science Technicians, n.e.c

3119.0700**Methods, Time and Motion Study Technician**

Methods and Time and Motion Study Technician studies and records time, motion methods and speed involved in performance of maintenance, production, clerical and other worker operations to establish standard production rate and to improve efficiency. Prepares charts, graphs, and diagrams to illustrate work flow routing, floor lay outs, material handling, and machine utilisation. Observes workers operating equipment or performing task to determine time involved and fatigue rate, using stopwatch, electrical recorder, and similar instrument. Recommends revision of methods of operation or material handling, alterations in equipment lay out,

or other changes to increase production or improve standards. Aids in planning work assignments in accordance with worker performance, machine capacity, production schedules, and anticipated delays.

ISCO 08 Unit Group Details:

Code 3119

Title Physical and Engineering Science Technicians, n.e.c

3119.0800**Fire Prevention Officer**

Fire Prevention Officer; Fire Station Officer detects and eliminates or reduces fire hazards in industrial plants, factories, warehouses, place of public assembly and other establishments. Inspects fire extinguishing and fire prevention equipment at regular intervals. Determines temperature, pressure etc. using instruments and by special tests to study and investigate conditions and practices likely to cause fires and reports findings and recommends fire preventive measures, such as provision for exits, adequate floor area and height of building, storage of combustible and explosive materials at required distance and under proper conditions, provision of hydrants and water supply resources etc. to eliminate undesirable conditions. May establish and operate fire safety programmes. May train personnel in fire-fighting and guide operations in case of a fire.

ISCO 08 Unit Group Details:

Code 3119

Title Physical and Engineering Science Technicians, n.e.c

3119.0900**Fire Officer**

Fire Officer directs fire-fighting and rescue operations, trains fire-fighting personnel and maintains fire-fighting appliances and equipment in operational condition. Studies fire reports and addresses from Fireman on watch. Decides nature of operation and proceeds on fire-fighting vehicle to the scene of fire with required number of fire-fighting personnel and equipment. Assesses intensity of fire and rescue operations required and deploys men and equipment for its control. Cordons off area, and directs operations to extinguish the fire with water or chemicals or use of portable fire extinguishers as appropriate and orders demolition of any part of building and structures to prevent further spread of fire. Arranges and aids rescue operations to rescue entrapped men, animals, property and to render first aid to injured. Investigates causes of fire and arson and submits report as required. Performs other services during emergencies or natural calamities where specialized equipment is useful such as rescuing people in danger of flood or storm, manning hoses to control rioters, and extricating persons or animals from places not easily accessible.

ISCO 08 Unit Group Details:

Code 3119
Title Physical and Engineering Science Technicians, n.e.c

3119.1000

Fire Inspectors, Other

Fire Inspectors, Other include all other associate professionals engaged in government, industrial and other enterprises, who inspect different structures to ensure compliance with central/state government laws and with approved plans, specifications and

standards, or inspect fire prevention systems and investigate fire sites to determine cause of fire not elsewhere classified.

ISCO 08 Unit Group Details:

Code 3119
Title Physical and Engineering Science Technicians, n.e.c

3119.1100

Laser Technician

Laser Technician constructs and tests prototype gas or solid-state laser devices, applying theory and principles of laser engineering and electronic circuits: Reviews project instructions, such as assembly layout, blueprints, and sketches, and confers with engineering personnel to clarify laser device specifications. Interprets production details, such as dimensions and functional requirements, for workers engaged in grinding mirror blanks, coating mirror surfaces, and machining metal parts. Installs and aligns optical parts, such as mirrors and wave plates, in laser body, using precision instruments. Turns controls of vacuum pump and gas transfer equipment to purge, evacuate, and fill laser body with specified volume and pressure of gases, such as helium, neon, or carbon dioxide, to test laser beam. Assembles completed laser body in chassis, and installs and aligns electronic components, tubing, and wiring to connect controls, such as valves, regulators, dials, and switches. Sets up precision electronic and optical instruments to test laser device, using specified electrical or optical inputs. Tests laser for gas leaks, using leak detector. Analyses test data and reports results to engineering personnel.

ISCO 08 Unit Group Details:

Code 3119

Title Physical and Engineering Science Technicians, n.e.c

3119.9900**Optical and Electronic Equipment Controllers, Other**

Optical and Electronic Equipment Operators, other include all other Technicians engaged in optical and electronic equipment operations not elsewhere classified.

ISCO 08 Unit Group Details:

Code 3119

Title Physical and Engineering Science Technicians, n.e.c

Group 312**Mining, Manufacturing and Construction Supervisors**

Mining, Manufacturing and Construction Supervisors co-ordinate, supervise, control and schedule the activities of workers in manufacturing, mining and construction operations.

Occupations in this Group are classified into the following Families:

3121 Mining Supervisors
3122 Manufacturing Supervisors
3123 Construction Supervisors

Family 3121**Mining Supervisors**

Mining supervisors oversee mining and quarrying operations and directly supervise and co-ordinate the activities of

miners working in underground and surface mines and quarries.

3121.0100**Supervisor and Foreman, Mining and Quarrying**

Supervisor and Foreman, Mining and Quarrying supervises and guides workers engaged in various mining and quarrying operations and ensures compliance with safety and mining rules and regulations. Collects information of workers present on duty in his section and allots duties to different Sirdars or head workmen according to nature of tasks to be performed. Ensures application of prescribed safety measures and compliance with mining rules and regulations in his section. Visits different portions of his section, guides workers as necessary and collects necessary information. Keeps in touch with surface, if working underground, arranges proper loading and unloading, dewatering and other mining operations. Maintains prescribed records, submits returns and ensures proper discipline, within his section. Co-ordinates functions with other sections and takes emergency measures as and when required. May be designated according to section or work supervised. (Excluded are other mining and quarrying supervisory staff, described separately).

ISCO 08 Unit Group Details:

Code 3121

Title Mining Supervisors

3121.0200**Supervisor and Foreman, Well Drilling**

Supervisor and Foreman, Well Drilling supervises and guides workers engaged in

well drilling, well pulling, cementing and like operations and keeps liaison between workers and senior staff. Guides workers in setting drilling rigs, selecting cutters to suit earth's strata, getting drillings tested, fitting pipes and tubes, cementing, etc., according to section in which posted and duties assigned. Decides plan of work, arranges for tools, equipment and accessories required and ensures proper working. Informs working difficulties to senior staff and assists in getting them removed. Maintains necessary records and registers and submits prescribed returns. May assist workers and senior staff in their work. May be designated according to nature of work or section supervised. (Excluded are other well drilling supervisory staff, described separately).

ISCO 08 Unit Group Details:

Code	3121
Title	Mining Supervisor

3121.0300

Supervisor and Foreman, Mineral Treating

Supervisor and Foreman, Mineral Treating supervises and guides workers engaged in mineral treating operations according to directions and test results received from laboratory. Guides workers in setting up crushing, sieving, straining, washing, precipitating and other machines and equipment according to section in which posted and duties assigned and ensures proper working. Gets samples tested as prescribed and directs alterations as per test results, if necessary. Arranges for stores and equipment and keeps plants in working order. Maintains production and other records and registers and submits returns as prescribed. May test samples, demonstrate operations and train

workers. May be designated according to mineral treated or work supervised. (Excluded are chemists, laboratory workers and other supervisory staff in mineral treating described separately).

ISCO 08 Unit Group Details:

Code	3121
Title	Mining Supervisor

3121.0400

Overman, Colliery

Overman, Colliery; Mine Foreman guides and supervises extraction of coal, mineral, timbering, etc. in his section of mine and ensures compliance of safety measures. Supervises setting of supports for securing roof and walls of work face. Ensures that air crossing, door, brattice and other ventilation devices are maintained in good order. Inspects track and tram-lines to see that they are properly laid, graded ballasted or otherwise packed. Ensures that man-holes and haulage roadways are kept safe and clear of obstruction. Detects unsafe appliances such as runaway switches, stop-blocks, ropes, chains, brakes, jig-wheels and gets them replaced. Ensures that supply of timber, brattice and other essential materials are stored at convenient places. Attends to danger reports and employs safety measures promptly. Gets dangerous places adequately fenced-off and gets defects removed. Maintains prescribed records and submits reports to superiors on safety measures and output of work. May do gas testing and supervise rescue operations if necessary. May be designated as RESCUE OVERMAN if qualified and perform rescue operations.

ISCO 08 Unit Group Details:

Code	3121
Title	Mining Supervisor

3121.0500
Sirdar, Colliery

Sirdar, Colliery assists Overman, Colliery in his work and conducts drilling, blasting, timbering, etc. Indents and collects material and other equipment near work-site. Directs and guides drilling and blasting operations ensuring observance of safety precautions. Examines edges of space left by extraction of coal seam and directs erection of supports according to timbering rules. Attends to dangerous operations giving directions in safety measures. Maintains records of output in his section and submits reports to superiors. May deputise for Overman, Colliery in his absence. May render first-aid and conduct rescue operations, if necessary.

ISCO 08 Unit Group Details:

Code	3121
Title	Mining Supervisors

3121.0600
Mud Supervisor

Mud Supervisor supervises preparation of mud (fluid-to-plastic mixture of compounded clay, chemicals and water) of required consistency at well or mud plant for drilling operations. Adds chemicals to mud or gets them mixed by Mud man in required proportions. Gets mud tested by analyst for consistency and removes defects, if any. Maintains record of all mud transactions, stock and chemicals used. Operates vibrating screen and directs closing and opening of line and tank valves as required. Instructs Drilling Crew to keep channels and tanks clean from sediments, well cuttings, sand, silt etc.

ISCO 08 Unit Group Details:

Code	3121
Title	Mining Supervisors

3121.0700
Well Pulling Supervisor

Well Pulling Supervisor studies depth and fluid level in well and controls well pulling, swabbing and scrapping operations. Takes measurement of depth of well and fluid level. Ensures issue of proper equipment and material to Well Drilling Operatives at work site, Guides crew to set up hoisting equipment mounted on tractor for repairs, replacements and removal of broken drilling accessories from well. Gets well cleared of mud and water and broken rods tubing etc. using special tools. Controls flow of oil or gas with plug device according to pressure chart. Reports irregularities to proper authorities. Maintains record of progress made. May swab old wells for removing mud, water and slush. May attend to leakage, breakage and other failures during well commission operations.

ISCO 08 Unit Group Details:

Code	3121
Title	Mining Supervisors

3121.0800
Gas Supervisor

Gas Supervisor operates for correct supply of gas and ensures proper functioning of meters, indicators and automatic gas controllers at well site. Supervisors blending of gas line, prevent leakage and maintains correct pressure of gas in pumps. Reports irregularities and defect to proper authorities and ensure proper functioning of well site meters, indicators and automatic gas controller. May do minor repairing of meters and indicators.

ISCO 08 Unit Group Details:

Code	3121
Title	Mining Supervisors

3121.9900**Supervisors and Foremen in Mining and Mineral Processing Plant Operation Activities, Other**

Supervisors and Foremen, Mining and Mineral Processing Plant Operation Well Drilling Activities, Other include all the supervisors and foremen engaged in mining quarrying, well drilling and related activities in field, plant or workshop, not elsewhere classified.

ISCO 08 Unit Group Details:

Code	3121
Title	Mining Supervisors

Family 3122**Manufacturing Supervisors**

Manufacturing Supervisors co-ordinate and supervise the activities of Process Control Technicians, Machine Operators, Assemblers, and other Manufacturing Labourers.

3122.0100**Supervisors and Foremen, Metal Making, Converting and Refining**

Supervisor and Foreman, Metal Making, Converting and Refining supervises and guides workers engaged in various metal making and refining processes and ensures efficient operations. Guides workers in setting up and controlling, furnaces, charging of raw materials according to type of metal to be made, mixing of chemicals and ingredients for making alloys, controlling furnace flue,

water circulation, tapping, pouring, casting and other operations for making required type and quality of metal and alloy. Arranges stock of raw materials, tools, equipment and accessories and ensures efficient and stipulated performance. Checks plants and equipment and gets defects removed. Maintains records and registers and submits prescribed returns. May test samples while processing and make necessary adjustments. May be designated according to section or work supervised. (Excluded are other metal making, converting and refining supervisory staff, described separately).

ISCO 08 Unit Group Details:

Code	3122
Title	Manufacturing Supervisors

3122.0200**Foreman, Blast Furnace**

Foreman, Blast Furnace directs and controls operations of blast furnace for production of pig iron. Directs Stock House Foreman on phone to charge proper proportions of raw material (limestone, iron-ore, coke, manganese etc.) and regulates blast. Checks furnace condition such as blast temperature pressure, furnace space, etc., and controls tapping of molten metal, removing slag (waste matter) and loading of molten iron in ladles. Records all details of furnace in log book. Checks iron and slag samples and issues necessary instructions for rectifying defects if any. May also do slag flushing tapping and operate mud gun for closing tapping hole.

ISCO 08 Unit Group Details:

Code	3122
Title	Manufacturing Supervisors

3122.0300**Stock House Foreman**

Stock House Foreman directs operations of stock house and controls charging of furnace. Arranges unloading of raw materials into stock house by Bunker Khalasis and thence to respective bunkers. Receives instructions from Blower, or Foreman Blast Furnace and accordingly instructs Lorry Car Driver or Control Man, Blast Furnace for loading skip with raw material. Keeps accounts of furnace charging, raw material etc. May check lime coating of slag ladles.

ISCO 08 Unit Group Details:

Code 3122

Title Manufacturing Supervisors

3122.0400**Supervisor and Foreman, Metal Treating**

Supervisor and Foreman, Metal Treating supervises and guides workers engaged in treating metals by tempering, hardening, electroplating, etc., and ensures desired finish. Arranges for necessary stores, chemicals, tools and equipment etc., and plans work according to tasks assigned and finish desired. Guides workers in heating metals, controlling temperature, setting vats and baths, hardening, tempering, degreasing, making chemical solutions of required strength electroplating and other processes involved in treating metals according to nature of work performed and ensures prescribed finish. Reports operational difficulties to senior staff or respective sections and gets them removed. Ensures compliance with safety measures, and maintenance of tools and equipment. Maintains necessary records and registers and submits reports as required. May

control one or more sections according to the size of the organization. May be designated according to section or work supervised. (Excluded are Technologists described elsewhere).

ISCO 08 Unit Group Details:

Code 3122

Title Manufacturing Supervisors

3122.0500**Supervisor and Foreman, Metal Drawing and Extruding**

Supervisor and Foreman, Metal Drawing and Extruding supervises and guides workers engaged in metal drawing and extruding operations for making wires, tubes etc. by automatic or semi-automatic processes. Guides workers in setting machines, dye guides, mandrel etc. according to nature of production. Supervises operations and directs workers as necessary to ensure efficient performance and prescribed finish. Arranges for tools and equipment and maintains them in working order. Ensures compliance with safety rules and precautionary measures, maintains necessary records and registers and submits returns as prescribed. May assist workers in setting machines and equipment. May be designated according to section or work supervised.

ISCO 08 Unit Group Details:

Code 3122

Title Manufacturing Supervisors

3122.0601**Assembly Line Supervisor**

Assembly line supervisor oversees assembly operation as per the required norms. Assembly of components includes

engines, transmission components, electrical and electronic circuit and components, dashboards, seating System, wheels, doors etc. and assembly of these aggregates in the vehicles at the required locations and as per required vehicle type/batch, deploying manpower as per requirement, guiding operatives and technicians to complete the assigned task, maintaining a safe and healthy working environment on the shop floor and maintaining records related to production, rejections, material movement and manpower productivity for a line/shift.

Qualification Pack Details:

QP NOS Reference	ASC/Q3602
QP NOS Name	Assembly Line Supervisor
NSQF Level	5

ISCO 08 Unit Group Details:

Code	3122
Title	Manufacturing Supervisors

3122.0800

Supervisor and Foreman, Glass Forming and Related Activities

Supervisor and Foreman, Glass Forming and Related Activities supervises various operations for manufacture of glass and glass products and ensures production to required specifications. Studies details of type and quality of glass or glass product to be made and explains tasks to be performed and precautions to be taken, for correct manufacture to workers. Conducts operations according to type of manufacture. Guides workers in mixing ingredients, controlling kiln temperature, and processing operations like blowing, drawing, rolling, cutting and grinding glass to required specifications, etc., as necessary to ensure desired production.

Keeps kilns and appliances in working order, replenishes stock of raw materials and maintains production chart and prescribed records. Enforces safety measures and necessary steps to avoid wastage and proper use of men and materials. May be designated according to section supervised or operation controlled. May specialize in manufacture of particular type of glass or manufacture process.

ISCO 08 Unit Group Details:

Code	3122
Title	Manufacturing Supervisors

3122.0900

Supervisor and Foreman, Ceramics and Related Activities

Supervisor and Foreman, Ceramics and Related Activities supervises various operations for manufacture of ceramic articles, abrasive wheels, bricks etc., and ensures production to required finish and specifications. Studies drawings and specifications of articles to be made and other necessary details for different stages of work to respective workers. Supervises and controls mixing of ingredients, crushing, casting, moulding, heating, baking, glazing and other operations as necessary according to articles being made and section supervised. Ensures correct production and takes steps to avoid loss and wastage and achieve proper use of men and materials. Maintains prescribed records and registers, replenishes stock of raw materials and keeps machines, kilns and equipment in proper working order. May specialize in any particular type of branch of production and be designated accordingly.

ISCO 08 Unit Group Details:

Code	3122
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Title Manufacturing Supervisors

3122.1000

Supervisor and Foreman, Wood Preparation and Paper Making

Supervisor and Foreman, Wood Preparation supervises and guides workers engaged in treating wood by process of seasoning, bending, impregnating with chemical etc. and ensures desired finish for further processing guides workers in setting and controlling temperature and humidity of kiln, impregnation wood with chemicals to prevent decay, bending wood to required shape by controlled steaming, heating softening and drying etc., and ensures desired finish for further processing or otherwise. Arranges materials, chemicals etc. according to requirements and ensures stipulated performance at every stage of work. May examine wood to plan treating, may be designated according to section or work supervised. (Excluded are Technologists described elsewhere).

ISCO 08 Unit Group Details:

Code 3122

Title Manufacturing Supervisors

3122.1100

Supervisor and Foreman, Paper Pulp and Paper Making

Supervisor and Foreman, Paper Pulp and Paper Making supervises and guides workers engaged in various paper pulp and paper making operations and ensures desired quality and finish. Guides workers in grinding and sorting paper pulp, liquor making, controlling flow of caustic solution in digester, operating digester, heating and paper making machines, etc., as required. Ensures efficient operation and performance of all men and machines

and manufacture of paper according to prescribed specifications. Gets samples tested while processing and makes necessary adjustments according to test results. Arranges for materials and chemicals as required, maintains tools, machines and equipment in working order and ensures compliance with safety rules and regulations. May test samples, while processing and suggests modifications. May be designated according to section or work supervised. (Excluded are Technologists and Chemists described elsewhere).

ISCO 08 Unit Group Details:

Code 3122

Title Manufacturing Supervisors

3122.1300

Supervisor and Foreman, Chemical Processing and Related Activities

Supervisor and Foreman, Chemical Processing and Related Activities (Excepting Petroleum) supervises and guides workers engaged in various chemical and related operations and ensures safety of workers and correct performance. Guides workers in setting and operating machines and plants for chemical and related processes such as crushing, grinding, mixing, cooking, roasting, making solutions, precipitating, filtering, operating stills and reactors, etc., and ensures correct performance. Gets samples tested or conducts shop tests as prescribed, and directs necessary adjustments to get specified results. Arranges for men and material as required and ensures safety of plants and workers supervised. Ensures compliance with rules and regulations binding on chemical factories and takes appropriate emergency measures as necessary. Maintains records and registers and

submits returns as prescribed. May set machines and plants, perform chemical and related tests and train workers in handling plants and equipment. May be designated according to section or work supervised. (Excluded are chemists and chemical engineers, described elsewhere).

supervised. Maintains records and registers and submits returns as prescribed. May test samples while processing and operate plants if necessary. May be designated according to section of work supervised. (Excluded are Chemists and Chemical Engineers described elsewhere).

ISCO 08 Unit Group Details:

Code 3122

Title Manufacturing Supervisors

3122.1400

Supervisor and Foreman, Petroleum Refining and Related Activities/Operator/Engineering Assistant (Mechanical/electrical/civil/chemic al) related activities

Supervisor and Foreman, Petroleum Refining and Related Activities supervises and guides workers engaged in processing and refining petroleum and its by products and ensures prescribed quality and standard of production. Guides workers in setting up, operation, temperature control and upkeep of various plants and equipment used in petroleum refining and manufacture of its by-products by processes of fractional distillation, straining, filtering, atomisation (cracking of hydrocarbons) etc., and ensures prescribed quality and standard of production of petrol, lubricants, white grease, synthetic coal, bitumen and other original and by-products. Arranges for materials, gets samples tested, while processing and makes necessary adjustments according to test results. Ensures safety, upkeep and proper utilization and performance of all men, machines, plants and equipment

ISCO 08 Unit Group Details:

Code 3122

Title Manufacturing Supervisors

3122.1600

Boiler Supervisor

Boiler Supervisor supervises performance and operation of coal, gas or oil fired boilers and ensures their proper functioning. Checks gauge and meter readings, setting of automatic draught control, feeding of fuel in hopper, water feed system, steam pressure, etc., in boiler house before starting boilers. Ensures proper combustion of fuel, required flue gas temperature and maintenance of prescribed steam pressure. Checks ash contents either visually or by chemical analysis and ensures continuous and proper working of ash disposal system, cleaning of tube ways and maintenance of boilers and equipment in perfect working order. Adopts precautionary measures in case of emergencies to avoid accidents. Maintains boiler house log book and devises methods to improve efficiency. Gets boilers ready for inspection by Boiler Inspector as scheduled. May conduct minor repairs.

ISCO 08 Unit Group Details:

Code 3122

Title Manufacturing Supervisors

3122.1700

Supervisors and Foremen, Stationary Engine and Related Equipment

Supervisor and Foreman, Stationary Engine and Related Equipment supervises performance and operation of stationary engines and related equipment and ensures their proper upkeep. Checks stationary engines and mechanical equipment under charge such as steam engines, air compressors, vacuum and centrifugal pumps, turbines, etc., for operational efficiency, output and other factors and assess their working condition at beginning of shift. Instructs workers to operate engines and equipment according to their respective working condition and observes their performance by reading meters and gauges as well as by sight and sound. Directs stopping of malfunctioning engines, arranges for their repairs and distributes load on other units as required, within specified safety limits. Supervises performance of workers operating them and ensures their proper working, and daily maintenance like oiling, greasing, etc. Arranges for periodical repairs and overhauling as scheduled and maintains prescribed records and registers. May conduct running repairs in case of emergency. May specialize in any particular branch of engine or type of work.

ISCO 08 Unit Group Details:

Code 3122
Title Manufacturing Supervisors

3122.1800

Supervisor and Foreman, Stone Cutting and Carving

Supervisor and Foreman, Stone Cutting and Carving supervises and guides cutting,

dressing and carving of stones for making statue, floral designs, figures, etc., according to model, design or specifications. Studies details of product to be made, selects right type of stone block, marks it as necessary and decides plan of work. Explains details and tasks to be performed to workers, supervises cutting, dressing, carving, polishing and related operations and instructs workers as necessary. Observes and measures articles at different stages of production, gets defects removed or rectification done, where necessary and ensures correct production to required finish. May copy design from catalogue and undertake enlargement work. May guide matching and repair work.

ISCO 08 Unit Group Details:

Code 8212
Title Cement and Other Mineral Products Machine Operators

3122.1900

Supervisor and Foreman, Machine Tool Operations

Supervisor and Foreman, Machine Tool Operations supervises various machining and grinding operations and ensures production to required specifications. Studies drawings and plans lay out of work according to machine capacity. Arrange for material, tools, cutters, jigs, fixtures etc., distributes work and explains working details to respective Machine Operators. Guides setting of machines, checks trial piece and ensures correct operation. Watches and measures work at different stages of production and gets defects removed wherever noticed. Keeps machines, tools and equipment in good working condition, prevents wastage of material and serves as liaison between workers and management. Maintains

necessary records and registers and ensures upkeep and discipline of shop supervised. May be designated according to machines or section supervised.

ISCO 08 Unit Group Details:

Code 8212

Title Cement and Other Mineral Products Machine Operators

3122.2000

Supervisor and Foreman, Rubber Goods Making

Supervisor and Foreman, Rubber Goods Making supervises manufacture of tyres, tubes and other rubber goods and ensures proper utilisation of men and materials. Arranges to draw raw materials according to specifications of articles to be made or processes involved. Guides setting of machines, tools and operations for mixing of rubber, making solution and dough, bead making, tyre and subtle moulding, making foam cushions, hose pipes, etc., and runs trial piece. Checks for dimensions, shape and other specifications as prescribed and gets resetting done as necessary. Maintains prescribed records and serves as liaison between workers and management. Gets machines repaired and overhauled as necessary and ensures proper utilisation of men and material. May get trial piece checked and approved by inspection department before starting actual production. May get running repairs done under his guidance.

ISCO 08 Unit Group Details:

Code 3122

Title Manufacturing Supervisors

3122.2100

Supervisor and Foreman, Plastic Products Making

Supervisor and Foreman, Plastics Product Making supervises various plastics product manufacturing processes and ensures proper use of men and materials. Studies specifications, arranges for materials, tools and equipment and guides setting of machines, tools, din, moulds, etc., according to type of article to be made. Gets trial piece made, checks it for dimensions, form and composition and makes alterations if necessary to ensure conformation to prescribed specifications. Supervises machine and other manufacturing processes such as extruding, moulding, injecting of material, etc. and ensures correct production. Maintains necessary records, ensures proper use of men and material and develops methods to minimise wastage. May conduct running repairs of machines and equipment to keep them in working condition.

ISCO 08 Unit Group Details:

Code 3122

Title Manufacturing Supervisors

3122.2200

Plastic Moulding Shop Supervisor

Plastic Moulding Shop Supervisor is responsible for supervising the PVC moulding and extrusion activities to create well-formed PVC parts for automobile components, maintaining process parameters, conducting quality checks on output product, deploying manpower as per requirement, guiding operatives and technicians to complete the assigned task, maintaining a safe and healthy working environment on the shop floor and

maintaining records related to production, rejections, material movement and manpower productivity for a line/shift

Qualification Pack Details:

QP NOS Reference	ASC/Q4403
QP NOS Name	Plastic
Moulding Shop Supervisor	
NSQF Level	5

ISCO 08 Unit Group Details:

Code	3122
Title	Manufacturing Supervisors

3122.2300

Plastic Moulding Shift In Charge

Plastic Moulding Shift In Charge is responsible for all types of extrusion and moulding operations for plastic products and to manage operations during a shift. This role is responsible for managing PVC moulding and extrusion activities during the shift, maintaining process parameters, deploying manpower as per requirement, guiding operatives and technicians to complete the assigned task, maintaining a safe and healthy working environment on the shop floor and maintaining records related to production, rejections, material movement and manpower productivity for a line/shift. The role holder is also responsible to set the moulding machine parameters and the process flow during operations

Qualification Pack Details:

QP NOS Reference	ASC/Q4404
QP NOS Name	Plastic
Moulding Shift In Charge	
NSQF Level	6

ISCO 08 Unit Group Details:

Code	3122
Title	Manufacturing Supervisors

3122.2400

Supervisor and Foreman, Wood Working (Machine)

Supervisor and Foreman, Woodworking Machines supervises and guides workers engaged in operating woodworking machines for sawing, shaping, sizing and planning lumber, making joints etc., according to sample or specifications. Studies drawings or measures samples and guides workers to set machines according to required sizes. Selects lumber, runs trial piece and checks it to ensure correct setting. Gets machine reset, if necessary, and directs to saw or machine, required number of pieces. Checks machined pieces from time to time, ensures correct operations and maintains production to required schedule. Enforces safety measures, prevents wastage of material and gets tools and machines repaired or replaced as necessary to keep them in perfect working condition. Maintains prescribed records and registers and serves as liaison between workers and management. May be designated according to machine or section supervised.

ISCO 08 Unit Group Details:

Code	3122
Title	Manufacturing Supervisors

3122.2500

Supervisor and Foreman, Carpentry, Cabinet Making and Related Wood Working Processes

Supervisor and Foreman, Carpentry, Cabinet Making and Related Woodworking Processes supervises and guides carpenters and related workers engaged in making furniture, coaches, vehicle bodies, carts, etc. according to

sample or prescribed specifications. Studies drawings or sample, selects right type of lumber or machined pieces and explains sizes, joints and article to be made to carpenters supervised. Checks work from time to time, ensures making of correct joints, fittings and working and guides workers as necessary. Examines assembled articles for shape, size, rigidity, finish, etc., and gets defects removed where noticed. Maintains necessary records and registers and serves as liaison between workers and management. May undertake repair work or evolve new designs. May be designated according to nature of production or section supervised.

ISCO 08 Unit Group Details:

Code 3122
Title Manufacturing Supervisors

3122.2600

Supervisor and Foreman, Paper and Paper Board Product Making

Supervisor and Foreman, Paper and Paper Board Product Making supervises manufacture of paper and paper board products by various manual and mechanical processes and ensures correct production. Studies details of articles to be made and arrange, for necessary metal, wooden or cardboard patterns or gets machines set accordingly. Guides workers in cutting, folding, trimming, moulding papier Mache to required shape, stretching cardboard parchment or other paper over lamp shade frame, etc., depending on type of article to be made and ensures correct production. Keeps production and other prescribed records, ensures proper utilisation of men and material and develops methods to minimise wastage. Maintains discipline in section supervised and trains new

workers. May design paper flowers, toys and novelties.

ISCO 08 Unit Group Details:

Code 3122
Title Manufacturing Supervisors

3122.2800

Jobber (Textile)

Jobber (Textile) supervises workers in specified section of textile plant and maintains machines and equipment in peak operating order. Plans work procedures and allocation of workers in accord with production goals and availability of machines. Sets-up and adjusts looms and other machines to best performance before turning over to workers. Makes minor repairs to restore them to top efficiency or to keep them in operation and avoid production delays. Assembles and distributes raw materials and supplies. Moves constantly about in work area to supervise workers and examines work performed to assure that quality and quantity standards are being met. Introduces changes in manufacturing processes as directed. Maintains simple production records. Controls tools in tool room, enforces fire and safety regulations and transmits workers' grievances to higher authority. May assist in overhauling, repairing and erecting or dismantling of machinery. May be designated as JOBBER, CARDING; JOBBER, SPINNING; FANCY JOBBER; JOBBER, COMBING; JOBBER, DOFFING; SIDE JOBBER; LINE JOBBER; JOBBER, REELING, JOBBER, DRAWING; JOBBER, SIZING; JOBBER, DYEING; etc. according to work performed.

ISCO 08 Unit Group Details:

Code 3122
Title Manufacturing Supervisors

3122.2900**Supervisor and Foreman, Hosiery**

Supervisor and Foreman, Hosiery supervises workers in specified section of hosiery mill for manufacture of socks, vests, gloves and other hosiery products. Guides Knitting Jobber to set machine according to type of article to be manufactured and ensures upkeep of machines and equipment in perfect working condition. Moves about in work area, checks production and ensures correct manufacture. Suggests modifications as necessary and enforces safety and other rules and regulations. May keep records and registers and submit reports.

ISCO 08 Unit Group Details:

Code 3122

Title Manufacturing Supervisors

3122.3000**Supervisor and Foreman, Tanning and Pelt Dressing**

Supervisor and Foreman, Tanning and Pelt Dressing supervises and guides workers engaged in processing tanning and dressing hides, leathers and pelts and ensures prescribed quality and required finish. Guides workers in tanning and pelt dressing processes such as liming, de-liming, fleshing, de-hairing, stretching, chemical or bark tanning, matching currying, dressing etc. as necessary and ensures specified quality and required finish of product. Arranges for materials, chemicals and other ingredients, enforces safety and precautionary measures and ensures proper utilisation of men, materials, plants and equipment supervised. Maintains records and registers and submits reports and returns

as prescribed. May specialize in any materials, plants and equipment supervised. May specialize in any particular tanning or dressing operation. May be designated according to section or work supervised.(Excluded are Leather Technologist described elsewhere).

ISCO 08 Unit Group Details:

Code 3122

Title Manufacturing Supervisors

3122.3100**Supervisor and Foreman, Shoemaking**

Supervisor and Foreman, Shoe Making supervises and guides workers engaged in manufacture of footwear and their components. Studies design and sketches of shoes or other types of footwear to be made. Selects right type of leather, canvas and other raw materials, gets machines and assembly line set, distributes work according to system of manufacture and conducts operations to ensure correct use of men and materials. Checks components at various stages of production, arranges regular flow of materials for line assembly work and gets snags removed as noticed. Ensures correct production and gets batches checked by Examiner. Maintains production log, material and other accounts and serves as liaison between workers and management. May supervise complete shoe-making or one or more of its sections and be designated accordingly.

ISCO 08 Unit Group Details:

Code 3122

Title Manufacturing Supervisors

3122.3200**Supervisor and Foreman, Harness and Saddle Making**

Supervisor and Foreman, Harness and Saddle Making supervises manufacture of harness and saddle and ensures production to required specifications. Studies drawing or sample of saddle or harness to be made. Selects right type of leather, felt, stiffeners, sheep wool, and other materials required and issues them to workers according to parts or components to be made. Supervises cutting, sizing, shaping, forming, looping, fitting of metal parts and other operations, guides workers as necessary and ensures correct use of men and materials. Checks production at every stage, gets defects removed if any and ensures conformation to prescribed specifications. Checks completed articles with measuring tape and gauges and gets them polished and finished. May specialize in manufacture of any particular type or component of saddle or harness and be designated accordingly. May make saddles to order to suit customers specific requirements.

ISCO 08 Unit Group Details:

Code 3122
Title Manufacturing Supervisors

3122.3300

Supervisor and Foreman, Leather Goods Making

Supervisors and Foreman, Leather Goods Making supervises manufacture of fancy and other leather goods such as gloves, suitcases, purses, belts, whips, etc. according to customer's choice or latest designs. Studies designs from catalogue or samples and decides manufacturing process. Arranges for required type and quality of materials and gets working pattern made to suit specifications. Instructs and guides workers as required

and ensures correct operations and quality and finish of ultimate product. May specialize in manufacture of any particular items and be designated accordingly.

ISCO 08 Unit Group Details:

Code 3122
Title Manufacturing Supervisors

3122.3400

Supervisors and Foremen, Textile Related Products

Supervisor and Foreman, Textile and Related Products (Except Garments) supervises and guides workers engaged in making cushions, tents, parachutes, upholstery and like products and ensures production to required specifications. Guides cutting, joining, folding, stitching and other operations according to specifications, drawing or sample and ensures correct finish and size. Gets necessary fittings done as detailed. Checks work or gets it checked at every stage of production and directs alterations as necessary. Keeps machines and equipment in working order and maintains prescribed records and registers. May set related power driven machines and equipment. May be designated according to type of production or section supervised.

ISCO 08 Unit Group Details:

Code 3122
Title Manufacturing Supervisors

3122.3450

Scouring Supervisor, Wool

Scouring Supervisor, Wool; Scouring Jobber, Wool supervises work of Scouring man, Wool and Drying Machine man,

Wool. Prepares chemical solution or instructs scouring man in preparing it. Adjusts scouring and drying machines and does running repairs.

ISCO 08 Unit Group Details:

Code 3122
Title Manufacturing Supervisors

3122.3500

Supervisors and Foremen, Tailoring and Dress Making

Supervisor and Foreman, Tailoring and Dress Making supervises and guides workers engaged in production of readymade garments and ensures standard fittings and finish at reasonable cost. Guides workers in making patterns for cutting, adjusting electrical and special purpose sewing machines, setting, joining and sewing parts, button matching, etc., and ensures standard fittings and finish. Checks work, and directs or makes alterations where necessary and keeps machines and equipment in working order. Maintains production register and delivers goods against receipts. May copy or develop new designs to boost sale. May train new entrants. May be designated according to section or work supervised. (Excluded are Garment Designers and Cutters described elsewhere).

ISCO 08 Unit Group Details:

Code 3122
Title Manufacturing Supervisors

3122.3551

Production Supervisor-Sewing

Supervisor guides activities of operators and/or other employees engaged in the process of manufacturing, inspection, processing and related activity. Production Supervisor plans and allocates

resources and monitors schedules. Their work includes checking output, input material, equipment and ensuring process controls. They communicate, simplify, and interpret specifications, job orders, and procedures for operators and provide solutions to problems that affect the desired output and organizational goals. They also train employees for continual improvement and to achieve the organizational objectives.

Qualification Pack Details:

QP NOS Reference	AMH/Q2101
QP NOS Name	Production
Supervisor-Sewing	
NSQF Level	6

ISCO 08 Unit Group Details:

Code 3122
Title Manufacturing Supervisors

3122.3600

Supervisor and Foreman, Brush Making

Supervisors and Foremen, Brush Making supervises manufacture of bristles, nylon and other types of brushes, and ensures correct production. Studies specifications of type of brush to be made and instructs respective workers accordingly. Checks setting, sizing, sterilizing and other operations, during manufacture according to processes involved, rejects defective items or gets defects removed and ensures correct production. Maintains prescribed records and registers and evolves methods to minimise wastage as far as possible. May specialize in manufacture of one or more types of brushes.

ISCO 08 Unit Group Details:

Code 3122
Title Manufacturing Supervisors

3122.3800**Supervisor and Foreman, Tobacco Preparation, Cigar and Cigarette Making**

Supervisor and Foreman, Tobacco Preparation, Cigar and Cigarette Making supervises and guides workers engaged in tobacco preparation, cigar and cigarette making and ensures quality and proper manufacture according to brand produced. Guides workers in various tobacco preparation, cigar and cigarette making operations, such as curing, grading, blending, conditioning, drying, stretching, rolling, slitting and other manual and mechanical processes and ensures proper quality according to brand produced. Arranges for materials and ensures upkeep of machines and equipment and proper utilization of men, materials and machines supervised. Maintains necessary records and registers, submits prescribed reports and returns and enforces excise and other rules and regulations. May test samples while processing. May be designated according to section or work supervised.

ISCO 08 Unit Group Details:

Code 3122
Title Manufacturing Supervisors

3122.3900**Supervisor and Foreman, Tobacco Product Making**

Supervisor and Foreman, Tobacco Products Making supervises and guides workers engaged in making snuff, zarda, kimam and other tobacco products and ensures quality of products manufactured. Guides workers in cutting tobacco leaves, drying, roasting, grinding,

dyeing, pounding and other operations according to nature of work and ensures quality of product manufactured. Arranges for materials and ensures proper utilization of men and equipment supervised. Trains new entrants and maintains prescribed records and registers. May specialize in manufacture of any particular type of tobacco product. May be designated according to section or work supervised.

ISCO 08 Unit Group Details:

Code 3122
Title Manufacturing Supervisors

3122.4000**Supervisor and Foreman, Material and Freight Handling**

Supervisor and Foreman, Material and Freight Handling supervises slinging, rigging and handling of material and freight for loading, unloading or placing them as required. Examines material or freight to be handled for size, approximate weight, appropriate position for balanced slinging, etc., and determines safe and best method of handling them without damaging. Directs and co-ordinates operations of Slingers, Cable Splicers, Riggers, Crane and Hoist Operators, etc., in slinging, raising, moving, lowering, loading, unloading, placing and other activities ensuring safe load and necessary precautions according to type of material or freight handled. Takes special precautions while handling fragile, inflammable and explosive materials to avoid breakage and accidents. Applies emergency measures where necessary and ensures safety of workers around. May maintain record of material handled.

ISCO 08 Unit Group Details:

Code 3122
 Title Manufacturing Supervisors

3122.4100

Supervisor and Foreman, Checking, Sorting, Packing and Related Activities

Supervisor and Foreman, Checking, Sorting, Packing and Related Activities supervises performance of workers engaged in testing, sorting, weighing, counting, packing and labelling drugs and other materials by automatic or manual processes and ensures correct operations. Studies specifications and details of work to be done and instructs workers accordingly to set machines and equipment or perform manual tasks as prescribed. Gets supply or speed of conveyor belt adjusted according to performance and prescribed out turn, in case of continuous automatic system and ensures observance of sequence of operations and necessary precautions to avoid wastage. Relieves workers as necessary to avoid fatigue and keeps machines and equipment in working order. Trains new entrants. Maintains record of daily out turn. May make shift arrangements to avoid stoppages.

ISCO 08 Unit Group Details:

Code 3122
 Title Manufacturing Supervisors

3122.4200

Supervisor and Foreman, Welding and Flame Cutting

Supervisor and Foreman, Welding and Flame Cutting supervises welding and flame cutting operation in workshop and ensures correct working. Studies drawings and other details regarding welding or cuttings to be done and arranges for jigs

and fixtures, if required. Explains joints to be made, precautions necessary to retain form or avoid cracking and burning, type of welding to be done, electrodes or welding rods to be used, flux to be applied, etc., to workers to ensure correct wiring. Supervises work, enforces adaptation of prescribed precautionary measures regarding placement of gas cylinders, use of rubber gloves, welding shields, etc., and guides workers as necessary to achieve desired finish, size strengths, shape and other factors as specified. Checks welded or cut part with appropriate testing and measuring instruments and gets defects removed or rectified, if possible. Ensures maintenance of welding sets, torches, gas cylinders etc., and maintains scheduled production and discipline in section. May maintain production and material records and registers.

ISCO 08 Unit Group Details:

Code 3122
 Title Manufacturing Supervisors

3122.4300

Supervisor and Foreman, Sheet and Structural Metal Working

Supervisor and Foreman, Sheet and Structural Metal Working supervises performance of sheet and structural metal workers, guides them as necessary and ensures production to required specifications. Studies drawings and related specifications of sheet and structural metal work to be done and plans machine, bench and hand tool operations to suit working. Explains tasks to be performed to workers, guides setting of shearing, handing, rolling, profiling other machines, sizes required, forming and development to be made, etc., and working tolerances (limit) to

specified finish at every stage of work. Supervises and guides workers as required. Checks lay out joints, forming, profiling, development, fittings riveting, etc., both visually and with appropriate testing and measuring instruments during stages of production as well as finish, gets defects removed and ensures correct working. May get soldering, brazing, welding and other related operations done, if necessary. May be designated as SUPERVISOR, TINSMITHS; SUPERVISOR BOILER MAKING; SUPERVISOR STRUCTURAL AND CONSTRUCTION WORK etc. according to specialisation or type of work done.

ISCO 08 Unit Group Details:

Code	3122
Title	Manufacturing Supervisors

3122.4401

Casting Line In charge

Casting Line In charge supervises the sand and molten metal related casting operations, overseeing the setting up and operating the casting equipment and forming and finishing of the final output.

Qualification Pack Details:

QP NOS Reference	ASC/Q3207
QP NOS Name	Casting Line
In charge	
NSQF Level	6

ISCO 08 Unit Group Details:

Code	3122
Title	Manufacturing Supervisors

3122.4402

Casting Line Supervisor

Welder is also known as line leader/team leader, this role is similar for all types off

casting processes i.e. Sand Casting Process, Gravity Casting Process and Pressure Die Casting Process. This role is responsible for supervising the various casting processes involving sand mixing, core making, mould making, metal smelting and pouring, maintaining process parameters, conducting quality checks on output product, deploying manpower as per requirement, guiding operatives and technicians to complete the assigned task, maintaining a safe and healthy working environment on the shop floor and maintaining records related to production, rejections, material movement and manpower productivity for a line/shift

Qualification Pack Details:

QP NOS Reference	ASC/Q3206
QP NOS Name	Casting Line
Supervisor	
NSQF Level	5

ISCO 08 Unit Group Details:

Code	3122
Title	Manufacturing Supervisors

3122.4501

Forging Shop Shift In charge

Forging Shop Shift In charge is responsible for ensuring productivity across various kinds of forging processes like Hot, Warm and Cold Forging processes to create well-formed metal components for automobiles like transmission rods, forks, flanges, shafts, axles etc. maintaining process parameters, deploying manpower as per requirement, guiding operatives and technicians to complete the assigned task, maintaining a safe and healthy working environment on the shop floor. The role holder is also responsible to set the furnace and press related parameters and the process flow during operations.

Qualification Pack Details:

QP NOS Reference	ASC/Q4503
QP NOS Name	Forging Shop
Shift In charge	
NSQF Level	6

ISCO 08 Unit Group Details:

Code	3122
Title	Manufacturing Supervisors

3122.4502**Forging Shop Supervisor**

Forging Shop Supervisor is responsible for supervising various kinds of forging processes like Hot, Warm and Cold Forging processes to create well-formed metal components for automobiles like transmission rods, forks, flanges, shafts, axles etc. Responsible for control by maintaining process parameters, conducting quality checks on output product, deploying manpower as per requirement, guiding operatives and technicians to complete the assigned task, maintaining a safe and healthy working environment on the shop floor and maintaining records related to production, rejections, material movement and manpower productivity for a line/shift

Qualification Pack Details:

QP NOS Reference	ASC/Q4502
QP NOS Name	Forging Shop
Supervisor	
NSQF Level	5

ISCO 08 Unit Group Details:

Code	3122
Title	Manufacturing Supervisors

3122.4601**Press Shop Shift In Charge**

Press Shop Shift In Charge is responsible for managing the metal pressing and sheeting activities in a line/shift to create well-formed sheet metal components for automobile frames and auto components using manual, hydraulic or pneumatic presses, defining and maintaining process parameters, conducting quality checks on output product, deploying manpower as per requirement and maintaining records related to production, rejections, material movement and manpower productivity for a line/shift.

Qualification Pack Details:

QP NOS Reference	ASC/Q3405
QP NOS Name	Press Shop
Shift In Charge	
NSQF Level	6

ISCO 08 Unit Group Details:

Code	3122
Title	Manufacturing Supervisors

3122.4602**Press Shop Supervisor**

Press Shop Supervisor is responsible for supervising the metal pressing and sheeting activities to create well-formed sheet metal components for automobile frames and auto components using manual, hydraulic or pneumatic presses, maintaining process parameters, conducting quality checks on output product, deploying manpower as per requirement, guiding operatives and technicians to complete the assigned task, maintaining a safe and healthy working environment on the shop floor and maintaining records related to production, rejections, material movement and manpower productivity for a line/shift

Qualification Pack Details:

QP NOS Reference	ASC/Q3404
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QP NOS Name	Press Shop
Supervisor	
NSQF Level	5

ISCO 08 Unit Group Details:

Code	3122
Title	Manufacturing Supervisors

3122.4701**Welding Machine Setter**

Welder is also known as Welding Technician, this role is similar for all types of joining techniques like Gas Discharge Arc Welding (MIG, MAG, TIG), Resistance Welding (Spot Welding, Projection Welding, Butt Welding) and Automatic or Robotic Welding Process. This role is responsible for joining various types of metallic frames, structures, jigs, plates, sheets etc. using heating and melting process created through electrical power and gaseous discharge, maintaining process parameters, conducting quality checks on output product and maintaining a safe and healthy working environment on the shop floor.

Qualification Pack Details:

QP NOS Reference	ASC/Q3105
QP NOS Name	Welding
Machine Setter	
NSQF Level	6

ISCO 08 Unit Group Details:

Code	3122
Title	Manufacturing Supervisors

3122.4702**Welding Supervisor**

Welding Supervisor is also known as line leader/team leader, this role is similar for all types of joining techniques like Gas

Discharge Arc Welding (MIG, MAG, TIG), Resistance Welding (Spot Welding, Projection Welding, Butt Welding), Automatic or Robotic Welding Process, Brazing and Soldering. This role is responsible for supervising the various material joining processes like welding, soldering and brazing for joining various types of metallic frames, structures, jigs, plates, sheets etc., maintaining process parameters, conducting quality checks on output product, deploying manpower as per requirement, guiding operatives and technicians to complete the assigned task, maintaining a safe and healthy working environment on the shop floor and maintaining records related to production, rejections, material movement and manpower productivity for a line/shift

Qualification Pack Details:

QP NOS Reference	ASC/Q3104
QP NOS Name	Welding
Supervisor	
NSQF Level	5

ISCO 08 Unit Group Details:

Code	3122
Title	Manufacturing Supervisors

3122.4900**Supervisor and Foreman, Blacksmith**

Supervisor and Foreman, Blacksmith supervises general or mechanised blacksmith shop and ensures correct production. Studies samples or drawing of metal to be forged or item to be made. Selects metal as specified and instructs workers on heating and forging temperatures, sizes to be made, blocks and dies to be used, etc., as required. Observes heating, stamping, machine forging, hand forging and other

blacksmithy operations and guides workers as necessary. Ensures correct working, sizes forged and gets defects removed as noticed. Gets furnaces and machines overhauled and repaired as necessary and maintains them in proper working order. Prevents wastage of materials, enforces discipline and safety measures and serves as liaison between workers and management. Maintains prescribed records and registers and replenishes tools and shop material stock as Scheduled. May supervise normalising, tempering and other heat treating operations.

Work at every stage of production with precision instruments. Suggests operations and gets defects removed wherever noticed. Checks completed tool and performs trial operations. Conducts reconditioning and repairs of used tool and puts them on production after trial run. Keeps tools, machines, equipment and instruments in perfect working order and checks their efficiency for precision working from time to time. Maintains log book and other records and suggests designer operational modifications where desired. May design simple tools.

ISCO 08 Unit Group Details:

Code 3122

Title Manufacturing Supervisors

3122.5000

Supervisor and Foreman, Tool Making/Die Making

Supervisor and Foreman, Tool Making supervises manufacture of jigs, fixtures, form, cutters, (special type of cutting tools), dies, gauges and other tools and ensures

Production within prescribed finish and tolerance. Studies drawings, consults Tool Engineer, if necessary, and plans lay out of work. Details workers according to prescribed

tolerance and type of tool to be made and instructs them on specifications and standard of

work required. Checks marking, filing, drilling, machining, grinding, and other operations according to type of tool being made and guides workers as necessary. Measures

ISCO 08 Unit Group Details:

Code 3122

Title Manufacturing Supervisors

3122.5200

Supervisor and Foreman, Machinery Fitting and Repairing

Supervisor and Foreman, Machinery Fitting and Repairing supervises fitting, assembling, overhauling and repairing of workshop and other machines and equipment and ensures stipulated performance. Examines machine, if necessary, by actual operation, and locates defects. Studies part of assembly drawings and explains details of assembly or repair work to be done to workers, conducts work step by step, gets defective and unserviceable parts repaired to be replaced as necessary and ensures proper performance of each unit assembled or repaired. Checks performance of completed machine or equipment for work efficiency, accuracy, rigidity, etc., and gets operational snags removed, if any. Undertakes periodical repairs and overhauling of machines as scheduled and

maintains them in working condition. Takes necessary steps during breakdown to get machine repaired or removed within least possible time ensuring minimum dislocation of work. Maintains repairing, overhauling and breakdown registers as prescribed. May install machine and undertake structural work.

ISCO 08 Unit Group Details:

Code 3122

Title Manufacturing Supervisors

3122.5300

Supervisor and Foreman, Motor Vehicle Repairing

Supervisor and Foreman, Motor Vehicle Repairing takes charge of fleet of vehicles and maintains them in road running order. Organizes work and details of workers according to nature of repairs, overhauling or servicing to be done. Gets vehicles removed dismantled and examined in respective areas and determines faults and repairs to be done. Prepares replacement and repair estimates and gets them approved, if necessary. Conducts repairs or replacements of defective parts, either personally or through other agencies as required. Supervises fitting, assembling, tuning, brakes bleeding, servicing and related tasks unit by unit as appropriate and ensure correct engine and road performance by actual tests. Gets upholstery, body fitting, painting, polishing, and like tasks done, if desired. Maintains necessary records and registers and submits prescribed returns and accounts. May supervise repairs and overhauling of particular assembly (part) or complete vehicle. May be designated as GARAGE SUPERVISOR if engaged in supervising only servicing and running repairs of vehicles.

ISCO 08 Unit Group Details:

Code 3122

Title Manufacturing Supervisors

3122.5400

Supervisor and Foreman, Aircraft Repairing

Supervisor and Foreman, Aircraft Repairing supervises repairing and overhauling of aircrafts and ensures them to be airworthy. Examines aircraft before and after flight and determines nature of repairs and adjustments to be done. Details aeromechanics to carry out necessary repairs under his guidance and ensures airworthiness of repaired aircraft before handing over for further flight. Gets aircraft removed to hanger after scheduled hours of flight or on major breakdown for dismantling, thorough checking, complete overhauling, replacement of worn out and defective parts, necessary adjustments, etc. according to prescribed schedule. Guides repairs of engines, fuselage, landing gears and other major units and electrical systems according to specialisation, tasks entrusted or section in which posted and ensures their stipulated performance and airworthiness before reassembling. Calculates data, checks engine horse power, prepares sketches and performs other tasks as may be required to ensure correct working. Maintains records and registers and submits prescribed returns. May train workers. May be designated according to nature of work done or section supervised.

ISCO 08 Unit Group Details:

Code 3122
Title Manufacturing Supervisors

3122.5600

Supervisor and Foreman, Electrical and Electronic Equipment

Supervisor and Foreman Electrical and Electronic Equipment supervises fittings assembling, installing and repairing of electrical and electronic equipment, motors, generators etc., and ensures stipulated performance. Studies drawings and wiring diagrams and explains details to workers. Checks connection, quality and thickness of wire, resistance, condensers, valves, coils, etc., gets defective parts or components replaced and ensures conformity with prescribed specifications. Guides workers in fitting, assembling and installing electrical and electronic equipment including electrical motors and generators and assists them where necessary, to test and remove snags. Tests completed unit for electrical circuit, flow of current, resistance, frequency, earthing, etc. gets defects removed and ensures stipulated performance. May use substitute parts or change wiring system, if authorised. May specialize in electrical or electronic equipment and be designated accordingly.

ISCO 08 Unit Group Details:

Code 3122
Title Manufacturing Supervisors

3122.5700

Engineering Supervisor, Telephone

Engineering Supervisor, Telephone controls and supervises, Sub-Inspectors, Linemen, Installation Mechanics, and Maintenance Mechanics engaged in erecting, installing, maintaining and repairing telephone lines, cables,

instruments and equipment in or outside telephone exchanges or in customers' premises in his area. Prepares estimates of expenditure and material required for extension of telephone connections and facilities and obtains necessary approval. Controls and supervises installation of underground and surface telephone lines and cables to provide necessary connections. Checks operational efficiency of telephone and telegraph apparatus at subscriber's premises and at respective exchanges. Supervises duties of Sub-Inspectors, Linemen, Maintenance Mechanic etc. and guides them as necessary. Organizes repair and maintenance operations during emergencies and breakdowns in commutation systems. Maintains liaison with public and looks into complaints. May supervise work of Telephone Operators.

ISCO 08 Unit Group Details:

Code 3122
Title Manufacturing Supervisors

3122.5800

Sub-Inspector, Telephone

Sub-Inspector Telephone Supervises Linemen, Telephone, engaged in erecting, repairing and maintaining overhead or underground telephone lines. Checks plan of line to be laid, instructs linemen on sequence of work to be executed and ensures timely supply of material required for installation, repairs and replacement, Deploys linemen as required on work site and supervises installation, repair, and installation of poles and fitting of brackets and crossbars. Guides fitting of insulators, drawing of wires, deviation of lines and setting of telephone instrument, keyboards etc. Tests personally or ensures proper testing line and removes defects if

any. Locates distance and area of failure in case of breakdown using testing meters and restores communication speedily by rewiring or getting faults removed. Checks telegraph and telephone lines periodically and maintains them in working condition. May install, repair, and replace components of the telephone system.

ISCO 08 Unit Group Details:

Code 3122

Title Manufacturing Supervisors

3122.5900

Charge Hand, Rack Wiring

(Telephone Equipment)

Manufacturing

Charge Hand, Rack Wiring (Telephone Equipment Manufacturing) instructs and directs Operators, Rack-wiring, in assembling and erecting different kinds of selector racks, relay set racks, etc. Organizes and distributes work among operators within sections and fills in time cards. Checks sequence of work performed by different operators, detects and removes faults and ensures that wiring is done according to circuit diagrams. Instructs and trains operators and ensures their general efficiency. Records number of persons supervised and ability to detect and rectify faults in wiring.

ISCO 08 Unit Group Details:

Code 3122

Title Manufacturing Supervisors

3122.6000

Line Supervisor, Electrical

Line Supervisor, Electrical supervises installation and drawing of overhead and underground electrical line for street

lighting and power supply. Studies diagrams and details of line to be drawn. Visits area, determines electrical towers and poles to be installed and/or underground cables to be laid and explains working details to linemen. Marks locations of poles and tower or earth to be dug and gets them installed or set according to electricity act ensuring proper earthing. Gets brackets and other accessories fitted according to specifications. Informs power house or appropriate authority to switch off electric supply in area in which working, if necessary. Directs linemen and other workers to draw electric line as scheduled ensuring safety and minimum sagging. Guides joining of cables, fuses, junction boxes, etc., as appropriate and ensures continuity and proper installation. May do lead burning and join cables. May take charge of particular area and maintain power supply line by conducting repairs and replacements as necessary.

ISCO 08 Unit Group Details:

Code 3122

Title Manufacturing Supervisors

3122.6200

Supervisor and Foreman, Precision Instrument Making (except electrical)

Supervisor and Foreman, Precision Instrument Making (except electrical) supervises assembly and repairing of precision instruments, other than electrical and ensures their efficient performance. Studies drawings, sizes calculations and other details as necessary. Checks components, assemblies etc., with set standards and precision instruments, gets defects removed, if any. Explains to workers, details of assembly or work to be done,

tolerance and accuracy required, operational efficiency, etc. with sketches if necessary and guides them to ensure correct working. Checks work at stages of production and also on completion and ensures stipulated accuracy. Maintains prescribed records and registers. May supervise, repairs and making of one or more types of instruments.

ISCO 08 Unit Group Details:

Code 3122
Title Manufacturing Supervisors

3122.6300

Supervisor and Foreman, Musical Instrument Making

Supervisor and Foreman, Musical Instrument Making supervises production of string, wind or percussion musical instruments and ensures their correct tuning. Studies specifications of individual or batch of musical instruments to be made and distributes work according to type of instrument amongst specialized workers. Arranges for various parts and accessories such as reeds, cabinet, shell, metal strings, leather etc., as required and maintains necessary stock to distribute amongst workers as needed. Supervises tooling, assembling and production processes, gets defects removed as noticed and guides workers to ensure correct working. Checks tuning, fittings, finish and other details with standard sample and prescribed specifications and ensures correct production. Maintains prescribed records and registers, conducts repairs of defective instruments and performs other tasks as may be assigned to him according to nature of undertaking and responsibility held. May train new workers. May specialize in one or more of musical instruments.

ISCO 08 Unit Group Details:

Code 3122
Title Manufacturing Supervisors

3122.6400

Supervisor, Jewellery, Engraving and Precision Metal Workers

Supervisor, Jewellery, Engraving and Precious Metal Working supervises selection, identification and processing of jewels, making and engraving metal ornaments, inlaying metal pieces, etc., and ensures desired finish with minimum wastage. Guides workers in examining, selecting cutting and processing real and artificial pearls and stones according to design or customer's specifications. Issues correct weight of gold or silver to workers, explains size and design of ornaments to be made, engravings to be done, jewels to be set or studded, etc., and supervises work to ensure correct working with minimum loss or wastage. Selects artistic designs for engraving inlaying or embossing metals, other than ornaments, and workers to reproduce them on articles for sale, decoration or display. Checks purity of gold and silver to determine value of used or new ornaments. May be experienced or specialized in any particular type of work and be designed accordingly. May assist customers in selecting pearls and jewels, and determining design or ornaments to be made.

ISCO 08 Unit Group Details:

Code 3122
Title Manufacturing Supervisors

3122.6501

Wax Model Making Supervisor

Wax Model Making Supervisor is in charge of running the day-to-day work flow and

processes of the wax model making department. The individual allocates work to subordinate workers, trains and educates them, instructs about the job to be performed

on daily basis, checks quality of output, manages departmental accounts along with team and systems, and interacts with other departments in order to produce wax trees as per production planning and delivers on time.

Qualification Pack Details:

QP NOS Reference	G&J/Q2606
QP NOS Name	Wax Model
Making Supervisor	
NSQF Level	5

ISCO 08 Unit Group Details:

Code	3122
Title	Manufacturing Supervisors

3122.6502

Product Development Manager

Product Development (PD) Manager: Also known as ‘PD head’ in the jewellery manufacturing industry, the PD Manager is in charge of the product development department and plays critical role in the jewellery designing and development. The individual at work co-ordinates with the stakeholders such as customers, marketing team, production team, designers and merchandisers to develop the practical, marketable and fashionable jewellery products. The individual recruits, trains and manages team of designers.

Qualification Pack Details:

QP NOS Reference	G&J/Q2303
QP NOS Name	Product
Development Manager	
NSQF Level	4

ISCO 08 Unit Group Details:

Code	3122
Title	Manufacturing Supervisors

3122.6503

Planning Supervisor

Planning Supervisor is in charge running the day-to-day work flow and processes of the planning department. The individual on this job, allocates work to subordinate workers, trains and educates them, instructs about the job to be performed on daily basis, checks quality of output, manages team and systems, carries out performance appraisal, ensures safety of the diamond, and interacts with other departments in order to ensure accurate planning to derive maximum value from a rough as per company’s objectives and delivers on time.

Qualification Pack Details:

QP NOS Reference	G&J/Q4202
QP NOS Name	Planning
Supervisor	
NSQF Level	4

ISCO 08 Unit Group Details:

Code	3122
Title	Manufacturing Supervisors

3122.6504

Blade Sawing Supervisor

Blade sawing supervisor is in charge running the day-to-day work flow and processes of the blade sawing department. The individual on this job, allocates work to subordinate workers, trains and educates them, instructs about the job to be performed on daily basis, checks quality of output, manages team and systems, carries out performance appraisal and ensures safety of the

diamond, in order to ensure accuracy in cut as per marking to derive maximum value from a rough as per company's objectives and delivers on time.

Qualification Pack Details:

QP NOS Reference	G&J/Q4404
QP NOS Name	Blade
Sawing Supervisor	
NSQF Level	5

ISCO 08 Unit Group Details:

Code	3122
Title	Manufacturing Supervisors

3122.6505

Laser Supervisor

Laser supervisor is in charge running the day-to-day work flow and processes of the laser cutting department. The individual on this job, allocates work to subordinate workers, trains and educates them, instructs about the job to be performed on daily basis, checks quality of output, manages team and systems, carries out performance appraisal, ensures safety of the diamond, and interacts with other departments in order to ensure accurate cut as per marking to derive maximum value from a rough as per company's objectives and delivers on time.

Qualification Pack Details:

QP NOS Reference	G&J/Q4404
QP NOS Name	Laser
Supervisor	
NSQF Level	5

ISCO 08 Unit Group Details:

Code	3122
Title	Manufacturing Supervisors

3122.6506

Bruting Supervisor

Bruting Supervisor is also known as Bruter or Coner, the auto bruter provides round girdle and cone shape to the sawed rough diamond. The individual works with bruting machine and another diamond or wheel (rotating in opposite direction to the diamond being bruted) to give the rough diamond round and cone shapes. A bruter must be careful: so that excess bruting does not cause too much stone loss or sub-optimal bruting causes the girdle to disappear at a later stage of processing.

Qualification Pack Details:

QP NOS Reference	G&J/Q4505
QP NOS Name	Bruting
Supervisor	
NSQF Level	3

ISCO 08 Unit Group Details:

Code	3122
Title	Manufacturing Supervisors

3122.6507

Blocking Supervisor

Blocking Supervisor is in charge running the day-to-day work flow and processes of the blocking department. The individual on this job, allocates work to subordinate workers, trains and educates them, instructs about the job to be performed on daily basis, checks quality of output, manages team and systems, carries out performance appraisal, ensures safety of the diamond, and interacts with other departments in order to ensure accurate basic four (or eight) top and bottom facets of the diamond as per company's objectives and delivers on time.

Qualification Pack Details:

QP NOS Reference	G&J/Q4606
QP NOS Name	Blocking
Supervisor	

Code 3122
 Title Manufacturing Supervisors

3122.6600
Supervisor and Foreman, Photo-Litho, Photo Engraving and Dark Room Operations

Supervisor and Foreman, Photo-Litho, Photo Engraving and Dark Room Operations guides and supervises photographic, photo engraving, developing and related tasks for block making and photo-litho operations in printing press. Studies nature of work to be done and plans work according to operations and order of priority for printing. Instructs cameramen, photo-engravers, darkroom and related workers on prescribed finish and specifications required and guides and supervises their performance. Gets defects removed and ensures minimum wastage and correct production. Maintains prescribed records and assists workers as necessary. May make photo-sensitive glass plates for use in camera, enlarge important microfilms, retouch lithographic printing plates, etc., if required.

ISCO 08 Unit Group Details:

Code 3122
 Title Manufacturing Supervisors

3122.6700
Supervisor and Foreman, Printing and Related Work

Supervisor and Foreman, Printing and Related Work supervises composition, type-setting, printing, binding and related general tasks, other than photo-engraving and dark room operations, in printing press and ensures correct operations, in printing press and ensures correct output.

Examines manuscript for layout, technical aspects, etc., and plans work accordingly. Arranges for machines, equipment and materials, and distributes work amongst Composers, Printers, Book Binders, etc., according to quantum of work and nature of printing required. Gets proof copies compared and corrected with manuscript, ensures compliance with other special instructions, if any, and instructs Printers to print required number of copies. Checks work frequently, directs necessary adjustments to be made and ensures desired output. Supervises stitching, binding, trimming etc., and ensures production to required specifications. Keeps machines and equipment in proper working order by getting repairs and overhauling done as required and maintains prescribed records and registers. May specialize in particular branch of work or type of printing.

ISCO 08 Unit Group Details:

Code 3122
 Title Manufacturing Supervisors

3122.6900
Supervisor and Foreman, Food Processing/Production Supervisor

Supervisor and Foreman, Food Processing supervises and guides workers engaged in processing and preserving food by various mechanical and manual processes. Guides workers in milling and parching food grains, crushing and pressing oil seeds, making 'gur', 'khandsari' and sugar by open or vacuum pan system, preserving and canning food stuff, making biscuits, candy, chocolate, sweet-meats, etc. by mechanical, manual or combined operations as necessary according to method and nature of production. Watches heating and baking temperatures, adjustments of machines

and equipment, mixing of proper quality and quantity of ingredients, etc. and directs workmen accordingly to suit requirements. Ensures quality and rate of production and maintains prescribed records. May regulate temperature, adjusts machines and equipment, mix ingredients and perform other tasks. May be designated according to section or work supervised (Excluded are other food processing supervisory staff and Technologists described separately).

ISCO 08 Unit Group Details:

Code 3122
Title Manufacturing Supervisors

3122.7000

Juice Clarification Supervisor

Manufacturing Chemist; Shift Chemist; Juice Clarification Supervisor; Juice Supervisor; Clarification House Supervisor(Sugar) co-ordinates and supervises all operations connected with the syrup making from raw juice, weighing to final sulphitation in sugar factory. Supervises and checks weighing or measuring of raw juice coming from mill house, and ensures correct maintenance of its records. Directs heating, carbonation, filtration Sulphitation, evaporation, and other for prescribed treating of juice and making of specified type of syrup. Supervises operations of lime kiln, sulphur furnace etc., and controls making of milk of lime and sulphur dioxide for clarifying juice by carbonation or Sulphitation process. Checks temperature and pressure of heaters, filters press and evaporators, tests juice with testing paper, and performs other functions as necessary for manufacturing of specified type of juice and syrup. Maintains log book giving hourly and daily operational details. May

get overhauling and necessary repairs done to maintain equipment in working order. May check juice with hydrometer and indicator to maintain specified standard.

ISCO 08 Unit Group Details:

Code 3122
Title Manufacturing Supervisors

3122.7100

Supervisor and Foreman, Brewing, Aerated Water and Beverage Making

Supervisor and Foreman, Brewing, Aerated Water and Beverage Making supervises and guides workers engaged in making beer, liquors, syrup, aerated water and other types of drinks and beverages and ensures standard quality of production as prescribed. Arranges for necessary materials and ingredients and guides workers in various operations such as brewing, mashing, fermenting, filtering, making syrups and sherbets, filling bottles, injecting carbon-dioxide into filled bottles, bottling etc., according to nature of production. Gets samples tested while processing and directs necessary adjustments and modifications. Enforces safety measures, compliance with excise and related rules and regulations, prescribed percentage of alcohol content, etc., and ensures standard quality of production. Maintains records and registers and submits prescribed returns. May set machines and equipment. May be designated according to nature of production or section supervised. (Excluded are Technologists, and Chemists described elsewhere).

ISCO 08 Unit Group Details:

Code 3122
Title Manufacturing Supervisors

3122.7200**Supervisor and Foreman, Dairy Products/Dairy Technologist**

Supervisor and Foreman, Dairy Product supervises and guides workers engaged in processing dairy products and ensures prescribed quality of manufacture. Guides workers in skimming and pasteurising milk, separating specified quantity of cream from milk, churning butter, making cheese and other dairy products either by mechanical, manual or combined processes and ensures prescribed quality and quantity of production. Tests or gets samples tested while processing, directs necessary adjustments to be made and maintains hygienic condition in area supervised. Controls bottling, mixing and packing operations according to type and quality of production and maintains necessary records and registers. May be designated according to section supervised or product processed.

ISCO 08 Unit Group Details:

Code 3122

Title Manufacturing Supervisors

3122.8001**Rubber Nursery Supervisor**

Rubber Nursery Supervisor supervises and give technical advice on all the nursery activities to all workers. He is responsible for the timely completion of all seasonal activities, smooth running of the nursery and production of quality planting materials as envisaged by the organization.

Qualification Pack Details:

QP NOS Reference RSC/Q 0933

QP NOS Name Rubber

Nursery Supervisor

NSQF Level 5

ISCO 08 Unit Group Details:

Code 3122

Title Manufacturing Supervisors

3122.9900**Manufacturing Supervisors, Other**

Manufacturing Supervisors, Other include Manufacturing supervisors who co-ordinate and supervise the activities of Process Control Technicians, Machine Operators, Assemblers, and other Manufacturing Labourers not elsewhere classified

ISCO 08 Unit Group Details:

Code

Title

**Family 3123
Construction Supervisors**

Construction Supervisors, co-ordinate, supervise and schedule the activities of workers engaged in the construction and repair of buildings and structures.

3123.0100**Work Supervisor, Construction**

Work Supervisor, Construction supervises construction and repairs of buildings, hutments, and other structures and ensures working to required specifications. Receives instructions from Building Overseer regarding sizes and specifications of structure to be built, composition of mortar and other materials to be used and instructs Masons and other workers accordingly. Gets bricks, sand, cement, mosaic chips, etc., stacked in proper order and ensures security against loss and wastage. Keeps watch on construction being built, ensures use of proper materials and mortar and

measures it periodically or at end of day to calculate wages earned by workers. Ensures building according to plan and gets defects removed or reconstructed as directed by Overseer. Maintains material, attendance and other records as necessary, calculates wages of workers engaged and ensures proper. Use of men and material. May prepare bills, arrange for MASONs, CARPENTERS, LABOURERS and other workers and arrange for their payment, if necessary.

ISCO 08 Unit Group Details:

Code 3123
Title Construction Supervisors

3123.0200 **Supervisor and Foreman, Insulation**

Supervisor and Foreman, Insulation supervises application of insulating materials in buildings, refrigeration and air-conditioning equipment, boilers, steam pipes, etc., to maintain pressure stipulated temperature, prevent reverberation of sound and like purposes. Studies drawings and specifications of insulation to be done. Arranges to draw or procure required quantity of insulating materials and accessories such as mineral wool, shredded or sheets of cork; asbestos etc., and hands them over to workers as required, with necessary instructions for their application. Supervises work, ensures correct application of required type and thickness of insulating material and gets defects removed, if any, to achieve desired result. Maintains necessary records and ensures proper use of men and material. May check insulation done with gauges and meters and report results achieved.

ISCO 08 Unit Group Details:

Code 3123

Title Construction Supervisors

3123.0300

Supervisor and Foreman, Plumbing and Pipe Fitting

Supervisor and Foreman, Plumbing and Pipe Fitting supervises workers engaged in pipe fitting and plumbing operations and guides them as necessary to ensure correct laying and fitting of pipes, drainage system, etc. Studies lay out drawings of pipelines or sanitary fittings depending on tasks to be performed and instruct workers accordingly. Supervises laying and joining of pipes, making connections with soak pit, fitting, sanitary appliances, cleaning blocked drain pipes, removing leakages, etc. and ensures proper installation and repairs done. Checks pipe lines and sewerage systems under his charge periodically or as required and maintains them in proper working order. Maintains records and registers and submits reports as required. May guide workers in installation of gas and hume pipes, making water and gas tight joints, removing water pipe leakages by lead burning, etc., if necessary.

ISCO 08 Unit Group Details:

Code 3123
Title Construction Supervisors

3123.0301 **Plumbing Foreman**

Plumbing Foreman is responsible for supervising, co-ordinating and scheduling the activities of supervisors, plumbers and other staffs.

Qualification Pack Details:

QP NOS Reference PSC/Q0113

QP NOS Name	Plumbing
Foreman	
NSQF Level	5

ISCO 08 Unit Group Details:

Code	3123
Title	Construction Supervisors

3123.0302**Plumbing Supervisor**

Plumbing Supervisor is responsible for supervising, co-ordinating and scheduling the activities of plumbers and other staffs.

Qualification Pack Details:

QP NOS Reference	PSC/Q0114
QP NOS Name	Plumbing
Supervisor	
NSQF Level	6

ISCO 08 Unit Group Details:

Code	3123
Title	Construction Supervisors

3123.0400**Electrical Supervisor, Wiring,**

Electrical Supervisor, Wiring plans, prepares, estimates and supervises installation of commercial, industrial and domestic wiring in factories, establishments and residential buildings. Visits site, decides number of points to be fixed and estimates costs according to type of wiring to be installed. Plans and prepares wiring diagram according to building layout, power and light points to be fixed, equal distribution of load, minimum exposure to weather, easy access for repairs and other factors as necessary to suit customer's requirements. Marks location of points, cut-outs, ceiling roses junction boxes etc., and

explains circuit to be drawn to Wireman. Arranges for materials, supervises installation of wiring and guides workers as necessary to ensure conformity with safety and electricity rules. Tests whole wiring systems with merger on completion of work to ensure continuity and proper installation. Connects to main switch fixed at convenient place and certifies on prescribed form that there is no leakage and wiring has been done in accordance with electricity act. May supervise installation of temporary wiring. May supervise installation of geyser, air-conditioners, booster pumps and other domestic appliances.

ISCO 08 Unit Group Details:

Code	3123
Title	Construction Supervisors

3123.0500**Supervisor and Foreman, Painting**

Supervisor and Foreman, Painting supervises sign writing and application of paint, varnish, distemper or lacquer on metal, wood, building, glass and other surfaces and ensures correct finish. Examines surface of structure or article to be worked upon and decides shade and type of paint, mixture or varnish to be used according to specifications or customers' requirements. Directs workers to smoothen surface to be painted or varnished to required finish by scrubbing chemical treatment or by polishing with emery or glass paper as necessary. Supervises preparation of base for spray and high class painting by application of putty on surface and its smoothening for applying first coat of paint. Guides

workers in mixing, straining of paints and varnish to required shade and consistency and supervises painting, smoothening and final polishing operations to ensure required gloss and finish desired. Maintains prescribed records and keeps tools and equipment in working order. May design stencils for brush and screen-printing.

ISCO 08 Unit Group Details:

Code	3123
Title	Construction Supervisors

3123.0600

Painting and Surface Treatment Line In Charge

Painting and Surface Treatment Line In Charge is responsible for supervising the various painting processes like surface treatment, preparation and top coat on different types of metallic frames, structures, jigs, plates, sheets etc. and managing operations for a line or a shift to fulfil the production plan as shared with the team

Qualification Pack Details:

QP NOS Reference	ASC/Q3306
QP NOS Name	Painting and Surface Treatment Line In Charge
NSQF Level	6

ISCO 08 Unit Group Details:

Code	3123
Title	Construction Supervisors

3123.0700

Painting Supervisor

Painting Supervisor is responsible for supervising the various painting processes like surface treatment, preparation and top coat on different types of metallic

frames, structures, jigs, plates, sheets etc. and managing operations for a line or a shift to fulfil the production plan as shared with the team.

Qualification Pack Details:

QP NOS Reference	ASC/Q3305
QP NOS Name	Painting
Supervisor	
NSQF Level	5

ISCO 08 Unit Group Details:

Code	3123
Title	Construction Supervisors

3127.9900

Supervisors and Foremen and Related Trades Workers in Painting, Building Structure Cleaning, Other

Supervisors and Foremen and Related Trades Workers, in Painting, Building Structure Cleaning, other include supervisory workers engaged in painting, building structure cleaning not elsewhere classified.

ISCO 08 Unit Group Details:

Code	3123
Title	Construction Supervisors

Group 313

Process Control Technicians

Process Control Technicians operate and monitor switchboards, computerized control systems, multi-function process control machinery and maintain processing units in electrical power generation and distribution, wastewater, sewage treatment and waste disposal plants, chemical, petroleum and natural gas refineries in metal processing and other multiple process operations.

Occupations in this Group are classified into the following Families:

3131	Power Production Plant Operators
3132	Incinerator and Water-Treatment Plant Operators
3133	Chemical Processing Plant Controllers
3134	Petroleum and Natural Gas Refining Plant Operators
3135	Metal Production Process Controllers
3139	Process Control Technicians, Not Elsewhere Classified

Family 3131

Power Production Plant Operators

Power-production Plant Operators operate, monitor and maintain switchboards and related equipment in electrical control centres which control the production and distribution of electric or other power in transmission networks. The equipment operated includes reactors, turbines, generators and other auxiliary equipment in electrical power generating stations.

3131.0100

Stationary Engine Driver, Steam

Stationary Engine Driver, Steam; Stationary Engine Operator Steam; Steam Engine Driver operates stationary steam engine to provide motive power for other equipment and plants. Checks and adjusts controls and starts engine; observes gauges and meters to ascertain running order of engine and makes further adjustments, if necessary; maintains water supply and steam pressure to required level, lubricates working parts, tightens loose parts and performs other servicing tasks to keep engine in running

order. May make minor repairs. May check and direct working of boiler.

ISCO 08 Unit Group Details:

Code 3131

Title Power Production Plant Operators

3131.0200

Stationary Engine Driver, Internal Combustion

Stationary Engine Driver, Internal Combustion; I.C. (Internal Combustion) Engine Driver; Stationary Engine Operator, Internal Combustion operates and maintains internal combustion engine run on petrol or diesel oil or gas to generate motive power to drive other equipment and plants. Checks oil level in engine tank by inserting graduated metal rod; turns fuel valve to admit oil to cylinder and starts engine; observes meters and gauges to determine operating condition and makes adjustments or minor repairs to ensure efficient performance; maintains supply of fuel, lubricates working parts, tightens loose parts and performs other servicing tasks to keep engine in good running order. May fit belt to wheel of engine to run other attached equipment and machinery. May be designated as DIESEL/GAS/PETROL/OIL ENGINE DRIVER according to type of fuel used.

ISCO 08 Unit Group Details:

Code 3131

Title Power Production Plant Operators

3131.0300

Turbine Operator, Steam

Turbine Operator, Steam; Turbo generator Operator, Steam operates steam powered turbine which drives generators for producing electricity. Starts turbine by

opening valve for supply of steam into turbine to rotate turbine wheels; runs turbine at low speed for pre-determined length of time and notifies the Switch-Board Operator when ready to run turbine at full working speed; increases speed of turbine and ensures that automatic regulator maintains correct working speed; notifies Switch-Board Operator that turbine can be synchronised with other power units in plant. Observes gauges and meters to ensure proper handling of load by turbine and its proper functioning; alters power output of turbine and makes other adjustments as necessary. Cuts out unit evaporator to conduct blow down of turbine for periodic overhauling. May keep records of instrument readings. May repair and overhaul equipment and other auxiliaries.

ISCO 08 Unit Group Details:

Code 3131

Title Power Production Plant Operators

3131.0400

Turbine Operator, Hydel

Turbine Operator, Hydel operates water-powered turbine which drives generators for producing electricity. Starts turbine by opening valves of pen-stock pipes to supply water to move turbine wheels; regulates flow of water into turbine to run it at required speed; checks operation of turbine for smooth and steady production of electricity by generators; controls water pressure in turbine, and safeguards against water leakage; ensures adequate cooling of turbine bearing by steady and continuous circulation of oil; observes gauges and meters to ascertain whether turbine can handle load and if working efficiently; checks for any abnormal sounds or movements of turbines. Alters power output of turbine and makes other

adjustments, as necessary. May keep records of instrument readings at regular intervals. May repair and overhaul turbines, when required.

ISCO 08 Unit Group Details:

Code 3131

Title Power Production Plant Operators

3131.0500

Power Plant Operator

Power-Plant Operator operates boilers, turbines, generators, and auxiliary equipment at generating plant to produce electricity: Monitors control board and regulates equipment, according to procedures and information obtained from recording and indicating instruments. Adjusts controls of water and cold feed systems, blowers, and igniters to start up or shut down boilers. Controls operation of boiler auxiliary equipment, such as water and vacuum pumps, coal driers and pulverisers, steam condensers, and soot blowers, to ensure efficient operation of boilers. Adjusts boiler controls to provide steam at specified temperature and pressure for turbine loads according to power demands. Adjusts controls to regulate speed, voltage, and phase of incoming turbines to coincide with voltage and phase of power being generated. Synchronizes incoming generating units with units in operation and closes circuit breaker at exact instant of coincidence. Monitors gauges to determine effect of generator load on related equipment, such as bus bars and voltage regulators. Adjusts transformer controls to regulate flow of power between generating stations and substations. Operates switchgear to regulate and transfer power loads to protect maintenance workers engaged in repairing or cleaning equipment. Records

malfunctions of equipment, instruments, or controls on log sheet.

ISCO 08 Unit Group Details:

Code 3131

Title Power Production Plant Operators

3131.0600

Electrical Switch Board Operator

Electrical Switch Board Operator: Switch Board Assistant; Switch Board Attendant; Sub-Station Attendant (Power Station) operates and attends switches and switch-gear on switch boards to regulate flow of electric current from power house or sub-station to different feeding units. Synchronises generators and motor connectors to bus bar (conductor forming common junction between two or more electrical circuits) receiving electrical current from other generating units by operating switches on panel board. Operates various controls to switch on and off current supply to different feeder units depending on load-requirements and as per instructions of superiors. Controls and regulates voltage, frequency and power factor according to demand and system condition. Disconnects generator from bus bar to decrease power output or to cut out faulty units and equalises load among remaining operating generators. Maintains records of switching operations and generator output at regular intervals and submits daily reports to superiors. Reports to superiors of major breakdown, power failure and malfunctioning of switch board equipment, instrument or relays. Isolates feeding units in case of break-down and fixes danger notices. May clean panel board periodically. May overhaul and repair panel equipment. May supervise working and cleaning of static or rotary electrical plants. May check voltage and

specific gravity of stand by storage batteries, maintain them and keep them fully charged.

ISCO 08 Unit Group Details:

Code 3131

Title Power Production Plant Operators

3131.0700

Oiler and Greaser, Stationary Engine and Machinery

Oiler and Greaser, Stationary Engines and Machinery cleans and lubricates moving parts or wearing surfaces of stationary engines or machinery. Fills oil cans, grease-guns with required type of lubricant; injects or pours lubricant on moving parts or into holes, oil cups, or reservoirs according to lubricating charts, instructional records or own judgement and knowledge of engine or machine to be lubricated; adjusts feed of oil from cups or reservoirs so that proper quantity reaches moving parts. Forces grease into bearings with grease guns or packs grease cups by hand and screws down cup to force grease to moving parts. Forces oil or smears grease on friction surfaces such as driving chains and guides. Keeps sumps (oil reservoir) for lubricating systems filled with oil. Cleans machine and equipment. May make minor adjustments, tighten loose parts and assist Machine Operator or Repairman. May keep records of tasks performed.

ISCO 08 Unit Group Details:

Code 3131

Title Power Production Plant Operators

3131.0800

Nuclear Plant Control Operator

Nuclear Plant Control Operator; controls nuclear reactor that produces steam for generation of electric power and co-ordinates operation of auxiliary equipment: Adjusts controls, under supervision, to start and shut down reactor and to regulate flux level, reactor period, coolant temperature, and rate of flow, control rod positions, and other control elements that affect power level within reactor, following standard instructions and prescribed practices. Dispatches orders and instructions to plant personnel through radiotelephone or intercommunication system to co-ordinate operation of such auxiliary equipment as pumps, compressors, switchgears, and water-treatment systems. May assist in preparing, transferring, loading, and unloading nuclear fuel elements. May control dual purpose reactors that produce plutonium and steam. May control operation of auxiliary equipment, such as turbines and generators.

ISCO 08 Unit Group Details:

Code 3131

Title Power Production Plant Operators

3131.0900

Breaker Tender

Breaker Tender; Breaker, Pit Attendant tends machines that break coal into lumps of specified size preparatory to pulverizing. Starts the revolving steel drum containing coal to break the coal as it tumbles and to pass through perforations in the drum. Starts conveyors to transfer coal to and from the breaker. Observes flow of material on belt to detect and remove foreign materials to clean jams. Removes metal from pocket of magnet separator, lubricates breaker with grease gun and oil can. Cleans work area

using shovel and broom. May assist with repair work.

ISCO 08 Unit Group Details:

Code 3131

Title Power Production Plant Operators

3131.1000

Hopper Attendant/Hopper Machine Operator

Hopper Attendant operates stationary or mobile hoppers mechanically by controlling valves or other devices to feed material into bins, kilns, furnaces, crushes, mines, etc. or to carry by conveyors or elevators-for further operations or filling. Operates machine by manipulating levers and switches to start hoppers for collecting materials and emptying them. Ensures that crushed material such as quartz, lime from crusher machine is dropped into the pit for conveying by hoppers, belt screw crushed material and emptying it into storage bins or tanks for further processing. Regulates speed or movement of hopper by control of lever or valve to carry correct quantity of material into kilns, furnaces, bin, tank etc. as necessary. Keeps place clean and tidy. May operate crusher machine. May replace or repair broken hopper buckets or baskets.

ISCO 08 Unit Group Details:

Code 3131

Title Power Production Plant Operators

3131.1100

Load Dispatcher

Load Dispatcher co-ordinates activities of personnel engaged in operating generating stations, substations, and lines of electric power system or electrified railway system to ensure adequate

production and distribution of electricity to meet power demands. In smaller systems, calculates load estimates according to corrected weather and consumer-demand of electric power required to meet fluctuating demands, or in larger systems receives load schedule for various generating stations. Monitors control board showing operating condition of lines and equipment throughout the system and makes adjustments or directs workers to make adjustments as conditions warrant. Notifies maintenance crew of location and de-energisation of troubled sector, and verifies that workers are clear of repaired equipment before directing energisation of the circuit. Contacts other utilities by telephone to arrange exchange of power according to existing contracts or during emergency and co-ordinates tie-in with other systems. Compiles operational records. May operate console of computer, which is programmed to automatically perform load-control functions. May calculate discharge rate of water in reservoirs utilising reports of rain, river flow, and water level in reservoirs, and directs setting of Watergates at hydroelectric plants to co-ordinate water flow and power generation for irrigation and flood control requirements.

ISCO 08 Unit Group Details:

Code 3131

Title Power Production Plant Operators

3131.9900

Power Production Plant Operators, Other

Power Production Plant Operators, Other include operators who operate, monitor and maintain switchboards and related equipment in electrical control centres which control the production and

distribution of electric or other power in transmission networks not elsewhere classified.

ISCO 08 Unit Group Details:

Code 3131

Title Power Production Plant Operators

Family 3132

Incinerator and Water-Treatment Plant Operators

Incinerator and Water-Treatment Plant Operators monitor and operate computerized control systems and related equipment in solid and liquid waste treatment plants to regulate the treatment and disposal of sewage and wastes, and in water filtration and treatment and distribution of water.

3132.0100

Ice Maker

Ice Maker tends refrigerating equipment that freezes water into ice, performing any combination of following tasks: Opens valves to fill containers with specified amounts of water, and lowers containers into freezing tanks, using hoist. Inserts air bubbler into containers and starts agitator in freezing tank to ensure uniform freezing. Siphons or pumps water containing foreign matter from centres of partially frozen ice blocks, using suction pump, and refills container with fresh water. Flushes surfaces of ice blocks with hose. Removes container from tank, using hoist, and immerses it in warm water or places it in steam bath to free ice from container sides. Positions cans on dumping pivot and pushes buttons to tilt pivot and dump ice onto conveyor or platform. Adds prescribed amounts of materials into mixing vats and starts

agitator to mix brine solution for freezing tanks. May turn valves to regulate compressors and condensers.

ISCO 08 Unit Group Details:

Code 3132

Title Incinerator and Water-Treatment Plant Operators

3132.0200

Reservoir Caretaker

Reservoir Caretaker controls equipment to regulate water flow and water level in reservoirs: Turns valves and pulls levers to regulate water flow through aqueduct and floodgates. Reads gauges and meters to control specified water flow, water levels, and water pressure in reservoir. Records data, such as water level, turbidity, temperature, and flow rate. Lubricates and performs minor repairs to equipment, using hand tools. Patrols area to detect property damage and to prevent trespassing. May tend heating apparatus to prevent freezing of valves and gates. May add chemicals to water to retard organic growth such as algae.

ISCO 08 Unit Group Details:

Code 3132

Title Incinerator and Water-Treatment Plant Operators

3132.0300

Gas-Compressor Operator

Gas-Compressor Operator operates steam or internal combustion engines to transmit, compress, or recover gases, such as butane, nitrogen, hydrogen, and natural gas in various production processes: Moves controls and turns valves to start compressor engines, pumps, and auxiliary equipment. Monitors meters, gauges, and recording instrument

charts to ensure specified temperature, pressure, and flow of gas through system. Observes operation of equipment to detect malfunctions. Records instrument readings and operational changes in operating log. May operate purification tanks to purify air or by-product gases. May tend pumps to mix specified amounts of acids and caustics with water for use in purifying gases. May perform minor repairs on equipment, using hand tools. May conduct chemical tests to determine sulphur or moisture content in gas.

ISCO 08 Unit Group Details:

Code 3132

Title Incinerator and Water-Treatment Plant Operators

3132.0400

Wastewater-Treatment-Plant Operator

Wastewater Treatment Plant Operator operates sewage treatment, sludge processing, and disposal equipment in wastewater (sewage) treatment plant to control flow and processing of sewage: Monitors control panels and adjusts valves and gates manually or by remote control to regulate flow of sewage. Observes variations in operating conditions and interprets meter and gauge readings and tests results to determine load requirements. Starts and stops pumps, engines, and generators to control flow of raw sewage through filtering, settling, aeration, and sludge digestion processes. Maintains log of operations and records meter and gauge readings. Gives directions to SEWAGE-DISPOSAL WORKERS in performing routine operations and maintenance. May collect sewage sample, using dipper or bottle and conduct laboratory tests, using testing equipment, such as colorimeter. May

operate and maintain power generating equipment to provide steam and electricity for plant.

ISCO 08 Unit Group Details:

Code 3132

Title Incinerator and Water-Treatment Plant Operators

as pump leaks or worn bearings. Repairs and lubricates equipment, using hand tools. Records data, such as utilization of equipment, power consumption, and water output in log. May operate equipment to treat and process raw water. May test water for chlorine content, alkalinity, acidity, or turbidity.

3132.0500

Heating-Plant Superintendent

Heating-Plant Superintendent supervises and co-ordinates activities of workers engaged in producing and distributing steam, heat and hot water in commercial or industrial establishments, and in maintaining mechanical equipment, such as boilers, pipe systems, pump, hot water generators, hot air furnaces, and air-cooling units.

ISCO 08 Unit Group Details:

Code 3132

Title Incinerator and Water-Treatment Plant Operators

ISCO 08 Unit Group Details:

Code 3132

Title Incinerator and Water-Treatment Plant Operators

3132.0600

Pump-Station Operator, Waterworks

Pump Station Operator, Waterworks operates pumping equipment to transfer raw water to treatment plant, or distribute processed water to residential, commercial, and industrial establishments: Turns valves, pulls levers, and flips switches to operate and control turbine-or motor-driven pumps that transfer water from reservoir to treatment plant, or to transfer processed water to consumer establishments. Reads flow meters and gauges to regulate equipment according to water consumption and demand. Inspects equipment to detect malfunctions, such

3132.0700

Air Compressor Operator

Air Compressor Operator; Compressor Driver operates and services power-driven air-compressor which generates and supplies compressed air to drive pneumatic tools, hoists and other mechanical equipment. Starts power unit and builds up required pressure; manipulates controls or sets automatic regulator to maintain correct supply of air to equipment; observes pressure, temperature and other gauges and makes further adjustments to controls as necessary; cleans and oils equipment, tightens loose parts and performs other servicing tasks to keep compressor in good running order. May connect pipelines from compressor to various equipment and make minor repairs. May operate mechanically or electrically driven compressor. May be designated as AIR COMPRESSOR OPERATOR STEAM; AIR COMPRESSOR OPERATOR, DIESEL etc. according to power used.

ISCO 08 Unit Group Details:

Code 3132

Title Incinerator and Water-Treatment Plant Operators

3132.0800**Ammonia Compressor Attendant**

Ammonia Compressor Attendant operates ammonia compressor and auxiliary unit for making ice by freezing water. Examines thermometers, pressure gauges and other instruments to ascertain working condition of plant, operates switches, thermostats and other controls to maintain desired temperatures; opens, closes and adjusts hand valves, associated with compressor and condenser, to control rate of suction and discharge of ammonia temperature, determining proper valve setting by observation of pressure and temperature gauges and knowledge of pressure and temperature required for efficient operation; ensures proper covering of freezing tank of plant with saw dust, and proper circulation of brine solution around tank; measures specific gravity of brine (saltwater) periodically; lowers cans containing water into freezing tank and covers lid; removes cans from freezing tank after ice is formed; separates ice blocks from cans after little thawing. Maintains prescribed records of meter readings, cleans equipment, and performs other tasks to keep system in good running order. May repair and overhaul plant. May adjust specific gravity by adding water, salt, or calcium chloride to solution.

ISCO 08 Unit Group Details:

Code 3132

Title Incinerator and Water-Treatment
Plant Operators**3132.0900****Air Conditioning and Refrigeration
Plant Attendant**

Air-Conditioning and Refrigeration Plant Attendant; Refrigeration System Operator

operates air-conditioning or refrigeration system for preserving food, providing cooling or warming media for industrial processes, cooling or warming buildings, or for other purposes. Manipulates various switches, at central control board to start and stop electric motors, pumps, compressors, coolers and other related equipment of refrigeration and air-conditioning system; observes readings in various meters, gauges and instruments regarding temperature, pressure and voltage of system to ascertain working condition of plant; operates switches, thermostats, rheostats and other controls to maintain desired level of temperature; cleans and resets generator brushes, replaces burned fuses and defective devices, thaws frozen valves, cleans equipment and performs other tasks such as oiling, greasing, cleaning of air and water filters etc. to keep system in good running order. May keep records of temperatures produced. May assist Refrigeration Mechanic in dismantling equipment for repairs.

ISCO 08 Unit Group Details:

Code 3132

Title Incinerator and Water-Treatment
Plant Operators**3132.1000****Pump Man**

Pump Man; Pump Operator; Pump House Attendant; Pump Driver; operates one or more power-driven machines for pumping, storing and supplying liquids or other fluid materials or for dewatering purposes. Starts pump, observes its operation and adjusts controls to maintain correct rate of pumping; stops pump when required quantity of fluid has been moved; cleans, oils and greases pump, tightens loose parts and performs other

servicing tasks to keep pump and equipment in good running order and safe condition. May do minor repairs. May connect pipe lines from pump to vessel to be filled or emptied. May be designated according to type of pump operated or type of material (fluid) pumped, as PUMP OPERATOR, STEAM; PUMP OPERATOR, DIESEL; PUMP OPERATOR (ELECTRIC); TUBE WELL OPERATOR.

ISCO 08 Unit Group Details:

Code 3132
Title Incinerator and Water-Treatment Plant Operators

3132.1100 **Exhaust Fan Operator**

Exhaust Fan Operator; Ventilating Equipment Operator operates power-driven motors, fans and related equipment to control ventilating system in mines, factories, stores and other establishments to remove foul air and gases from enclosed atmosphere. Inspects fans, motors and other parts of ventilating system; lubricates moving parts of equipment by filling cups with grease or oil; regulates speed of fans and adjusts dampers in ventilating ducts to control flow of air; makes minor repairs to equipment performing duties, such as tightening nuts, bolts and loose parts, replacing old or worn parts in thermostats, cleaning or replacing motor brushes. Assists Electrician or Electrical Fitter in dismantling fans and motors for repairs. May maintain air-cooling, air-conditioning, or air purification equipment. May be designated as FAN OPERATOR, CENTRAL HEATING; HEATING EQUIPMENT OPERATOR if operating central heating system.

ISCO 08 Unit Group Details:

Code 3132
Title Incinerator and Water-Treatment Plant Operators

3132.1200 **Blower Operator**

Blower Operator operates electrically driven blower for supplying air blast for converters, cupolas and blast furnaces. Starts blower and manipulates controls to maintain correct supply of air to furnace; observes further adjustments to controls, as necessary; checks pressure and increases or decreases it, as necessary, by changing engine speed; opens and closes duct chamber to regulate flow of air into different chambers of premises. Cleans and oils motors periodically. Many repair air ducts or tubes.

ISCO 08 Unit Group Details:

Code 3132
Title Incinerator and Water-Treatment Plant Operators

3132.1300 **Incinerator Operator**

Incinerator Operator; Furnace Man, Refuse Disposal controls equipment to burn garbage, refuse and sludge cake in incinerator plant. Directs workers in feeding waste material into furnace. Starts forced air-draft blower and turns valve to admit liquid or gaseous fuel or signals workers to shovel coal into furnace. Lights fire in furnace by pressing electric-arc ignition switch or by other device. Observes and adjusts combustion control devices, such as pyrometers, meters and burners to maintain specified temperatures and to obtain efficient combustion. Moves levers to open grates for ash removal and turns valve on waterline to sprinkle and settle ashes.

May tend low pressure and settle ashes. May tend low pressure boiler to provide steam to heat plant. May repair furnace refractory lining with fire-brick and replace and adjust machine parts.

ISCO 08 Unit Group Details:

Code 3132

Title Incinerator and Water-Treatment Plant Operators

3132.9900

Incinerator and Water-Treatment Plant Operators, Other

Incinerator and Water-Treatment Plant Operators, Other include Plant Operators who monitor and operate computerized control systems and related equipment in solid and liquid waste treatment plants to regulate the treatment and disposal of sewage and wastes, and in water filtration and treatment plants to regulate the treatment and distribution of water not elsewhere classified.

ISCO 08 Unit Group Details:

Code 3132

Title Incinerator and Water-Treatment Plant Operators

Family 3133

Chemical Processing Plant Controllers

Chemical processing plant controllers operate and monitor chemical plants and adjust and maintain, processing units and equipment which distil, filter, separate, heat or refine chemicals.

3133.0100

Process Man, Chemical

Process Man, Chemical process chemical ingredients by mixing in specific proportions, heating, distilling, cooling, filtering, blending, percolating, refining, pulverising, etc. for causing chemical reactions for research or production. Obtains scheme of processing from Chemist; sets apparatus and equipment; collects chemicals in required quantities; regulates feed of gaseous, liquid or solid materials into equipment. Checks progress of process by looking through peep holes, observing temperature readings, pressure gauges and other instruments and making simple chemical tests; regulates material feed, and heating and cooling devices and makes other adjustments necessary to ensure that processes are correctly carried out. Strains, filters and distils chemical substances to obtain required product in purified form. Implements safety measures in regards to operation of plant/machinery and in handling and processing materials such as acids, oils and maintains machinery. May be designated, according to type of material processed or plant in charge of, such as DISTILLING STILL ATTENDANT, FILTER PRESSMAN, etc.

ISCO 08 Unit Group Details:

Code 3133

Title Chemical Processing Plant Controllers

3133.0200

Furnace Operator (Chemical)

Furnace Operator (Chemical) controls continuous-process furnace and related equipment to decompose salt cake, forming hydrogen chloride: Starts salt conveyors or shovels salt cake into furnace; turns valves to fill furnace reaction pot with sulfuric acid from supply

tank; and sets burners, dampers, and vents to fire furnace to specified temperature and effect liberation of hydrogen chloride. Computes salt and acid requirements, using instrument readings and formulae and sets feed scales and timers for continuous operation or manually regulates feed and temperature controls to maintain production in conformity with plant standards. Removes scale from furnace walls and agitates salt cake to maintain efficient production, using scrapers and rake. Starts or regulates speed of salt-removal device to prepare furnace for new charge. Maintains log of shift production, gauge readings, and equipment failures.

ISCO 08 Unit Group Details:

Code 3133
Title Chemical Processing Plant Controllers

3133.0300 **Boiling-Tub Operator (Chemical)**

Boiling-Tub Operator (Chemical) tends tanks in which crude tetryl explosive or nitrocellulose is boiled and washed to remove acids and impurities: Admits batch of crude tetryl slurry to boiling tank. Starts tank agitators and turns valve to admit steam to tank jacket to boil slurry for specified time. Pumps off water after material has settled. Pumps fresh water through tank to wash tetryl and flush away impurities. When boiling nitrocellulose, admits acid to tub and boils contents for specified time, adds neutralizing agent, and repeats process until all nitrocellulose impurities are removed. May test acidity of solution, using hydrometer or titration test.

ISCO 08 Unit Group Details:

Code 3133

Title Chemical Processing Plant Controllers

3133.0400 **Batch Still Operator, Chemical**

Batch-Still Operator, Chemical operates one or more stills in which batches of liquid chemicals, other than petroleum, are treated to separate them into their chemical constituent such as alcohol beverages, perfume or drugs or to refine those constituents. Manipulates feed valves to fill tank with liquid to desired levels; adjusts valves to control pressure in tank and rate of heating; regulates valves to control amount of condensed vapour returned to tank to enrich vapours driven from it; draws, from containers receiving condensed vapours, product samples for testing either on their own or in laboratory; determines by purity of samples, container to which product should be routed. Maintains record of raw materials drawn, quantity consumed to indicate production capacity of plant; enters in log book condition of plant and abnormalities noticed in distillation during shift for report to Chemist. May make adjustments to still auxiliaries such as condensers and pumps. May operate ordinary type of wood-fire distillation plant. May be designated according to type of chemicals used and industry attached to e.g. AMMONIA STILL OPERATOR; ALCOHOL STILL OPERATOR; BENZENE STILL OPERATOR.

ISCO 08 Unit Group Details:

Code 3133
Title Chemical Processing Plant Controllers

3133.0500 **Continuous Still Operator, Chemical**

Continuous Still Operator, Chemical; Distillation Operator tends one or more stills in which continuous feed of liquid chemical, other than petroleum is heated to separate into chemical constituents by regulating temperature, pressure, cooling valves etc. Adjusts feed valves to allow liquid to enter still at prescribed rate; adjusts controls to maintain temperature at various levels of still and to maintain prescribed pressure in still; regulates valves to control amount of condensed vapour returned to still to enrich vapours driven from it; draws, from containers receiving condensed vapours, product samples for testing either themselves or in the laboratory; determines by purity of samples to which container product should be routed; returns impure samples to main stock; maintains record of temperature, pressure and feed indicator readings. May make adjustments to still auxiliaries such as heat exchangers, absorbers, strippers, boilers and compressors. May specialize in type of chemical treated and be designated accordingly.

ISCO 08 Unit Group Details:

Code 3133

Title Chemical Processing Plant
Controllers

3133.0600

Bleaching Operator, Chemical

Bleaching Operator, Chemical; Bleacher Operator Chemical operates bleaching machine and treats chemical solution with bleaching reagents to improve their colour. Pumps liquids and chemical solutions to be bleached into tank; adds bleaching reagents and ingredients determined by formula by pumping or opening valves; starts agitator; observes and controls temperature and speed of agitator and regulates steam valves;

continues bleaching for desired time till acceptable bleach product is obtained; samples bleached product and sends it to control laboratory to test and check for chemical specifications. Filters products with the help of filter press and takes filtered products into storage tanks or to another department for further processing. Records weights of materials used and time required for bleaching. Maintains, oils, adjusts and makes minor repairs to equipment, implements safety measures in regard to operation of plant/machinery and in handling and processing materials.

ISCO 08 Unit Group Details:

Code 3133

Title Chemical Processing Plant
Controllers

3133.0700

Chemical Process Operator (Radio Active Materials)

Chemical Process Operator (Radio-Active Materials) controls laboratory equipment to prepare radioisotopes and other radioactive materials for use as tracers in biological, biochemical, and physiological and industrial research. Places specified amounts of chemicals to be irradiated into container, and secure vacuum pump head to outlet valve on container to replace air with inert gas. Drives pickup or forklift truck to transport container to nuclear reactor for irradiation and from reactor to processing area. Lifts container of irradiated material from truck using hoist and positions container over opening in concrete and lead cell. Moves remote control lever to open container and dump radioactive contents into glass tube in chamber of protective cell. Opens pneumatic valves or uses slave manipulators to add specified types and quantities of liquid reagents to glass

vessel, dissolve and transfers radioactive samples into ion exchange tube, washes radioisotopes from side of ion exchange tube into collection vessel and transfers sample of glass flask, observing chemical reaction through periscope. Drains liquid into glass tube and performs standard chemical analysis involving titration and filtration, to ensure that radioisotopes conform to specifications. Places tube in metal container and crimps top to close container. Places container in carbon, encloses descriptive literature, and seals carbon. Compiles records including dates, production and related information. Decontaminates glassware and other equipment during shut down using cloth and soapy water.

ISCO 08 Unit Group Details:

Code 3133
Title Chemical Processing Plant Controllers

3133.0800

Hot-Cell Technician

Hot-Cell Technician operates remote-controlled equipment in hot cell to conduct metallurgical and chemical tests on radioactive materials: Controls slave manipulators from outside cell to remove metal or chemical materials from shielded containers inside hot cell and places on bench or equipment work station. Tests chemical or metallurgical properties of materials according to standardised procedures, and observes reaction through cell window. Sets up and operates machines to cut, lap, and polish test pieces, following blueprints, x-ray negatives, and sketches. Tests physical properties, using equipment, such as tensile tester, hardness tester, metallographic unit, micrometre, and gauges. Immerses test sample in chemical

compound to prepare for testing. Places irradiated nuclear fuel materials in environmental chamber to test reaction to temperature changes. Records results of tests for further analysis by engineers, scientists, or customers. Places specimen in shielded container for removal from cell, using manipulators. Participates in cleaning and decontamination of cell during maintenance shutdown. May devise adapters and fixtures for use in hot cell operations.

ISCO 08 Unit Group Details:

Code 3133
Title Chemical Processing Plant Controllers

3133.9900

Chemical Processing Plant Controllers, Other

Chemical Processing Plant Controllers, Other include plant controllers who operate and monitor chemical plants and adjust and maintain, processing units and equipment which distil, filter, separate, heat or refine chemicals not elsewhere classified.

ISCO 08 Unit Group Details:

Code 3133
Title Chemical Processing Plant Controllers

Family 3134

Petroleum and Natural Gas Refining Plant Operators

Petroleum and Natural Gas Refining Plant Operators operate and monitor plants and adjust and maintain processing units and equipment which refine, distil and treat petroleum, petroleum-based products and by-products, or natural gas.

3134.0100
Continuous Still Operator,
Petroleum

Continuous Still Operator, Petroleum; Stillman, Petroleum operates one or more continuous stills for distilling or refining crude oil to obtain fuel gas, gasoline, kerosene, diesel oil, lubricating oil, wax, bitumen, etc. Reads processing schedules, operating logs, test results of oil samples, and laboratory recommendations to determine changes in equipment controls required to produce specified quantity and quality of product; moves and sets controls, such as knobs, valves, switches, levers, and index arms on control panels to adjust, maintain, and co-ordinate process variables, such as flows, temperatures, pressures, vacuum, time, catalyst, and chemicals, by automatic regulation and remote control of processing units, such as heaters furnaces, compressors, exchangers, recharges, absorbers. Moves controls to regulate valves, pumps, compressors, and auxiliary equipment to direct flow of product, reads temperature and pressure gauges and flow meters, records readings, and compiles operating records; tests products for specific gravity and observes their colour to determine whether processing is being carried out properly; makes minor adjustments to equipment; shuts down still for cleaning and opens it up again; supervises workers who assist in operation of still. May fire oil or gas burning furnace through which oil is run to heat it to processing temperature. May specialize in a particular type of still, kind of oil processed, and be designated according to process involved or plant operated as ABSORPTION PLANT OPERATOR; PURIFICATION OPERATOR; STILLMAN; CRACKING UNIT; STILLMAN, POLYMERIZATION, etc.

ISCO 08 Unit Group Details:
Code 3134
Title Petroleum and Natural Gas Refining Plant Operators

3134.0200
Still Man Gas Plant/Gas Plant Operator (Petrol Refining)

Still Man, Gas Plant; Desulphurizer Operator; Gas Plant Operator (Petrol Refining) tends operation of unit in which pressure distillate and non-condensable gases are treated to extract those gases which are used as fuel. Observes various temperature, pressure and flow gauges of unit to ensure that unit is functioning properly and records readings. Adjusts valves to regulate height of liquid level in dephlegmator so that maximum separation of vapours from liquid will be obtained and vapours will be prevented from flowing back into unit and to regulate flow of gases through unit. Operates and controls speed of pumps to regulate flow of liquids through unit. Controls temperature and pressure of unit by setting automatic regulator at points desired. Winds and changes charts on recording meters. Shuts down unit and cleans it out with steam and water, exercising caution to prevent explosion. May oil and grease pumps.

ISCO 08 Unit Group Details:
Code 3134
Title Petroleum and Natural Gas Refining Plant Operators

3134.0300
Pump Man (Petroleum Refining)

Pump man (Petroleum Refining) controls pumps and manifold systems to circulate crude semi compressed and finished

petroleum products, water and chemical solutions through processing and storage departments of refinery according to schedules or instructions and plans movement of product through lines of processing and storage unit, utilizing knowledge of interconnections and capacities of pipelines, valve manifolds, pumps and tanks. Synchronizes activities with other pump houses to assure continuous flow of products and minimum contamination between products. Starts battery of pumps, observes pressure and flow meter and turns valve to regulate pumping speeds according to schedules. Turns hand wheels to open line valves to direct flow of product. Signals by telephone to operate pumps in designed units to open and closed pipeline and tank valves and to gauge, sample and determine temperature of tank contents. Records operating data, such as products and quantities pumped, stocks used, gauging results and operating time. May blend oil and gasoline. May repair pumps, lines and auxiliary equipment.

ISCO 08 Unit Group Details:

Code 3134

Title Petroleum and Natural Gas Refining Plant Operators

3134.0400

Control Man (Petroleum Refining)

Control Man (Petroleum Refining) operates control panel to regulate temperature, pressure, rate of flow, and tank level in petroleum refining, processing and treating units and petrochemical units, according to process schedules. Observes instruments and meters to verify specified conditions and record readings. Moves and adjusts dials, switches, valves and levers on control panel to regulate and co-ordinate process

variables, such as flows, temperatures, pressures, vacuum, time catalyst and chemicals as specified. Reports malfunctioning equipment to Still Man. Records results of laboratory analysis. May test products for chemical characteristics and colour, or send them to laboratory for analysis. May change recording charts and ink pens. May operate auxiliary equipment to assist in distilling or treating operations. May be designated according to type of process or unit in which employed such as CONTROL MAN, CRACKING UNIT; CONTROL MAN, CRUDE UNIT; CONTROL MAN, POLYMERISATION UNIT; SOLVENT 'TREATING' PLANT CONTROL MAN etc.

ISCO 08 Unit Group Details:

Code 3134

Title Petroleum and Natural Gas Refining Plant Operators

3134.0500

Blender (Petroleum Refining)

Blender (Petroleum Refining) controls equipment to blend straight run of natural gasoline with chemicals, tetra-ethyl leads, and light distillates of crude oil to produce commercial fuel, according to formula. Reads blending schedules specifying components and quantities to be blended. Turns, controls to open valves and starts pumps or directs Pump Man to transfer gasoline to blending tanks. Completes amount of addition or sets weighing machine that automatically weighs quantities of additives in ratio to quantity of gasoline. Turns hand wheel to open valves to spray jets to admit and circulate specified quantities of gasoline, additives and chemicals in mixing tanks. Move controls of pumps, agitators and mixtures to blend mixture mechanically or with air agitation. Observes temperature gauges

and turns valves to regulate and maintain specified temperature in tanks. Draws sample of mixture for laboratory analysis. Repeats blending process as required by laboratory recommendations or starts pump to draw off blended gasoline to storage tanks or leading racks. Opens valves to draw off chemical and lead residue. Records quantity blended and materials used. Lubricates, adjusts, and repairs pumps, agitators, and mixers. May test products. May operate control panel utilizing electronic computer and controls to blend products in pipelines. May be designated according to type of additive used as ETHYL BLENDER.

ISCO 08 Unit Group Details:

Code 3134
Title Petroleum and Natural Gas Refining Plant Operators

3134.0600 Paraffin Plant Operator (Petrol Refining)

Paraffin Plant Operator (Petrol Refining) operates filter presses to separate oil of paraffin distillate from paraffin wax. Installs filter plates using hand tools, and turns hand wheel to adjust hydraulic ram pressure. Turns valves to regulate flow of chilled distillate in to filter press. Starts machine to activate hydraulic rams to squeeze oil from distillate, as wax solidifies. Observes oil pressed from filter plates and adjust ram pressure to extracts maximum amount of oil from wax. Scraps accumulated wax from filter plate in to spiral conveyer that carries it to melting pan. Turns valve to regulate flow of steam in to melting pan to heat wax.. Start pumps to return salvaged distillate from tank to filter press for re-processing. May be designated according to phase of

processing as LEAK MAN, PARAFFIN PLANT; PRESSMAN, PARAFFIN PLANT.

ISCO 08 Unit Group Details:

Code 3134
Title Petroleum and Natural Gas Refining Plant Operators

3134.0700 Pump Station Operator

Pump-Station Operator; operates electric, diesel, gas, or automated pumping equipment to pump and route petroleum products through pipelines at main-line or terminal stations according to instructions and destination: Turns valves and starts engines to pump oil through station. Reads flow and pressure meters, and turns valves to vary pumping rate and line pressure, according to specifications. Turns hand wheel to open or close pipeline valves to direct flow of oil to storage tanks according to grade; to direct flow of oil through station and along pipeline, according to destination; or to switch oil to alternative pipelines to prevent contamination between grades. Inspects pumping equipment to detect malfunctioning and leaks. Lubricates machinery, and repairs and adjusts pumps and equipment, using hand tools. Records pressures, temperature, and flow rates, and maintains records of oil stock and oil receipts. May pump natural gas or natural gas liquid products. May gauge and test oil. May use radiotelephone equipment.

ISCO 08 Unit Group Details:

Code 3134
Title Petroleum and Natural Gas Refining Plant Operators

3134.0800 Treating-Plant Operator

Treating-Plant Operator controls continuous-treating or batch-treating equipment to process petroleum products, such as petroleum, kerosene, and lubricating oils, with chemicals, solvents, steam, clay, and hydrogen to remove impurities and to improve colour, odour, and stability, according to specifications: Moves and sets levers, switches, dials, and hand wheels to admit products and treating agents to processing units in specified ratio; to direct flow of products through treating stages, such as mixing, precipitating, and neutralising; and to regulate temperatures, pressures, and circulation rates of treating equipment. Observes temperature gauges, pressure gauges, and flowmeters; records readings; and compiles operating records. Patrols unit to detect malfunctions and leaks. Opens bleeder valves to sample products and tests them for chemical characteristics, specific gravity, and colour, or sends sample to laboratory for analysis. Reprocesses products or pumps them to storage tanks, according to test results and laboratory recommendations. Opens valves to drain sludge from units. May repair and lubricate equipment. May treat products, using hydrogen-catalytic process.

ISCO 08 Unit Group Details:

Code 3134
Title Petroleum and Natural Gas Refining Plant Operators

3134.9900

Petroleum Refining Workers, Other

Petroleum Refining Workers, Other includes all other petroleum refining workers engaged in refining petroleum and their products, not elsewhere classified.

ISCO 08 Unit Group Details:

Code 3134
Title Petroleum and Natural Gas Refining Plant Operators

Family 3135

Metal Production Process Controllers

Metal production process controllers operate and monitor multi-function process control machinery and equipment to control the processing of metal converting and refining furnaces, metal-rolling mills, metal heat-treating, or metal-extrusion plant.

3135.0500

Mixer Man

Mixer Man receives blast furnace molten metal from crane operated ladles into mixer furnace and transfers same to convertor, at correct temperature, as and when required. Adjusts mouth of mixer furnace by mechanical device and directs Crane Driver operating tilting ladle to pour molten metal into mixer furnace. Adjusts coke oven gas burners to maintain correct temperature of received molten metal. Tilts mixer furnace by electrical device for pouring molten metal into empty ladles for transferring it into Bessemer (duplex) convertor. Keeps account of metal received and delivered. May undertake electrical and mechanical running repairs.

ISCO 08 Unit Group Details:

Code 3135
Title Metal Production Process Controllers

3135.0600

Convertor Blower/Convertor Blower Technician

Convertor Blower; Blower Man; Steel Blower operates Bessemer convertor for obtaining required carbon content in molten iron for manufacture of steel by blowing. Tilts convertor by electrical device to receive molten metal from ladles (coming from mixer furnace). Blows air and steam into convertor at required pressure by operating electric switches. Brings convertor to vertical position and continues blowing. Judges metal condition from flames and sparks shooting out of convertor. Stops blowing when satisfied that molten metal is blown for further processing into steel. Tilts convertor to pour metal into another ladle for next operation. May watch signals from furnace and power house and take necessary action. May also maintain log book for recording serial number of blow, time, bottom number, vessel number blows on bottom etc.

ISCO 08 Unit Group Details:

Code 3135
Title Metal Production Process Controllers

3135.0700 Convertor Man/Convertor Blower Technician

Converter Man transfers molten metal from mixed furnace ladles to Bessemer converter with help of crane for blowing molten metal. Guides Converter Blower and Crane Driver for tilting converter and ladle to required angle for pouring molten metal from ladle in to converter and for transferring blown metal into another ladle. Inspects bottom and tuyeres (air passages) after each blowing. Closes defective tuyeres by steel plate, firebricks and clay, if necessary. Directs all running repairs of converter. May also supervise

changing of bottom and shoulder of converter.

ISCO 08 Unit Group Details:

Code 3135
Title Metal Production Process Controllers

3135.0900

Furnace Operator (Nonferrous Metal)

Furnace Operator (Nonferrous Metal) operates furnace to heat aluminium slabs and fabricated forms to specified temperature for rolling or processing: Sets furnace controls to regulate temperatures and heating time. Starts conveyors and opens furnace doors to admit slabs, plate, sheet, and coil, or signals Overhead Crane Operator to uncover soaking pits and lower ingots into them. Observes pyrometer and adjusts rheostat controls to maintain temperature between specified limits. Measures temperature of product to determine necessity for adjusting furnace temperature or timing cycle, using thermal instruments and charts. Removes material from furnace, using crane, or signals Overhead Crane Operator to transfer it to next station. Records time and production data.

ISCO 08 Unit Group Details:

Code 3135
Title Metal Production Process Controllers

3135.1100

Furnace Operator, Open Hearth

Furnace Operator, Open Hearth; Furnace Operator First Hand, Open Hearth (Steel Manufacture) operates open hearth furnace for making steel from blown

metal (iron). Charges furnace with scrap, blown and molten metal received from convertor and blast furnace, chemicals etc., according to type of steel required. Controls fuel intake and flow of air in furnace to suit furnace condition. Takes care not to damage refractory work of furnace. Gets furnace ready for tapping and directs Furnace Operator Second Hand to open tapping hole of furnace closed for ascertaining suitability of further operation. May spray furnace sides with dolomite for maintaining proper furnace condition.

ISCO 08 Unit Group Details:

Code 3135
Title Metal Production Process Controllers

3135.1200

Furnace Operator, Second Hand, Open Hearth

Furnace Operator, Second Hand, Open Hearth (Steel Manufacturing) assists Furnace Operator, First Hand taps molten steel from furnace and adds, chemicals, oxides, etc. Keeps oxide and fluxes ready for charging into furnace. Maintains spout for flow of molten steel in proper condition. Leads gang of Helpers and Khalasis on receipt of instructions from Furnace Operator First Hand to open tapping hole of furnace by compressed air gun, oxygen cylinder with pipes or other devices. Ensures that molten metal flows smoothly into ladle. Adds various chemicals, oxides and fluxes in ladle to obtain correct specification of steel. Closes tapping hole by dolomite, coke mixtures, etc. Repairs, maintains and dresses runner (channel for flow of molten steel) with fire clay bricks, loan, etc. during tapping intervals. May assist Furnace Operator First Hand in changing

furnace and in spraying dolomite on furnace banks (sides). May be designated as FURNACE KEEPER or TAPPER, if employed in blast furnace.

ISCO 08 Unit Group Details:

Code 3135
Title Metal Production Process Controllers

3135.1300

Furnace Operator (Smelting and Refining)

Furnace Operator (Smelting & Refining) operates furnace to remove moisture, arsenic, or sulphur from ore: Charges top hearth of roaster with ore, regulating rate of charge by means of chute door. Determines speed with which roaster is being charged by weighing sample of charge ore obtained over measured interval of time. Starts rabbles (automatic rakes) that scrape hearth beds continually and move ore from one hearth to next lower one. Regulates draft and temperature of roaster by adjusting dampers and gas pressure. Replaces rabble arms by detaching arm from shaft with bar and removing it with hoist. Replaces defective rabble teeth. Directs workers in removing incrustations from hearth beds. Removes samples of roasted ore for laboratory analysis. May clean arms and rabbles with scrapers and iron bars. May determine oxide content of dried ore by titrating specified amount of flakes and calculating percentage. May replace defective parts and clean equipment, thermal instruments and charts. Removes material from furnace, using crane, or signals OVERHEAD CRANE OPERATOR (any industry) to transfer it to next station. Records time and production data.

ISCO 08 Unit Group Details:

Code 3135
 Title Metal Production Process Controllers

3135.1401**Shift In Charge Furnace Ferro Alloys**

Shift In Charge Furnace Ferro Alloys takes responsibility of a particular shift for the entire operation of the furnace, starting from raw material feed until the final product is tapped and transferred with an assurance of quality product.

Qualification Pack Details:

QP NOS Reference	ISC/Q1104
QP NOS Name	Shift In Charge Furnace Ferro Alloys
NSQF Level	5

ISCO 08 Unit Group Details:

Code 3135
 Title Metal Production Process Controllers

3135.1700**Roller, Merchant Mill/Mill Operator**

Roller, Merchant Mill; Roller, Billet Mill sets, rolls, checks, directs and co-ordinates operations of rolling mill. Checks general condition of mill. Directs and ensures proper supply of billets to re-heating furnace and from furnace to mill for rolling. Sets rolls, checks guides, adjusts controls, stands and functional parts of mill. Rolls trial bar or plate and makes necessary adjustments. Continues rolling and makes adjustments according to defects revealed in samples taken from time to time. Co-ordinates work of mill crew such as Guide Setter, Tongsman, Labourers, and ensures smooth running of

mill. Keeps mill tackles, rolls, men, etc., ready for mill changing (rolling sizes). May also conduct minor running repairs.

ISCO 08 Unit Group Details:

Code 3135
 Title Metal Production Process Controllers

3135.1800**Roller, Sheet Mill/Mill Operator**

Roller Sheet Mill; Rough Roller; Eight Roller; Finishing Roller; Four Roller rolls pack (metal plates or sheets) between mechanically or electrically driven rolls for making metal sheets of specific sizes. Sets roll pressure as per direction. Holds hot metal plate or sheet with tongs, pushes them into rolls, controls roll temperature by opening steam and water on them and rolls plate or sheet in between rolls for required number of times with gradually increased pressure by screwing device. Ensures correct rolling both for finish and sizes. May change position with other Rollers, Sheet Mill. May be designated as COLD ROLLER if engaged in cold rolling of annealed sheets for tinning, sizing, forming, etc.

ISCO 08 Unit Group Details:

Code 3135
 Title Metal Production Process Controllers

3135.1900**Operator, Hot Rolling Mill (Non-Ferrous Metal)/Mill Operator**

Operator Hot Rolling Mill (Non-Ferrous Metal) controls and operates hot mill for sizing down metal slabs to required specifications. Judges temperature of slabs before starting rolling. Switches on

screw ' down 'Motor and adjusts roll gap according to material and thickness of slab with help of gap indicating dial gauge. Switches on pumps for supply of coolant to slabs or sheets under rolls. Watches light signals and operate, lifting and tilting tables by electric switches. Repeats process of narrowing down roll gap until required thickness is obtained. Keeps account of slabs rolled.

ISCO 08 Unit Group Details:

Code 3135
Title Metal Production Process Controllers

3135.2000

Roller, Hot Rolling Mill (Non-Ferrous Metal)/Mill Operator

Roller, Hot Rolling Mill (Non-Ferrous Metal) guides and controls ingoing and returning hot slabs or sheets with help of metal pushers (mild steel hammer like tool with long handle). Receives hot slabs one at a time from pre-heating furnace. Sets slab square on conveyor table (metal table with rollers) and signals to Operator Hot Rolling Mill. Lubricates slabs with oil by oil can and mop. Travels along table with slab and pushes it square in to rolls by metal pushers. Checks and stops returning slab or sheet by metal pushers. Repeats process till required size is attained. May reject material if deformed during rolling.

ISCO 08 Unit Group Details:

Code 3135
Title Metal Production Process Controllers

3135.2001

Fluid Management Operator Rolling Mills

Fluid Management Operator Rolling Mills prepares supply collection, evaluation and operation of all fluids connected with rolling operation in steel plant. It involves ensuring the right quantity and quality of fluid, its operation, inventory management, waste fluid disposal and the basic maintenance activities associated with maintaining the system.

Qualification Pack Details:

QP NOS Reference	ISC/Q0603
QP NOS Name	Fluid
Management Operator Rolling Mills	
NSQF Level	4

ISCO 08 Unit Group Details:

Code 3135
Title Metal Production Process Controllers

3135.2002

Process Operator Rolling Mills

Process Operator Rolling Mills keeps different process lines functional by ensuring continuity of process. It also involves providing the actual commands for different operations as needed and monitor the operations for any deviations. It includes inspecting the material between processes to ensure alignment to specifications.

Qualification Pack Details:

QP NOS Reference	ISC/Q0701
QP NOS Name	Process
Operator Rolling Mills	
NSQF Level	5

ISCO 08 Unit Group Details:

Code 3135
Title Metal Production Process Controllers

3135.2003**Coil Packaging Machine Operator
Rolling Mills**

Coil Packaging Machine Operator Rolling Mills operates the coil master (coil packaging machine) for packaging the finished coils (CR, Galvanised, Tinned, Colour Coated etc.) strapping operation and waggon unitisation in safe and secure manner. It includes bundling of the coil after mill, protecting the coil from dust, humidity, rain and handling damage by applying protective films and sheets in a designed sequence. Weighing and labelling the packaged coil according to specifications and finally ensuring readiness of coils for dispatch.

Qualification Pack Details:

QP NOS Reference	ISC/Q0602
QP NOS Name	Coil
Packaging Machine Operator Rolling Mills	
NSQF Level	3

ISCO 08 Unit Group Details:

Code	3135
Title	Metal Production Process Controllers

3135.2300**Operator, Strip Mill (Non Ferrous Metal)**

Operator, Strip Mill (Non-Ferrous Metal); Roller, Strip Mill; Roller, Strip Mill First Hand re-rolls strips to required thickness, coils them by machine and co-ordinates various functions of strip mill. Sets roll gap by electrical controls, lubricate rolls and adjust friction clutch to draw strip in to rolls. Directs Roller Second Hand, Strip Mill in his work. Checks thickness of rolled strips from time to time by micrometre or standard wire gauge and makes

adjustments if necessary. Maintains records of rolled strip.

ISCO 08 Unit Group Details:

Code	3135
Title	Metal Production Process Controllers

3135.2500**Seamless Pipe and Tube Roller**

Seamless Pipe and Tube Roller operates rolls to form seamless pipe and tubes from billets which have been pierced longitudinally. Examines drawings and specifications. Selects and installs rolls which form specified outside diameter of tubing. Selects and screws to a power driven rod a plug that rotates inside the billet and forces it to expand to the proper inside diameter. runs billet through successive sets of rolls until dimensions of tubing meet specification. Examines and measures tubing for defect and for conformity to specifications.

ISCO 08 Unit Group Details:

Code	3135
Title	Metal Production Process Controllers

3135.2600**Furnace Man, Reverberatory,
Pulverised Coal Fired**

Furnace Man Reverberate, Pulverized Coal Fired operates pulverized coal fired reverberatory furnace for melting iron or steel for heavy castings. Arranges for setting of furnace. Controls blast and temperature by means of valves and blowers. Supervises and controls charging of furnace by watching flame and atmospheric condition in side chamber. Records reading of various meters and changes furnace condition by controlling

feeding of pulverized coal and blast. Draws out samples of metals and slag at intervals and gets them analysed. Refines metal by adding Ferro-alloys to melting metals. Supervises furnace repairs. May do chemical analysis of samples.

ISCO 08 Unit Group Details:

Code 3135
Title Metal Production Process Controllers

3135.3001 **Heat Treatment Shop Supervisor**

This role is responsible for supervising the various heat treatment activities through application of heat like Carburizing, Tempering, Nitriding, Induction Hardening and Quenching, and maintaining process parameters and conducting quality checks on output product. Deploying manpower as per requirement, guiding operators and technicians to complete the assigned task, maintaining a safe and healthy working environment on the shop floor and maintaining records related to production, rejections, material movement and manpower productivity for a line/shift.

Qualification Pack Details:

QP NOS Reference	ASC/Q3902
QP NOS Name	Heat
Treatment Shop Supervisor	
NSQF Level	5

ISCO 08 Unit Group Details:

Code 3135
Title Metal Production Process Controllers

3135.3100 **Centrifugal Casting Machine Operator**

Centrifugal Casting Machine Operator operates centrifugal casting machine to cast tubular metal products such as brake drums, pipes, artillery barrels etc. selects required types of mould, grinds off and cleans rough spot from inside, using specially devised grinding attachment and brush, and fills inside pits with refractory material. Sets mould on machine and fastens cover on ends of mould. Mounts pouring box to serve as funnel for pouring molten metal into mould. Pre heats mould with torch, if necessary. Starts machine rotating at specified speed and sprays insulation on inside surface of rotating mould. Guides crane man in positioning portable furnace, containing melt for pouring and manipulates electric controls to fill furnace and pour melt in to pouring box. Observes and records prescribed instruments readings and allows mould to spin for required time to solidify metal against mould walls. Unfastens mould cover and removes casting using hydraulic ram or other devices as necessary. May operate machine from control board and be designated as CASTING MACHINE CONTROL BOARD OPERATOR. May pour molten metal in to mould with ladle.

ISCO 08 Unit Group Details:

Code 3135
Title Metal Production Process Controllers

3135.3900 **Control Man, Billet/Process Controller**

Control Man, Billet; Signal Control Man, Billet controls pushing of billet (metal bars) one by one from furnace and guides it to pinching rolls (Device to catch billet) for passing it through first pass (mechanical device for reducing thickness). Watches proper heating of

billets in furnace by means of thermo-electrical meters and signals (by light or bell) to Hot Billet Pusher and Furnace Hooker to push billet to pinching roll. Watches rear end of running bar to feed next billet. Draws attention of Pre-heating Furnace Operator in case of improper heating of billets.

ISCO 08 Unit Group Details:

Code 3135
Title Metal Production Process Controllers

3135.9900

Metal Production Process Controllers, Other

Ore and Metal Furnace Operators, Other include workers who operate and monitor ore-smelting, metal-converting and refining furnaces not elsewhere classified.

ISCO 08 Unit Group Details:

Code 3135
Title Metal Production Process Controllers

Family 3139

Process Control Technicians, Not Elsewhere Classified

This family covers Process Control Technicians not classified elsewhere. For instance, the group includes those who operate multiple process control equipment in manufacturing assembly lines and paper an

3139.0100

Digester Operator, Paper Pulp

Digester Operator, Paper Pulp; Rag Boiler Operator, Paper Pulp operates boiler

(cooker) to convert raw materials into paper pulp. Supervises charging of cooker with ingredients such as wood chips, rags, straw and waste paper shreds. Directs adding of chemicals and admission of steam to raise temperature and pressure. Observes gauges and makes adjustments to maintain desired operating conditions. Tests samples by titration or colour tests to determine stage of cooking. When the process completes, drains liquid from digester and instructs others in removal of cooked pulp. May be designated according to materials processed or chemicals used.

ISCO 08 Unit Group Details:

Code 3139
Title Process Control Technicians Not Elsewhere Classified

3139.0200

Beater Man, Paper Pulp

Beater Man, Paper Pulp; Beater Operator, Paper Pulp operates machine that mixes, beats and hydrates pulp and other ingredients used in making paper. Supervises charging of machine with pulp, fillers, size, dyes, alum and other chemicals. Sets and adjusts beater roller for desired degree of hydration. Examines the material for consistency and size of fibres while it is beaten, and sends samples to laboratory for testing. Transfers completed batch to storage tank and starts agitator to maintain consistency. May mix and cook colouring matter for dyeing mixture.

ISCO 08 Unit Group Details:

Code 3139
Title Process Control Technicians Not Elsewhere Classified

3139.0300

Machine Man, Paper, Wet End

Machine Man Paper, Wet End operates section of machine in which wet pulp is fed on an endless wire-mesh belt and is formed into paper. Starts flow of material from storage chest through rotary screens to machine; adds water as necessary to make the material thin; removes dirt and other foreign matters from screens and regulates flow of stuff to obtain paper of desired weight. Sets machine controls for width, thickness and moisture content of paper; threads formed paper between press rolls. Supervises machine crew, drying, sizing, calendaring, winding and cutting paper. May weigh samples of paper and install Dandy Rollers to impress water mark on paper.

ISCO 08 Unit Group Details:

Code 3139

Title Process Control Technicians Not Elsewhere Classified

3139.0400

Machine Man, Paper, Dry End

Machine Man Paper, Dry End; Back Tender, Paper operates section of paper-making machine in which paper is dried, calendered, wound on reels. Threads paper through drier and calender rollers; adjusts controls to regulate tension of paper, temperature of drier rollers and pressure of calender rollers. Examines paper for defects and marks defective portions for removal at reel. Sets up machinery and directs workers in slitting and rewinding paper. May operate sizing tub when surface sizing is desired and may spray paper with steam, water, or dyes to obtain specified finish.

ISCO 08 Unit Group Details:

Code 3139

Title Process Control Technicians Not Elsewhere Classified

3139.0500

Calender Man, Paper

Calender Man, Paper operates and adjusts calendering machine equipped with heated or chilled rollers to impart suitable gloss and finish to surface of paper. Positions roll of paper on reel stand of machine; threads paper between machine rolls and wraps end around rewinder reel. Inserts badding between rollers and running paper to remove crease in paper. Adjusts controls to regulate speed and tension of paper, temperature and pressure of rollers. Examines paper and ensures it is free from dirt, slime spots, wrinkles and spots. Ensures correct compactness of winding, mends breaks in paper with glue or tissue or heated flat iron. Tests paper samples for finish and gloss with special instruments. May attend to other processes in paper making.

ISCO 08 Unit Group Details:

Code 3139

Title Process Control Technicians Not Elsewhere Classified

3139.1400

Robotic Machine Operator

Robotic Machine Operator sets up and operates industrial robots to drill, countersink, and counter bore metallic and non-metallic work pieces used to manufacture aircraft parts or tooling, according to specifications and pre-programmed machine control instructions: Reads work order and specifications to determine prescribed setup and operation. Mounts and positions work piece on locating pins of

holding fixture adjacent to a robot, manually or using hoist, and aligns and secures work piece on holding fixture, using template, bolts, hand tools, and power tools. Installs specified type and size of drill bits in end effectors and places end effectors in holding station adjacent to a robot. Loads cassette tape of machine instructions into machine controller or enters commands to retrieve pre-programmed instructions from the mainframe computer. Pushes a button or enters commands to activate a robot that automatically retrieves and secures designated end effectors on robot arm and positions arm for drilling. Operates robots to drill holes in test specimen and measures holes for conformance to specifications, using measuring instruments. Enters commands to start robot, observes robotic operation, and monitors screen of machine controller for malfunctions and error messages. Changes worn drill bits or adjusts machine according to error message instructions. Inspects finished work piece for conformance to specifications. Cleans parts, tools, and fixtures, using solvents and rags. May set up and operate robot to perform additional machine operations, such as sealing and fastener installation, to join component parts into complete assembly.

ISCO 08 Unit Group Details:

Code 3139
Title Process Control Technicians Not Elsewhere Classified

3139.1501

Auto Component Assembly Fitter

Auto Component Assembly Fitter is one who is skilled in operating machine tools for conducting assembly and fitment operations of vehicle components and

aggregates as per the required assembly norms. The components assembled by the operators are finally assembled in 2wheelers, 3 wheelers, 4 wheelers and large commercial vehicles.

Qualification Pack Details:

QP NOS Reference	ASC/Q3701
QP NOS Name	Auto Component Assembly Fitter
NSQF Level	4

ISCO 08 Unit Group Details:

Code 3139
Title Process Control Technicians Not Elsewhere Classified

3139.2001

Assembly Supervisor

Assembly Supervisor is also called, 'Line Supervisor' or 'Shift In charge'. The Assembly Supervisor is responsible for supervising Electronic and Mechanical Assembly Technicians and for ensuring that production deadlines are met. The individual at work co-ordinates with production planning team, stores, quality assurance and assembly team to implement production schedule, manage shifts and allocate work in order to meet deadlines and quality standards.

Qualification Pack Details:

QP NOS Reference	ELE/Q6305
QP NOS Name	Assembly Supervisor
NSQF Level	5

ISCO 08 Unit Group Details:

Code 3139
Title Process Control Technicians Not Elsewhere Classified

3139.5001

Quality Control Inspector

Quality Control Inspector needs to be responsible for the quality inspection of the manufactured products in order to deliver high quality to customers

Qualification Pack Details:

QP NOS Reference	ASC/Q6301
QP NOS Name	Quality Control
	Inspector-Level 3

NSQF Level

3

ISCO 08 Unit Group Details:

Code	3139
Title	Process Control Technicians Not Elsewhere Classified

3139.5002

Quality Controller

Quality Controller is responsible for proper monitoring, testing and inspecting all systems and processes at the dealership. The individual is able to ensure that quality standards specified for the various component/aggregate manufacturers of the OEM product or service provided by an organization are met.

Qualification Pack Details:

QP NOS Reference	ASC/Q1605
QP NOS Name	Quality Controller
NSQF Level	6

ISCO 08 Unit Group Details:

Code	3139
Title	Process Control Technicians Not Elsewhere Classified

3139.9900

Industrial Robot Operators, Other

Industrial Robot Operators, Other include operators those who load and unload industrial robots and perform related tasks not elsewhere classified.

ISCO 08 Unit Group Details:

Code	3139
Title	Process Control Technicians Not Elsewhere Classified

Group 314

Life Science Technicians and Related Associate Professionals

Life Science Technicians and Related Associate Professionals perform a variety of technical tasks to support life science professionals with their research, development, management, conservation and protection work, in areas such as biology, botany, zoology, biotechnology and biochemistry, and to agriculture, fisheries and forestry.

Occupations in this Group are classified into the following Families:

3141	Life Science Technicians (Excluding Medical)
3142	Agricultural Technicians
3143	Forestry Technicians

Family 3141

Life Science Technicians (Excluding Medical)

Life Science Technicians (except medical) provide technical support to life science professionals undertaking research, analysis and testing of living organisms, and development and application of products and processes resulting from research in areas such as natural resource

management, environmental protection, plant and animal biology, microbiology, and cell and molecular biology.

3141.0100 Laboratory Assistant, Zoological

Laboratory Assistant, Zoological arranges microscope, dissecting trays, instruments, reagents etc. in zoological laboratory for conducting experiments by Zoologist to perform routine test for classification and analyses and preserves zoological specimens. Sets up in position required apparatus. Arranges standard solutions, reagents and other preservative solutions. Collects required specimens such as insects, frogs, fishes, birds, animals etc. administers or guides administration of chloroform to them and supplies dead, living or unconscious specimens to laboratory for research and practical experiments. Performs routine test by dissections, studying growth, nature physiological reactions etc. and records observations as necessary. Classifies and catalogues preserved specimens and arranges them in proper order in museum. Preserves specimens by properly mounting them in preservative media like formalin, alcohol etc. Dissects animals and birds and stuffs them properly to retain their natural colour, appearance etc. Accompanies students and Zoologists on excursions and assists them in collection and preservation and zoological specimens. Checks animals room and ensures proper maintenance of animals meant for laboratory use. Keeps apparatus and instruments such as balances, paraffin baths, incubators microtones etc. in good condition. May prepare slides and cut sections for practical demonstration.

ISCO 08 Unit Group Details:

Code 3141
Title Life Science Technicians (Excluding Medical)

3141.0200 Laboratory Assistant, Botanical

Laboratory Assistant, Botanical sets up microscopes, dissecting tables, instruments reagents etc. in botanical laboratory. Conducts routine tests for classification and analyses and preserves botanical specimens. Sets up in position microscope, dissecting tables, apparatus etc. and prepares or arranges standard solution, piths, alcohol and reagents required for conducting experiments. Cuts and mounts section, dissects flowers, seeds, etc. as desired Botanist and conducts routine tests for classification of plants, cataloguing of specimens and studying their characteristics. Preserves herbarium and other specimens in special media. Accompanies students and Botanist on excursion and assists them in collection and preservation of botanical specimens. Keeps apparatus and instruments in good condition. May operate microtome (instrument for cutting very thin sections). May maintain stock register of specimens, instruments etc. of laboratory.

ISCO 08 Unit Group Details:

Code 3141
Title Life Science Technicians (Excluding Medical)

3141.0300 Taxidermist

Taxidermist prepares, stuffs and mounts skins of animals and birds in lifelike form. Removes skin from carcass of animal or bird using special knives, scissors etc., taking care to preserve coat and skin and

other outward features in their natural state. Applies preservative solutions to skin. Makes artificial structure or body frame using wires, wood, papier-Mache or other media to cover preserved skin over it using special adhesives. Fits artificial or real eyes, claws, teeth etc. to specimen. Mounts prepared specimen on suitable pedestal. May display stuffed specimen in natural surroundings. May articulate skeletal parts of birds and animals for preservation and scientific study. May paint faded portions of specimen with appropriate colours. May specialize in preparing stuffing and mounting of particular type of animals.

ISCO 08 Unit Group Details:

Code 3141
Title Life Science Technicians (Excluding Medical)

3141.9900

Life Science Technicians (Excluding Medical), Other

Life Science Technicians (Excluding Medical), Other include technicians who provide technical support to life science professionals undertaking research, analysis and testing of living organisms, and development and application of products and processes not elsewhere classified.

ISCO 08 Unit Group Details:

Code 3141
Title Life Science Technicians (Excluding Medical)

Family 3142

Agricultural Technicians

Agricultural Technicians perform tests and experiments, and provide technical and

scientific support to Agricultural Scientists, Farmers and Farm Managers.

3142.0101

Micro Irrigation Technician

Micro Irrigation Technician holds a very critical role in the installation and function of micro irrigation system that not only uses the existing natural resources efficiently but also benefits the farmers in terms of decreased cost of cultivation in the long run.

Qualification Pack Details:

QP NOS Reference	AGR/Q0301
QP NOS Name	Micro
Irrigation Technician	
NSQF Level	4

ISCO 08 Unit Group Details:

Code	3142
Title	Agricultural Technicians

3142.0201

Bare Foot Technician (BFT)

Bare Foot Technician (BFT) is also known as the Bare Foot Engineer is needed at village level in rural India to provide technical support to the infrastructure activities and works taken up under MGNREGS, to improve the quality and durability of the assets to be created. The role involves working as a Junior Technical Assistant and perform tasks under the instruction and guidance of the Technical Assistant/Junior Engineer/Assistant Engineer. The individual is expected to carry out the functions of Technical Assistant/Overseer/Work Inspector in providing technical services at village level such as identification, setting and layout, supervise for ensuring the quality and specifications of works taken up under

MGNREGS. The individual should ensure activity specific compliance to environment, health and safety aspects while executing the works.

Qualification Pack Details:

QP NOS Reference	AGR/Q7801
QP NOS Name	Bare Foot
Technician	
NSQF Level	4

ISCO 08 Unit Group Details:

Code	3142
Title	Agricultural Technicians

3142.9900

Agricultural Technicians, Others

Agricultural Technicians, Others include Agricultural Technicians who perform tests and experiments, and provide technical and scientific support to Agricultural Scientists, Farmers and Farm Managers not elsewhere classified.

ISCO 08 Unit Group Details:

Code	3142
Title	Agricultural Technicians

Family 3143

Forestry Technicians

Forestry Technicians perform technical and supervisory functions in support of forestry research and forest management, harvesting, resource conservation and environmental protection.

Group 315

Ship and Aircraft Controllers, and Technicians

Ship and Aircraft Controllers and Technicians, command and navigate ships and aircraft, perform technical functions to ensure safe and efficient movement and operations, and develop electrical, electromechanical, and computerized air control systems.

Occupations in this Group are classified into the following Families:

3151 Ship's Engineers
3152 Ship's Deck Officers and Pilots
3153 Aircraft Pilots and Related Associate Professionals
3154 Air Traffic Controllers
3155 Air Traffic Safety Electronics Technicians

Family 3151

Ship's Engineers

Ships' Engineers control and participate in the operation, maintenance and repair of mechanical, electrical and electronic equipment and machinery on board ship, or perform related supporting functions on shore.

3151.0100

Chief Engineer, Ship

Chief Engineer, Ship; Chief Engine Officer, Ship ensures safe and economic running of all engines, boilers, electrical, refrigerating and sanitary equipment deck machinery and steam connections abroad ship. Directs and controls work and conduct of engine room crew of vessel. Keeps log of performance of engines and equipment on voyage. Supervises repairs and overhauling of engines and accessories. Looks after fuelling of ship. Looks to proper storage and maintenance

of all engine room stores. May attend to repair work in case of breakdown.

ISCO 08 Unit Group Details:

Code	3151
Title	Ship's Engineers

3151.0200

Second Engineer, Ship

Second Engineer, Ship; Second Engine Officer, Ship functions as second-in-command, to Chief Engineer and ensures general upkeep and cleanliness of machine on board ship. Distributes work to engine room crew. Checks and keeps rough ledgers relating to stores. Tests all machinery to ensure that they are in good order. Supervises personally setting of valves, pistons etc. of main engine under instructions from Chief Engineer. Keeps watch in engine room and stoke-hole during specified hours in mornings and evenings.

ISCO 08 Unit Group Details:

Code	3151
Title	Ship's Engineers

3151.0300

Third Engineer, Ship

Third Engineer Ship; Third Engine Officer, Ship keeps watch in engine room and stoke-hole during specified hours while at sea, alternates with Fourth Engineer Ship for day duties during specified hours while in port and performs other duties assigned by Second Engineer, Ship. Ensures proper adjustment of bearings of main engine and moving parts. May take charge of maintenance of all electrical fittings and stores in absence of electrician. May keep rough ledger of electrical stores and equipment.

ISCO 08 Unit Group Details:

Code	3151
Title	Ship's Engineers

3151.0400

Fourth Engineer, Ship

Fourth Engineer, Ship; Fourth Engine Officer, Ship assists Second Engineer, Ship in maintenance of main engine, pumps, boiler mountings and other auxiliary machinery on board and keeps watch in engine room and stoke-hole during specified hours in mornings and nights while ship is at sea. Carries out daily maintenance work and does day duty alternating with Third Engineer, Ship while ship is in port.

ISCO 08 Unit Group Details:

Code	3151
Title	Ship's Engineers

3151.0500

Fifth Engineer, Ship/Junior Engineer

Fifth Engineer, Ship; Junior Engineer, Ship looks after maintenance and overhaul of winches and other machinery under guidance of Second Engineer, Ship. Keeps night watch on engine room and deck. Carries out day work while at sea assisting senior engineers.

ISCO 08 Unit Group Details:

Code	3151
Title	Ship's Engineers

3151.9900

Ship and Aircraft Controllers and Technicians, Other

Ships Engineers, Other include all other ship's engineers engaged in maintenance

of ship and deck machinery, ledgers, etc., not elsewhere classified.

ISCO 08 Unit Group Details:

Code	3151
Title	Ship's Engineers

Family 3152

Ship's Deck Officers and Pilots

Ships' deck officers and pilots command and navigate ships and similar vessels, and perform related functions on shore.

3152.0100

Captain, Ship/Master

Captain, Ship; Master, Ship functions as head of ship ensuring safe navigation, exercises complete control over officers and crew on board and carries on ships business at ports of call. Directs navigation of vessel, assisted by other deck officers. Lays course of voyage for officers on watch follow. Manoeuvres vessel under adverse weather conditions and emergencies. Alters course at discretion. Maintains day-to-day log of events during voyage. Carries on ships business with Customs and Port Services such as, entering and clearing ship, submitting cargo manifesto to custom authorities, etc. Maintains discipline on vessel. Submits periodical reports to owner suggesting measures for increasing efficiency of service.

ISCO 08 Unit Group Details:

Code	3152
Title	Ship's Deck Officers and Pilots

3152.0200

Chief Officer, Ship

Chief Officer, Ship; First Mate, Ship functions as second-in-command to Captain, supervises activities of deck workers and loading, storage and discharge of cargo. Exercises control over deck crew, assigns duties to Serang and apprentices and maintain discipline. Plans and executes work related to loading, storage and unloading of cargo. Maintains cleanliness and upkeep of equipment. Keeps watch on bridge in mornings and evenings at sea during specified hours and assists Captain in navigation. Fixes ships position by star lights at dawn and dusk, and maintains Mates logbook, cargo books and store books. Imparts necessary training to indentured apprentices. May assume duties of Captain in case of emergency.

ISCO 08 Unit Group Details:

Code	3152
Title	Ship's Deck Officers and Pilots

3152.0300

Second Officer, Ship

Second Officer, Ship; Second Mate, Ship assists Captain, Ship in navigation and Chief Officer, Ship in supervising loading and discharge of cargo. Performs night duty in port while important cargoes are being loaded and unloaded, takes turn with Third Officer on cargo while in port. Maintains all navigational equipment on board in good order. Winds chronometer daily, and starts and stops gyrocompass. Keeps watch on bridge during specified hours of day and night for ensuring safe navigation. Fixes position of ship at sea by taking morning, noon and afternoon readings with sextant and reports to Captain. Keeps watch on anchor, when ship anchored outside port. May look after sick on board in absence of Medical Officer.

ISCO 08 Unit Group Details:

Code 3152

Title Ship's Deck Officers and Pilots

3152.0400**Third Officer, Ship**

Third Officer, Ship; Third Mate, Ship assists Captain, Ship and Chief Officer, Ship in navigation and maintenance of life boats, safety and signalling equipment on board and loading and discharge of cargo in port. Remains on bridge while ship enters or leaves port and passes orders of Captain or Pilot, Ship to engine room and relays messages to Chief Officer and Second Officer, Ship. Ensures that helm orders are correctly executed by the Seaconny. Maintains log book of all engine and helm orders and other silent features of manoeuvres. Assists Second Officer in fixing position of ship. Keeps watch on bridge during specified hours of day and night for ensuring safe navigation. Performs day and night duty in port alternating with Second Officer, Ship in supervising, loading and discharge of cargo.

ISCO 08 Unit Group Details:

Code 3152

Title Ship's Deck Officers and Pilots

3152.0500**Harbour Master**

Harbour Master exercises administrative control of docks and wharves and controls movement of vessel in and out of port. Allocates duty to Pilot, Ship and controls floating crafts and marine staff of port. May pilot vessels to and from harbour if necessary

ISCO 08 Unit Group Details:

Code 3152

Title Ship's Deck Officers and Pilots

3152.0600**Pilot Ship/Bay Pilot/Harbour****Pilot/Channel Pilot**

Pilot, Ship directs movement of ship in and out of confined waters such as cannels, rivers, harbours, etc. Boards vessel outside confined waters and assists Captain, Ship in navigating, manoeuvring vessel safely into port, assists Captain also in manoeuvring vessel when leaving port. May moor or unmoor ship in harbour.

ISCO 08 Unit Group Details:

Code 3152

Title Ship's Deck Officers and Pilots

3152.0900**Ferry Officer**

Ferry Officer directs arrival of boats, steams etc. at ferry crossings. Controls and co-ordinates work of staff employed at ferry station. Displays time schedules, instructions, changes in timings of ferry service etc. prominently at ferry station. Prepares duty roster of boat crew and arranges substitutes for absentees. Ensures that service boats are provided with lifesaving equipment such as life belts, first aid kits, firefighting appliances etc. and are adequate. Attends to all passenger enquires. Checks periodically certificate issued on safety survey of seaworthiness of vessel. Attends to embarkation and disembarkation of passengers, weighment and charging of luggage etc. as necessary. Receives and issues signal messages to guide boat through water-way. Despatches relief boats and other assistance on receipt of S.O.S. from boat on course. Collects and remits to treasury levies from private boats for services rendered. Maintains

prescribed statement of accounts and returns and forwards them to higher authority as required.

ISCO 08 Unit Group Details:

Code 3152

Title Ship's Deck Officers and Pilots

3152.9900

Ship's Deck Officers and Pilots, Other

Ship's Deck Officers and Pilots, Other include all other Ships Deck Officers and Pilots engaged in seafaring, navigation, berthing, harbouring, etc. not elsewhere classified.

ISCO 08 Unit Group Details:

Code 3152

Title Ship's Deck Officers and Pilots

Family 3153

Aircraft Pilots and Related Associate Professionals

Aircraft pilots and related associate professionals control the operation of mechanical, electrical and electronic equipment, in order to navigate aircraft for transporting passengers, mail and freight and perform related pre-flight and in-flight tasks.

3153.0100

Chief Pilot, Aircraft

Chief Pilot Aircraft; Aeroplane Pilot, Chief directs operation of flight department of airline. Conducts indoctrination training for new Pilots and refresher training for experienced Pilots. Reviews reports on pilot performance and forwards reports to airline control authority. Discusses operation and personal problems with subordinates to improve morale and

efficiency. Studies technical manuals of Aeroplane and equipment manufactures and government regulations affecting flight operations to ensure that company training manuals adhere to legal requirements and are adopted to type of aircraft in use. Represents company in advisory capacity during contract negotiations with Pilots Union. Accompanies flights to observe performance of Pilots. Conducts training classes for flight personnel covering emergency procedures and use of survival equipment. Directs preparation of flight crew schedules and assignment of personnel. May interview and hire flight personnel. May pilot airplane on scheduled flights, for testing performance of aircrafts, drawing up new air-routes, conducting aerial surveys and on reconnoitring missions.

ISCO 08 Unit Group Details:

Code 3153

Title Aircraft Pilots and Related Associate Professionals

3153.0200

Check Pilot

Check Pilot, accompanies Aeroplane Captains on periodic flights to observe their ability and to evaluate their proficiency. Accompanies Pilots on periodic flights over established air routes to observe their proficiency in manoeuvring of aircrafts and notes compliance with and infringements of company or aviation regulations. Checks navigational and meteorological facilities available en route. Compiles report on findings, for management remedial action. May fly aircraft during emergency.

ISCO 08 Unit Group Details:

Code 3153

Title Aircraft Pilots and Related
Associate Professionals

3153.0300 Pilot, General

Pilot, General; Aeroplane Pilot, General flies aircraft to transport passengers mail or freight, or for other commercial purposes. Reviews flight papers to ascertain factors, such as load weight, fuel supply, weather conditions and flight route and schedule. Orders changes in fuel supply, load, route or schedule to ensure safety of flight. Reads gages to verify that oil, hydraulic fluid, fuel quantities and cabin pressure are at prescribed level prior to starting engines. Starts engines and taxies aeroplane to runway. Sets breaks and accelerates engines to verify operational readiness of components, such as super charges, carburettor-heaters and controls. Contacts control tower by radio to obtain take-off clearance and instructions. Releases brakes and moves throttles and hand and foot controls to take-off and control aeroplane in flight. Pilots aeroplane to destination adhering to flight plan and regulations and procedures. Records information, such as time in flight, altitude flown and fuel consumed. May instruct students or pilots in operation of aircraft. May be designated as Transport Pilot according to aviation licence held Airline Pilot or Corporate Pilot according to commercial activity in which engaged or as Aeroplane Captain, if placed in command of aircraft and crew; and as Aeroplane First Officer or Co-Pilot, if engaged as second in command.

ISCO 08 Unit Group Details:

Code 3153
Title Aircraft Pilots and Related
Associate Professionals

3153.0400 Aircraft Pilot, Specialized

Pilot, Aircraft, flies aircraft for specialized purposes such as testing aircrafts, instructing trainees in flying, dropping supplies, making aerial surveys, spraying pesticides etc. Operates controls of aircraft on scheduled routes or chartered flights; observes gages, meters and other cockpit instruments to control aircraft and detect engine irregularities; uses navigational aids to direct course of aircraft in flight; trains Pilots in operation of particular types of aircraft such as jet aircrafts, single or multi-engine aircraft, helicopters etc. Demonstrates and explains methods of control and operation of aircraft to students-trainees, flies aircraft or helicopters at low altitude with slow speed over agricultural fields to spray or dust fields with fertilizers or pesticides; flies aircraft at high altitudes, over hills and dales to drop supplies and make aerial surveys and take aerial photographs. May be known as Instructor, Pilot or Instructor, Flying, if specially engaged in instructing students or Pilots in operation of aircraft.

ISCO 08 Unit Group Details:

Code 3153
Title Aircraft Pilots and Related
Associate Professionals

3153.0500 Pilot, Glider

Pilot Glider operates glider to glide and soar in air with help of rising air-currents (thermal currents). Takes position in glider and secures with a strap. Checks controls fitted in glider. Ensures that end of wire-rope stretched from wire-rope drum of stationary winch engine stationed at other end of field is fixed to glider and

Signalman and Traffic Hand Gliding are ready at their posts. Directs Signalman to signal Winch-Engine Operator about readiness for take-off. Releases wire-rope from glider by manipulating release knob after glider is air-borne and gains maximum height through air-currents. Maintains flight for required time, lands glider at landing area by manoeuvring controls. May fly glider towed by power-driven airplane. May be designated as Glider-Pilot; Glider-Instructor, if employed in flying clubs to train members in gliding.

ISCO 08 Unit Group Details:

Code 3153
Title Aircraft Pilots and Related Associate Professionals

3153.0600 **Chief Navigator, Aircraft**

Chief Navigator, Aircraft controls and supervises work of Check Navigator and advises management on feasibility of undertaking flights on new routes. Checks log-book maintained by Navigator. Examines reports compiled by Check Navigator on work performance and efficiency of Navigator. Studies working difficulties experienced by Navigators and suggests remedial measures. Maintains navigational charts and maps and advises management on condition of terrain when considering flights over new routes. Studies latest advances in navigational equipment etc. and makes recommendations regarding their purchase and installation. May check work of Check Navigator and Navigator by surprise visits.

ISCO 08 Unit Group Details:

Code 3153
Title Aircraft Pilots and Related Associate Professionals

3153.0700 **Check Navigator, Aircraft**

Check Navigator, Aircraft observes periodically Navigator during flights and reports on his abilities and efficiency of various navigational aids used to higher authorities. Accompanies Navigator periodically in aircraft and observes his working. Checks accuracy of charts and time taken by him in plotting position of aircraft not equipped with automatic position indicator. Submits reports on Navigators ability and efficiency. May test Navigators ability to handle difficult situation in breakdowns, accidents, etc. by asking questions. May recommend Navigators promotion, demotion or further training to appropriate authorities.

ISCO 08 Unit Group Details:

Code 3153
Title Aircraft Pilots and Related Associate Professionals

3153.0800 **Navigator, Aircraft**

Navigator, Aircraft advises Pilot, Aircraft on position of aircraft, weather conditions and deviation from course during flights, using radar charts and other navigational aids. Checks automatic position indicator, navigational instruments, radio direction-finding equipment, etc. before flight and ensures that they function properly. Establishes position of aircraft during flight using navigational instruments and radar charts. Plots position of aircraft on charts using navigational instruments and radio direction-finding equipment as necessary. Directs course of aircraft in accordance with flight plan. Informs Pilot about unforeseen weather conditions, such as storms and other atmospheric changes and suggests any necessary

deviation from course of flight. Maintains logbook of flights undertaken. May act as Pilot in case of emergency.

ISCO 08 Unit Group Details:

Code 3153

Title Aircraft Pilots and Related Associate Professionals

3153.0900

Chief Flight Engineer

Chief Flight Engineer plans, co-ordinates, controls and supervises work of Check-Flight Engineer, Flight Engineer and ensures removal of defects or deficiencies in aircraft observed during flight and pointed out in flight reports. Studies flight reports and logs prepared by Checked-Flight Engineer and Flight Engineers regarding working of aircraft, fuel consumption, engine performance and its malfunctions etc. amends logs when any technological change is made in aircraft, or when any statistical data is required to be collected. Maintains liaison with engineering department in technical matters affecting flight engineering. Recommends adequate standard operations in force to Director of Flying or planned operations. Represents operations department in technical conferences. Undertakes yearly flight checks of all flight engineers working under him. Conducts surveys of engineering and refuelling facilities on new routes to be opened. May assist in investigation of important events like crashes, break-down etc.

ISCO 08 Unit Group Details:

Code 3153

Title Aircraft Pilots and Related Associate Professionals

3153.1000

Check Flight Engineer

Check Flight Engineer checks work of Flight Engineer and ensures correct execution of his responsibilities with regard to pre-flight, in-flight and post-flight, and renders report to Chief Flight Engineer. Ensures that proper checking of fuel loading, oxygen, forms and manuals on board, engine parameter, pressurization and air-conditioning has been done by Flight Engineer before flight of aircrafts. Accompanies Flight Engineer, periodically, during flight and observes that he maintains constant watch on performance of aircraft, engine and components and keeps accurate hourly log of all instruments readings; ensures speedy and proper rectifications of all defects by engineering personnel during flight emergencies, renders report of his observations to Chief Flight Engineer after flight and suggests improvements for efficient working of aircraft or Flight Engineer. May draw attention of training department to any short-comings noticed in Cadet Flight Engineer, may supervise work of ground crew at transit stops.

ISCO 08 Unit Group Details:

Code 3153

Title Aircraft Pilots and Related Associate Professionals

3153.1100

Flight Engineer

Flight Engineer makes pre-flight, in-flight, and post-flight inspection, adjustments, and minor repairs to ensure safe and efficient operation of aircraft. Inspects aircraft prior to take-off for defects, such as fuel or oil leaks and malfunctions in electrical, hydraulic, or pressurization systems according to pre-flight checklist. Verifies passenger and cargo distribution and amount of fuel to ensure that weight and balance specifications are met.

Monitors control panel to verify aircraft performance, and regulates engine speed according to instructions of Pilot, Aircraft. Makes in-flight repairs, such as replacing fuses, adjusting instruments, and freeing jammed flight control cables, using hand tools, or takes emergency measures to compensate for failure of equipment, such as autopilot wing heater, and electrical and hydraulic systems. Monitors fuel gauges and computes rate of fuel consumption and engine performance. Records malfunctions which were not corrected during flight, and reports needed repairs to ground maintenance personnel. May perform repairs upon completion of flight.

ISCO 08 Unit Group Details:

Code 3153
Title Aircraft Pilots and Related Associate Professionals

3153.9900 **Aircraft Pilots and Related Associate Professionals, Other**

Aircraft Pilots and Related Associate Professionals, other include associate professionals who control the operation of mechanical, electrical and electronic equipment, in order to navigate aircraft for transporting passengers, mail and freight and perform related pre-flight and in-flight tasks not classified elsewhere.

ISCO 08 Unit Group Details:

Code 3153
Title Aircraft Pilots and Related Associate Professionals

Family 3154

Air Traffic Controllers

Air traffic Controllers direct aircraft movements in airspace and on the ground, using radio, radar and lighting systems, and provide information relevant to the operation of aircraft.

3154.0100

Air Traffic Controller Specialist

Air Traffic Control Specialist receives and transmits flight plans, meteorological, navigational and other information in air traffic control station to perform pre-flight and emergency service for Aeroplane Pilots and controls air traffic on and within vicinity of airport. Accepts flight plans from Pilots and reviews them for completeness. Routes plans for operating under instrument flight rules to station near destination airport. Provides meteorological navigational and other information to Pilot during flight, using radio. Relays traffic control and other instructions regarding safety of aircraft to Pilots. Answers radio calls from arriving and departing aircraft and issues landing and take-off instructions and other information such as runway to use, liquid velocity and directions, visibility, etc. May keep written record of messages issued to and received from aircraft.

ISCO 08 Unit Group Details:

Code 3154
Title Air Traffic Controller

3154.0200

Traffic Controller, Air Service

Traffic Controller, Air Service; Air Traffic Controller directs take-off and landing of aircraft at airports by issuing radio instructions to flying crafts within his range. Directs take-off and landing of aircraft at airport by radio, lights and flags. Contacts flying aircraft to give warnings

and instructions regarding landing and information about whether condition at airfield. Guides Pilots of aircrafts in distress. Arranges search and rescue operations of lost aircraft. Controls airport lights for taking off and landing of planes at night. Arranges for rectification of defect in lighting system and in other facilities to be corrected. Keeps record of all instructions issued, messages received, and landing and departure of aircraft. May operate radar for close watch and identifying aircraft on flight.

ISCO 08 Unit Group Details:

Code 3154
 Title Air Traffic Controller

3154.9900

Air Traffic Controllers, Other

Air Traffic Controllers, other include associate professionals engaged in aircraft movements in airspace and on the ground, using radio, radar and lighting systems, and provide information relevant to the operation of aircraft not elsewhere classified.

ISCO 08 Unit Group Details:

Code 3154
 Title Air Traffic Controller

Family 3155

Air Traffic Safety Electronics Technicians

Air Traffic Safety Electronics Technicians perform technical tasks concerning the design, installation, management, operation, maintenance and repair of air traffic control and air navigation systems.

Sub Division 32

Health Associate Professionals

Health associate professionals perform technical and practical tasks to support diagnosis and treatment of illness, disease, injuries and impairments in humans and animals, and to support implementation of health care, treatment and referrals plans usually established by medical, veterinary, nursing and other health professionals

Tasks performed by workers in the sub-major group usually include: testing and operating medical imaging equipment and administering radiation therapy; performing clinical tests on specimens of bodily fluids and tissues; preparing medications and other pharmaceutical compounds under the guidance of pharmacists; designing, fitting, servicing and repairing medical and dental devices and appliances; providing nursing and personal care and midwifery support services; using herbal and other therapies based on theories, beliefs and experiences originating in specific cultures.

Occupations in this Sub Division are classified into the following Groups:

321	Medical and Pharmaceutical Technicians
322	Nursing and Midwifery Associate Professionals
323	Traditional and Complementary Medicine Associate Professionals
324	Veterinary Technicians and Assistants
325	Other Health Associate Professionals

Group 321

Medical and Pharmaceutical Technicians

Medical and Pharmaceutical Technicians perform technical tasks to assist in diagnosis and treatment of illness, disease, injuries and impairments.

Occupations in this Group are classified into the following Families:

3211 Medical Imaging and Therapeutic Equipment Technicians
3212 Medical and Pathology Laboratory Technicians
3213 Pharmaceutical Technicians and Assistants
3214 Medical and Dental Prosthetic Technicians

Family 3211

Medical Imaging and Therapeutic Equipment Technicians

Medical Imaging and Therapeutic Equipment Technicians test and operate radiographic, ultrasound and other medical imaging equipment to produce images of body structures for the diagnosis and treatment of injury, disease and other impairments. They may administer radiation treatments to patients under the supervision of a radiologist or other health professionals.

3211.0100 X-Ray Technician

X-Ray Technician; Radiographer; Radiological Assistant takes X-ray skiagraph (Photographs) for diagnosis of ailments or gives ray treatment by operating X-ray equipment and exposing patients to rays. Prepares or gets patients prepared by Nurse for ray exposure.

Regulates duration and intensity of exposure by adjusting machines and exposing patients to rays as directed by the Radiologist. Positions patient on X-ray couch to ensure correct exposure of the part of body required to be X-rayed and for ray exposure taking care to protect the patient and themselves from harmful exposure to X-ray. Adjusts X-ray tube at proper distance and angle, by rotating the pivot etc. to ensure centring of tube on part of body to be X-rayed. Regulates controls of X-ray machine or therapy equipment, for duration intensity of exposure and exposes film or patient to rays as directed by Radiologist. Removes cassette with exposed film and hands over to Dark Room Assistant where available for developing fixing, washing, Labelling (date and name of patient) etc. Mixes, develops, fixes etc. and processes X-ray films in accordance with techniques and instruction of Radiologist. Keeps records of raw and exposed films, spare parts and of patients X-rayed or treated. May mix developers and process film in accordance with prescribed techniques.

ISCO 08 Unit Group Details:

Code 3211

Title Medical Imaging and Therapeutic Equipment Technicians

3211.0101 Radiology Technician

Radiology Technician is also referred to as Radiologic technologists, Radiological Technologists and Technicians. Radiology Technicians perform diagnostic imaging examinations such as X-rays, CT and MRI scans under the guidance of a Radiologist. They are responsible for preparing patients and operating equipment for the test, besides keeping patient records and adjusting and maintaining equipment.

Qualification Pack Details:

QP NOS Reference	HSS/Q0201
QP NOS Name	Radiology Technician
NSQF Level	4

ISCO 08 Unit Group Details:

Code	3211
Title	Medical Imaging and Therapeutic Equipment Technicians

3211.0200**Bio-Medical Equipment Technician**

Biomedical Equipment Technician Electronics Technician; Biomedical Engineering Technician repairs, calibrates, and maintains medical equipment and instrumentation used in health-care delivery field: Inspects and installs medical and related technical equipment in medical and research facilities for use by physicians, nurses, scientists, or engineers involved in researching, monitoring, diagnosing, and treating physical ailments or dysfunctions. Services various equipment and apparatus, such as patient monitors, electrocardiographs, blood-gas analysers, x-ray units, defibrillators, electrosurgical units, anaesthesia apparatus, pacemakers, blood-pressure transducers, spirometers, sterilisers, diathermy equipment, in-house television systems, patient-care computers, and other related technical paraphernalia. Repairs, calibrates, and maintains equipment, using hand tools, power tools, measuring devices, and knowledge of manufacturers' manuals, troubleshooting techniques, and preventive-maintenance schedules. Safety-tests medical equipment and health-care facility's structural environment to ensure patient and staff safety from electrical or mechanical hazards. Consults with

medical or research staff to ascertain that equipment functions properly and safely, utilizing knowledge of electronics, medical terminology, human anatomy and physiology, chemistry, and physics.

ISCO 08 Unit Group Details:

Code	3211
Title	Medical Imaging and Therapeutic Equipment Technicians

3211.0501**Medical Equipment Technician**

Medical Equipment Technician: in the Healthcare Industry is also known as a Biomedical Equipment Technician (BMET), Service Technician, Biomedical Electronics Technician, and Biomedical Engineering Technician (BMET). Medical Equipment Technicians install, maintain and repair patient care equipment. They perform inspection, installation, and preventative maintenance of general clinical equipment, including appropriate documentation for all service activities and training the hospital staff.

Qualification Pack Details:

QP NOS Reference	HSS/Q5601
QP NOS Name	Medical Equipment Technician
NSQF Level	4

ISCO 08 Unit Group Details:

Code	3211
Title	Medical Imaging and Therapeutic Equipment Technicians

3211.0801**Cardiac Care Technician**

Cardiac Care Technician (CCT) is a health care specialist who supports cardiologist in diagnosing and treatment of ailments of

the human heart. Cardiac Care Technician in the health Industry is also known as a Cardiographic Technicians or Cardiovascular Technicians. Individuals in this job assist in performing invasive and non-invasive diagnostic examinations and therapeutic interventions of the heart and/or blood vessels at the request or direction of a provider.

Qualification Pack Details:

QP NOS Reference	HSS/Q 0101
QP NOS Name	Cardiac Care Technicians
NSQF Level	4

ISCO 08 Unit Group Details:

Code	3211
Title	Medical Imaging and Therapeutic Equipment Technicians

3211.9900

Medical Imaging and Therapeutic Equipment Technicians, Other

Medical Equipment Operators, other includes those who are engaged in controlling technical equipment used to diagnose or treat illnesses and disorders not elsewhere classified.

ISCO 08 Unit Group Details:

Code	3211
Title	Medical Imaging and Therapeutic Equipment Technicians

Family 3212

Medical and Pathology Laboratory Technicians

Medical and Pathology Laboratory Technicians perform clinical tests on specimens of bodily fluids and tissues in

order to obtain information about the health of a patient or cause of death.

3212.0101

Operation Theatre Technician

Operation Theatre Technician performs any combination of following tasks before, during, and after surgery to assist surgical team: Places equipment and supplies in operating room and arranges instruments, according to instructions. Assists team members to place and position patient on table. Scrubs arms and hands and dons gown and gloves. Aids team to don gowns and gloves. Maintains supply of fluids, such as plasma, saline, blood, and glucose for use during operation. Hands instruments and supplies to surgeon, holds retractors, cuts sutures, and performs other tasks as directed by surgeon during operation. Puts dressings on patient following surgery. Counts sponges, needles, and instruments before and after operation. Washes and sterilises equipment, using germicides and sterilizers. Cleans operating room.

Qualification Pack Details:

QP NOS Reference	HSS/Q2601
QP NOS Name	Operation Theatre Technician
NSQF Level	4

ISCO 08 Unit Group Details:

Code	3212
Title	Medical and Pathology Laboratory Technicians

3212.0201

Dialysis Technician

Dialysis Technician sets up and operates haemodialysis machine to provide dialysis treatment for patients with kidney failure: Attaches dialyser and tubing to machine to assemble for use. Mixes dialysate, according to formula. Primes dialyzer with

saline or heparinised solution to prepare machine for use. Transports patient to dialysis room and positions patient on lounge chair at haemodialysis machine. Takes and records patient's pre-dialysis weight, temperature, blood pressure, pulse rate, and respiration rate. Explains dialysis procedure and operation of haemodialysis machine to patient before treatment to allay anxieties. Cleans area of access (fistula, graft, or catheter), using antiseptic solution. Connects haemodialysis machine to access in patient's forearm or catheter site to start blood circulating through dialyser. Inspects equipment settings, including pressures, conductivity (proportion of chemicals to water), and temperature to ensure conformance to safety standards. Starts blood flow pump at prescribed rate. Inspects venous and arterial pressures as registered on equipment to ensure pressures are within established limits. Calculates fluid removal or replacement to be achieved during dialysis procedure. Monitors patient for adverse reaction and haemodialysis machine for malfunction. Takes and records patient's post dialysis weight, temperature, blood pressure, pulse rate, and respiration rate. May fabricate parts, such as cannulas, tubing, catheters, connectors, and fittings, using hand tools.

Qualification Pack Details:

QP NOS Reference	HSS/Q2701
QP NOS Name	Dialysis Technician
NSQF Level	4

ISCO 08 Unit Group Details:

Code	3212
Title	Medical and Pathology Laboratory Technicians

3212.0301

Anaesthesia Technician

Anaesthesia Technician: Paramedical professional working in hospital settings and an integral part of the anaesthesia patient care team. Also known as Anaesthetic Technician. Individuals in this job provide support to anaesthesia providers in the acquisition, preparation and application of the equipment and supplies required for the administration of anaesthesia.

Qualification Pack Details:

QP NOS Reference	HSS/Q2501
QP NOS Name	Anaesthesia Technician
NSQF Level	4

ISCO 08 Unit Group Details:

Code	3212
Title	Medical and Pathology Laboratory Technicians

3212.0501

Histo-Technician

Histo-Technician(HTL) in the Healthcare Industry is also known as a Certified Histologic Technician, Histologic Aide and Histology Specialist. Histo-Technician process and prepare tissue specimens from surgery and other patient service areas. The HTL prepares tissue blocks and slides with skill and accuracy for evaluation by Pathologists. The Histo-Technician must continually employ judgment gained from knowledge, practice, and experience to adjust technique for proficient execution of the manual skills of microtomy, embedding and staining. The HTL must demonstrate knowledge of tissue specimens, anatomy and dissection techniques.

Qualification Pack Details:

QP NOS Reference	HSS/Q0401
QP NOS Name	Histo-Technician

NSQF Level 4

ISCO 08 Unit Group Details:

Code 3212

Title Medical and Pathology Laboratory Technicians

3212.0601

Phlebotomy Technician

Phlebotomy Technician (PBT) in the Health Industry is also known as Phlebotomist. Individuals in this job need to draw quality blood samples from patients and prepare those specimens for medical testing.

Qualification Pack Details:

QP NOS Reference HSS/Q0501

QP NOS Name Phlebotomy Technician

NSQF Level 4

ISCO 08 Unit Group Details:

Code 3212

Title Medical and Pathology Laboratory Technicians

3212.0602

Blood Bank Technician

Blood Bank Technician in the Healthcare Industry is also known as Phlebotomy Technicians and Blood Bank Laboratory Technician. Blood Bank Technicians work in a lab to collect, label and store blood. The Blood Bank Technicians test samples to screen potential donors, store blood, draws and maintain documentation and records. They make patients comfortable during the procedure and monitor their vital signs. They also check compatibility blood before issuing it out for transfusion.

Qualification Pack Details:

QP NOS Reference HSS/Q2801

QP NOS Name Blood Bank Technician

NSQF Level 4

ISCO 08 Unit Group Details:

Code 3212

Title Medical and Pathology Laboratory Technicians

3212.0701

Medical Laboratory Technician

Medical Laboratory Technician (MLT) is also referred to as Clinical Laboratory Science professionals, Medical Technologists and Medical Laboratory Scientists. The Medical Laboratory Technician performs complex tests for diagnosis, treatment, and prevention of disease. These professionals are responsible for supporting and assisting doctors and scientists in their day-to-day healthcare work in a variety of roles. They function as the main support to biomedical scientists in pathology laboratories. They are also sometimes responsible for imparting training and supervision to the staff.

Qualification Pack Details:

QP NOS Reference HSS/Q0301

QP NOS Name Medical Laboratory Technician

NSQF Level 4

ISCO 08 Unit Group Details:

Code 3212

Title Medical and Pathology Laboratory Technicians

3212.9900

Dialysis Technician Life Science Technicians, Other

Life Science Technicians, other include all other Life Science Technicians engaged in arranging and setting up laboratory equipment, not elsewhere classified.

ISCO 08 Unit Group Details:

Code 3212

Title Medical and Pathology Laboratory Technicians

Family 3213 Pharmaceutical Technicians and Assistants

Pharmaceutical Technicians and Assistants perform a variety of tasks associated with dispensing medicinal products under the guidance of a pharmacist or other health professional.

3213.0100 Pharmacist

Pharmacist, Dispenser; Compounder dispenses medicines as prescribed by Physician, Dentist, or Veterinarian. Stores and arranges drugs, prepares mixtures, powders, ointments, liniments, etc., as prescribed and gives instructions regarding dosage and use of medicines. May keep medical stores and maintain account of medical supplies, cash and daily record of prescriptions dispensed. May prepare intravenous solutions, tinctures, etc., dresses wounds, gives injections and enemas, under guidance, and render first-aid.

ISCO 08 Unit Group Details:

Code 3213

Title Pharmaceutical Technicians and Assistants

3213.0101 Pharmacy Assistant

Pharmacy Assistant in the Healthcare Industry is also known as a Pharmacy Technician and Pharmaceutical Care Associate. Pharmacy Assistants work under the direct supervision of a registered pharmacist and perform many pharmacy-related functions. They refer any questions regarding prescriptions, drug information, or health matters to a pharmacist. They review prescriptions or requests for refills that they receive from patients and nurse.

Qualification Pack Details:

QP NOS Reference HSS/Q 5401

QP NOS Name Pharmacy Assistant

NSQF Level 4

ISCO 08 Unit Group Details:

Code 3213

Title Pharmaceutical Technicians and Assistants

3213.0200 Laboratory Assistant, Pharmaceutical

Laboratory Assistant, Pharmaceutical, arranges and sets apparatus and other equipment in pharmaceutical laboratory, conducts routine tests of various ingredients for manufacture of drugs and medicines and assists Pharmaceutical Chemist in carrying out studies and experiments. Sets required types of apparatus and equipment in position as required for conducting studies and experiments. performs routine tests of different ingredients and records observations as desired. Grinds and mixes chemicals and other raw materials in prescribed proportions for study, research or manufacture of drugs and medicines such as syrups, tonics, ointments, solutions, tablets, etc. under guidance of Pharmaceutical Chemist. Collects and

tests samples at various stages of production to determine effects and ensures compliance to specification. Maintains precision apparatus and equipment in good working order and in safe custody and keeps laboratory clean and tidy. May prepare samples for getting them tested by Pharmaceutical Chemist and also do research and analysis of drugs and medicine under his guidance.

ISCO 08 Unit Group Details:

Code 3213
Title Pharmaceutical Technicians and Assistants

3213.9900 **Pharmaceutical Assistants, Other**

Pharmaceutical Assistants, other includes associate professionals who dispense and prepare medicaments, lotions and mixtures under the guidance of pharmacists, in pharmacies, hospitals and dispensaries not elsewhere classified.

ISCO 08 Unit Group Details:

Code 3213
Title Pharmaceutical Technicians and Assistants

Family 3214 **Medical and Dental Prosthetic Technicians**

Medical and Dental Prosthetic Technicians design, fit, service and repair medical and dental devices and appliances following prescriptions or instructions established by a health professional. They may service a wide range of support instruments to correct physical medical or dental problems such as neck braces, orthopaedic splints, artificial limbs,

hearing aids, arch supports, dentures, and dental crowns and bridges.

3214.0100 **Mechanic, Dental**

Mechanic, Dental; Dental Technician makes full or partial dentures, inlay, bridges, and crowns of metal, vulcanite or other composition plates from wax or plaster plate impressions taken by DENTIST and repairs dental aids as prescribed by him. Makes special impression trays as designed by DENTIST and prepares plaster casts of upper and lower jaws from wax impression taken by him to provide pattern for work to be done. Shapes metal vulcanite or plastic plates for dentures and sets artificial teeth in plates. Processes denture in acrylic resin or metal and makes fixed metal restorations such as crowns, bridges etc. according to impression taken by Dentist. Forms porcelain teeth and crowns and repairs or makes additions on existing dentures as directed. May assist Dentist in general dental practice and undertake chair side clinical work on patients.

ISCO 08 Unit Group Details:

Code 3214
Title Medical and Dental Prosthetic Technicians

3214.9900 **Medical and Dental Prosthetic Technicians, Other**

Medical and Dental Prosthetic Technicians, Other include technicians who design, fit, service and repair medical and dental devices and appliances following prescriptions or instructions established by a health professional not elsewhere classified.

ISCO 08 Unit Group Details:

Code 3214

Title Medical and Dental Prosthetic Technicians

Group 322**Nursing and Midwifery Associate Professionals**

Nursing and midwifery associate professionals provide basic nursing and personal care for people who are physically or mentally ill, disabled or infirm, and others in need of care due to potential risks to health including before, during and after childbirth. They generally work under the supervision of, and in support of implementation of health care, treatment and referrals plans established by, medical, nursing, midwifery and other health professionals.

Occupations in this Group are classified into the following Families:

3221 Nursing Associate Professionals
3222 Midwifery Associate Professionals

Family 3221**Nursing Associate Professionals**

Nursing associate professionals provide basic nursing and personal care for people in need of such care due to effects of ageing, illness, injury, or other physical or mental impairment. They generally work under the supervision of, and in support of implementation of health care, treatment and referrals plans established by, medical, nursing and other health professionals.

3221.0100**Nurse, General**

Nurse, General gives bedside care in cases of illness, assists Physician in examination and operation of patient and performs other nursing tasks. Maintains record of patient's treatment, temperature, respiration, pulse rate, nourishment, progress, etc. Administers medicines and injections, as prescribed; dresses injuries and renders first aid. Observes and reports to Physician or Surgeon mental, physical and emotional condition of patient. Prepares patient for examination or operation and helps to maintain healthy and hygienic environment for patient and takes preventive measures to check spread of communicable diseases in ward. Is designated as Matron or Nursing Superintendent, if responsible for supervision of work of nurses and related administrative duties.

ISCO 08 Unit Group Details:

Code 3221

Title Nursing Associate Professionals

3221.0200**Nurse, Industrial**

Nurse Industrial renders first-aid and provides general nursing care to workers in industrial establishments. Helps to foster hygienic habits among workers and undertakes duties of preventive character, such as antimalarial precautions, quarantine, etc. is designated as Crèche Nurse and Milk Kitchen Nurse, if supervises or takes charge of crèches and milk kitchens respectively.

ISCO 08 Unit Group Details:

Code 3221

Title Nursing Associate Professionals

3221.0300**Nursing Attendant**

Nursing Attendant helps nursing staff in hospitals, nursing homes in taking care of patients, and performs various miscellaneous low-skilled tasks. Assists Nurses in taking nursing care of patients and rendering other miscellaneous services, such as giving baths, enemas, feeding them at fixed hours, preparing beds, bringing medicines from dispensary etc. Carries patients on stretchers, or in wheeled carts, to and from operation theatre, maintains cleanliness in wards and performs odd jobs such as calling Doctors or Nurses at night etc. Is designated as Ward Ayah, Ward Boy, Nursing Orderly, Pantry Attendant (Nursing), etc. according to nature of work done. May assist nursing staff in operation theatre, blood bank. May assist in massaging, dressing and bandaging.

ISCO 08 Unit Group Details:

Code 3221

Title Nursing Associate Professionals

3221.9900

Nursing Associate Professionals, Other

Nurses, other include all other nursing associate professionals not classified elsewhere.

ISCO 08 Unit Group Details:

Code 3221

Title Nursing Associate Professionals

Family 3222

Midwifery Associate Professionals

Midwifery associate professionals provide basic health care and advice before, during and after pregnancy and childbirth. They implement care, treatment and

referral plans usually established by medical, midwifery and other health professionals.

3222.0100

Midwife

Midwife; Maternity Assistant; Auxiliary Nurse, renders antenatal care to expectant mothers, conducts normal delivery cases, advises for consultation of doctor, when necessary, and renders post-natal care. Looks after new-born babies and recognises signs and symptoms requiring advice of Physician. Advises patients on simple matters of personal hygiene, such as cleanliness of hands, skin, hair, etc., and environmental hygiene, such as protection of food from flies and cleanliness of household. Carries out simple nursing duties. May assist Surgeon or Nurse in labour room and operation theatre.

ISCO 08 Unit Group Details:

Code 3221

Title Midwifery Associate Professionals

3222.0200

Midwifery Attendant

Midwifery Attendant; Ayah, Maternity, Dai assists Midwife or Health Visitor in rendering antenatal and post-natal care to women. Performs tasks such as bathing, massaging and feeding new born babies and their mothers, gives enemas to babies under supervision of Nurse or Midwife; maintains general cleanliness in maternity wards. May help nursing staff in operation theatres or delivery room.

ISCO 08 Unit Group Details:

Code 3221

Title Midwifery
Associate Professionals

3222.0300**Lady Health Visitor/ASHA Worker/Anganwadi Worker**

Lady Health Visitor renders health care at private residences and at health centres. Visits private residences in her jurisdiction to render antenatal care and advice to expectant mothers. Makes arrangements for their confinement and renders post-natal care. Renders health care to mothers, children and expectant mothers in health centres by performing variety of duties, like administering stock medicines, weighing babies, distributing milk and tonics, ensuring vaccination and inoculation, etc. Gives advice on personal and environmental hygiene. Supervises training and work of Dais. May give injections. May also conduct sewing and first aid classes at welfare centres and give family planning advice.

ISCO 08 Unit Group Details:

Code 3221

Title Midwifery Associate Professionals

3222.9900**Midwifery Associate Professionals, Other**

Midwifery Associate Professionals, other include those who assist doctors or midwifery professionals in the delivery of babies, provide antenatal and post-natal care and instruct parents in baby care not elsewhere classified.

ISCO 08 Unit Group Details:

Code 3221

Title Midwifery Associate Professionals

Group 323**Traditional and Complementary Medicine Associate Professionals**

Traditional and complementary medicine associate professionals prevent, care for and treat human physical and mental illnesses, disorders and injuries using herbal and other therapies based on theories, beliefs and experiences originating in specific cultures.

Occupations in this Group are classified into the following Families:

3230 Traditional and Complementary Medicine Associate Professionals

Family 3230**Traditional and Complementary Medicine Associate Professionals**

Traditional and complementary medicine associate professionals prevent, care for and treat human physical and mental illnesses, disorders and injuries using herbal and other therapies based on theories, beliefs and experiences originating in specific cultures.

Group 324**Veterinary Technicians and Assistants**

Veterinary Technicians and Assistants carry out advisory, diagnostic, preventive and curative veterinary tasks, more limited in scope and complexity than those carried out by veterinarians. They care for animals under treatment and in temporary residence at veterinary facilities and assist veterinarians to perform procedures and operations.

Occupations in this Group are classified into the following Families:

3240 Veterinary Technicians and Assistants

Family 3240
Veterinary Technicians and
Assistants

Veterinary Technicians and Assistants carry out advisory, diagnostic, preventive and curative veterinary tasks, more limited in scope and complexity than those carried out by, and with the guidance of, veterinarians. They care for animals under treatment and in temporary residence at veterinary facilities and assist veterinarians to perform procedures and operations.

3240.0100
Vaccinator, Veterinary

Vaccinator, Veterinary, vaccinates, birds or animals against infectious diseases by injecting required type and quantity of vaccine or virus using syringe, needle etc. Immobilise subject (animal or bird) by tying with a rope and with help of others if necessary. Sterilises syringe, needle etc. in boiling water and by washing them with bactericidal. Examines area of body to be vaccinated. Removes feather or hair from marked part of body of subject and cleans it with bactericidal to prevent chances of failure. Loads syringe with vaccine or virus of required quantity and injects it in body as specified. Withdraws syringe needle from body and rubs injected part with cotton soaked in antiseptic liquid to prevent shedding of blood. Recommends hygienic precautions to owner or attendant. Maintains register-showing details of animals vaccinated, vaccine or virus used, etc. May visit vaccinated animals for after care instructions.

ISCO 08 Unit Group Details:
Code 3240

Title Veterinary Technicians and Assistants

3240.0200
Stockman

Stockman; conducts activities of raising and breeding animals and attends to minor ailments and castration of male stock. Buys feed of stock, and weighs and stores them. Prepares diet and feeds stock. Cleans barns and cattle by washing them with water. Arranges grazing on natural pastures. Looks after young at birth. Feeds, cleans and houses them. Treats minor ailments of cattle. Conducts artificial insemination of cattle for improved breed. Arranges mating. Keeps record of pedigrees, coverings, births, etc. Undertakes operations in yard directed towards raising and breeding of stock.

ISCO 08 Unit Group Details:

Code 3240
Title Veterinary Technicians and Assistants

3240.0300
Animal Keeper

Animal Keeper feeds waters and cleans quarters of animals and birds in zoo, circus, chemical, medical or biological research laboratories. Feeds and waters animals as per schedule or prescribed diet list and records amount of food consumed. Observes and reports sick animals to relevant authorities. treats minor injuries and ailments under directions of Veterinarian or respective authorities. Shaves operative area of animals, to prepare them for surgery and administer anaesthetics if engaged in biological or medical research laboratories. Cleans and sterilises cages, pens and surrounding areas. Collects feed and supplies from store. May repair cages

and equipment. May prepare animal feed, bathe and groom animals. May remove dead animals for disposal. May be known as ANIMAL CARE TAKER if engaged in medical or biological research laboratories. May also be designated as BEAR KEEPER, BIRD KEEPER, MONKEY KEEPER, etc., according to animal cared for.

ISCO 08 Unit Group Details:

Code 3240

Title Veterinary Technicians and Assistants

3240.0400

Laboratory Technician, Artificial Breeding

Laboratory Technician, Artificial Breeding measures purity and potency of bull semen to develop improved methods for preserving and processing semen for artificial insemination of cattle. Observes sample of freshly collected sperm cells. Determines density of semen using densimeter. Adds measured amounts of extender, sodium citrate and antibiotics semen to dilute and preserve sample. Transfers semen to refrigeration unit. Cleans and sterilizes laboratory equipment. Performs experimental tests as directed such as to extend survival rate and time of sperm cells and development of improved preservative processes. Cultivates, isolates and identifies pathogenic bacteria and other micro-organism in semen.

ISCO 08 Unit Group Details:

Code 3240

Title Veterinary Technicians and Assistants

3240.9900

Veterinary Technicians and Assistants, Other

Veterinary Assistants, other include all other veterinary associate professionals not elsewhere classified.

ISCO 08 Unit Group Details:

Code 3240

Title Veterinary Technicians and Assistants

Group 325

Other Health Associate Professionals

Other health associate professionals perform technical tasks and provide support services in dentistry, medical records administration, community health, the correction of reduced visual acuity, physiotherapy, environmental health, emergency medical treatment and other activities to support and promote human health.

Occupations in this Group are classified into the following Families:

3251	Dental Assistants and Therapists
3252	Medical Records and Health Information Technicians
3253	Community Health Workers
3254	Dispensing Opticians
3255	Physiotherapy Technicians and Assistants
3256	Medical Assistants
3257	Environmental and Occupational Health Inspectors and Associates
3258	Ambulance Workers
3259	Modern Health Associate Professionals, Not Elsewhere Classified

Family 3251
Dental Assistants and Therapists

Dental Assistants and therapists provide basic dental care services for the prevention and treatment of diseases and disorders of the teeth and mouth, as per care plans and procedures established by a dentist or other oral health professional.

3251.0101
Dental Assistant

Dental Assistant; Dentists Assistant prepares patients for examination, treatment or dental surgery and assists Dentist in performing his work by handing him necessary implements or equipment and by keeping patients comfortable. Obtains and records patient's personal information and medical history and records dental treatment rendered. Seats patient and prepares him for treatment. Arranges dental instruments, materials, and medications and hands them to Dentist as required. Keeps oral operating area clear during dental procedures by use of suction devices, water sprays, cotton rolls and holders and by retraction of cheek and tongue. Measures silver alloy powder and mercury, and operates mechanical amalgamator to prepare dental amalgam. Supplies portions of filling materials to Dentist as required during placement of restorations. Gives emergency treatment for local and systematic distress under Dentist's direction. Sterilises instruments in autoclaves, dry heat ovens or with chemical disinfectants. May expose and process dental X-ray films as directed by Dentist.

Qualification Pack Details:
QP NOS Reference HSS/Q 2401

QP NOS Name	Dental Assistant
NSQF Level	4

ISCO 08 Unit Group Details:
Code 321
Title Dental Assistants and Therapists

3251.9900
**Dental Assistants and Therapists,
Other**

Dental Assistants, other include all those who carry out advisory, diagnostic, preventive and curative dental tasks, more limited in scope and complexity than those carried out by Dentists not elsewhere classified.

ISCO 08 Unit Group Details:
Code 321
Title Dental Assistants and Therapists

Family 3252
**Medical Records and Health
Information Technicians**

Medical Records and Health Information Technicians develop, maintain and implement health records processing, storage and retrieval systems in medical facilities and other health care settings to meet the legal professional, ethical and administrative records-keeping requirements of health services delivery.

3252.0101
**Medical Records and Health
Information Technician**

Medical Records and Health Information Technician in the Healthcare Industry is also known as a Medical Records Clerk, Health Information Clerk, Medical Records Technician, File Clerk, Medical Records Co-

ordinator and Medical Records Analyst. Medical Records and Health Information Technician compile, process, and maintain medical records of hospital and clinic patients in a manner consistent with medical, administrative, ethical, legal, and regulatory requirements of the health care system. They process, maintain, compile, and report patient information for health requirements and standards in a manner consistent with the healthcare industry's numerical coding system.

Qualification Pack Details:

QP NOS Reference	HSS/Q 5501
QP NOS Name	Medical Records and Health Information Technician
NSQF Level	4

ISCO 08 Unit Group Details:

Code	3252
Title	Medical Records and Health Information Technicians

Family 3253 Community Health Workers

Community Health Workers provide health education, referral and follow up, case management, and basic preventive health care and home visiting services to specific communities. They provide support and assistance to individuals and families in navigating the health and social services system.

3253.0101 Diabetes Educator

Diabetes Educator Health professionals involved in the care of people with diabetes through communication, counselling and education. Individuals in this job are involved in understanding the impact of health behaviour and lifestyle

on acute and chronic problems of diabetes and provide a comprehensive, cost effective and self-care management plan.

Qualification Pack Details:

QP NOS Reference	HSS/Q8701
QP NOS Name	Diabetes Educator
NSQF Level	4

ISCO 08 Unit Group Details:

Code	3253
Title	Community Health Workers

3253.0201

Frontline Health Worker

Voluntary health worker engaged at village level in implementation and support of National health programmes. Individuals in this job provide support to Allied health workers engaged in National health programmes. Act as health counsellors to local communities and provide healthcare services

Qualification Pack Details:

QP NOS Reference	HSS/Q8601
QP NOS Name	Frontline Health Worker (Equivalent to ASHA)
NSQF Level	3

ISCO 08 Unit Group Details:

Code	3253
Title	Community Health Workers

3253.9900

Community Health Workers, Other

Community Health Workers, Other include health workers who provide health education, referral and follow up, case management, and basic preventive health care and home visiting services to

specific communities not elsewhere classified.

ISCO 08 Unit Group Details:

Code	3253
Title	Community Health Workers

Family 3254

Dispensing Opticians

Dispensing opticians design fit and dispense optical lenses based on a prescription from an ophthalmologist or optometrist for the correction of reduced visual acuity. They service corrective eyeglasses, contact lenses, low-vision aids and other optical devices.

3254.0100

Optician, General

Optician, General; Optician, dispensing fabricates lenses to prescription specifications, fits lenses in frames, assists customer in choice of frames and fits frames to customer. Reads prescription for frame and lens specifications. Assists customer in choosing frames by advising correct size and shape according to facial features. Measures customer for bridge length and pupillary distance using ruler, and prepares work order slip. Selects lens blank from stock. Sets up and operates machines, such as generator, polisher, edger and hardener to make lens to specifications. Adjusts finished eye glasses to fit customer by heating and shaping plastic or by bending metal frame with fingers and pliers. Inspects lenses and determines specifications of broken lenses with power determining and optical instruments. May examine eyes to determine visual efficiency and performance by means of instrumentation and observation and prescribe corrective

eyeglasses. May sell other optical goods, such as binoculars, magnifying glasses and non-prescription sunglasses.

ISCO 08 Unit Group Details:

Code	3254
Title	Dispensing Opticians

3254.0200

Optician, Contact-Lens

Optician, Contact Lens examines customer's eyes and fits contact lenses to prescription specifications. Measures height and width of eyes and diameter of cornea using millimetre rule. Examines eyelid surface for presence of irregularities. Determines base curve of cornea, using Keratometer. Converts optical prescription into terms applicable to contact lenses. Positions trial lenses on patient's eyes to determine adaptability and wearer discomfort. Explains procedures for installing, removing and cleaning lenses. Grinds finished lenses to fit wearer. May examine eyes and prescribe lens and subnormal vision devices.

ISCO 08 Unit Group Details:

Code	3254
Title	Dispensing Opticians

3254.9900

Dispensing Opticians, Other

Dispensing Opticians, Other include opticians who design, fit and dispense optical lenses based on a prescription from an ophthalmologist or optometrist for the correction of reduced visual acuity not elsewhere classified.

ISCO 08 Unit Group Details:

Code	3254
Title	Dispensing Opticians

Family 3255
**Physiotherapy Technicians and
Assistants**

Physiotherapy Technicians and Assistants provide physical therapeutic treatments to patients in circumstances where functional movement is threatened by injury, disease or impairment. Therapies are usually provided as per rehabilitative plans established by a physiotherapist or other health professional.

3255.0101
Assistant Physiotherapist

Assistant Physiotherapist in the Healthcare Industry is also known as Physical Therapist Assistant (PTA). Assistant Physiotherapist work alongside qualified physiotherapists, assisting in the rehabilitation of patients suffering from reduced mobility. Key tasks of an Assistant Physiotherapist include setting up equipment, preparing clients for therapy and demonstrating mobility aids and exercises. Other duties may include keeping the department tidy and basic administration work.

Qualification Pack Details:

QP NOS Reference	HSS/Q7701
QP NOS Name	Assistant
	Physiotherapist
NSQF Level	4

ISCO 08 Unit Group Details:

Code	3255
Title	Physiotherapy Technicians and Assistants

Family 3256

Medical Assistants

Medical Assistants perform basic clinical and administrative tasks to support patient care under the direct supervision of a medical practitioner or other health professional.

3256.0101
Refractionist

Refractionist in the healthcare industry is also known as Ophthalmic Assistant. Refractionist provides vision care and refraction under the supervision of an ophthalmologist. They assist with taking patient histories, performing diagnostic tests and procedures, dispensing optical prescription and maintaining records.

Qualification Pack Details:

QP NOS Reference	HSS/Q3002
QP NOS Name	Refractionist
NSQF Level	4

ISCO 08 Unit Group Details:

Code	3256
Title	Medical Assistants

3256.0202
Vision Technician

Vision Technician in the healthcare industry is also known as Eye Technician. Vision Technician performs administrative and certain clinical duties. Administrative duties may include scheduling appointments, maintaining medical records and clinical duties may include taking and recording vital signs and medical histories, preparing patients for examination, and dispensing ophthalmic prescription.

Qualification Pack Details:

QP NOS Reference	HSS/Q3001
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QP NOS Name	Vision
Technician	
NSQF Level	4

ISCO 08 Unit Group Details:

Code	3256
Title	Medical Assistants

3256.9900**Medical Assistants, Other**

Medical Assistants, Other include associate professionals who carry out advisory, diagnostic, preventive and creative and curative medical tasks, more limited in scope and complexity than those carried out by medical doctors, not elsewhere classified.

ISCO 08 Unit Group Details:

Code	3256
Title	Medical Assistants

Family 3257**Environmental and Occupational Health Inspectors and Associates**

Environmental and Occupational Health Inspectors and Associates investigate the implementation of rules and regulations relating to environmental factors that may affect human health, safety in the workplace, and safety of processes for the production of goods and services. They may implement and evaluate programmes to restore or improve safety and sanitary conditions under the supervision of a health professional.

3257.0100**Sanitary Inspector**

Sanitary Inspector; Health Assistant takes measures to maintain and improve standard of public health in specified area.

Inspects houses, shops, factories, entertainment places, bazars, drains, night soil depots, rubbish depots, latrines, burial and cremation ground, etc., and undertakes public health activities such as disinfections, anti-malarial and anti-epidemic measures. Inspects hotels, restaurants, etc. to ensure that food and edibles sold are fit for public consumption. Attends to complaints regarding sanitation. Reports outbreak of infectious diseases to authorities and takes preventive measures. Attends courts for prosecution of persons violating sanitation and public health regulations and performs inoculation work. Controls and supervises work of Sanitary Daroghas. May maintain accounts and correspondence, compile figures of births and deaths in his jurisdiction and may investigate causes of death. May be designated as Disinfecting Inspector, Food Inspector, Slaughter House Inspector, Mosquito Inspector, etc. according to nature of work performed.

ISCO 08 Unit Group Details:

Code	3257
Title	Environmental and Occupational Health Inspectors and Associates

3257.0300**Environment Science and Protection Technician, Including Health**

Environmental Science and Protection Technicians, Including Health records test data and prepares reports, summaries, and charts that interpret test results. Collects samples of gases, soils, water, industrial wastewater, and asbestos products to conduct tests on pollutant levels and identify sources of pollution. Respond to and investigate hazardous conditions or spills, or outbreaks of

disease or food poisoning, collecting samples for analysis. Provides information and technical and programme assistance to government Representatives, employers and the general public on the issues of public health, environmental protection or workplace safety. Calibrates microscopes and test instruments. Makes recommendations to control or eliminate unsafe conditions at workplaces or public facilities. Inspects sanitary conditions at public facilities. Prepares samples or photomicrographs for testing and analysis. Calculates amount of pollutant in samples or computes air pollution or gas flow in industrial processes, using chemical and mathematical formulas. Initiates procedures to close down or fine establishments violating environmental and/or health regulations.

ISCO 08 Unit Group Details:

Code 3257

Title Environmental and Occupational Health Inspectors and Associates

3257.0400

Environmental Compliance Inspector

Environmental Compliance Inspector inspects and investigate sources of pollution to protect the public and environment and ensure conformance with Central, State, and local regulations and ordinances. Inspects solid waste disposal and treatment facilities, wastewater treatment facilities, or other water courses or sites for conformance with regulations. Inspects establishments to ensure that handling, storage, and disposal of fertilisers, pesticides, and

other hazardous chemicals conform with regulations. Conducts field tests and collects samples for laboratory analysis. Examines permits, licenses, applications, and records to ensure compliance with licensing requirements. Assists in development of spill prevention programmes and hazardous waste rules and regulations, and recommends corrective action in event of hazardous spill. Prepares, organizes, and maintains records to document activities, recommend action, provide reference materials, and prepare technical and evidentiary reports. Studies laws and statutes to determine nature of code violation and type of action to be taken. Advises individuals and groups concerning pollution control regulations, inspection and investigation findings, and encourages voluntary action to correct problems.

ISCO 08 Unit Group Details:

Code 3257

Title Environmental and Occupational Health Inspectors and Associates

3257.0500

Environmental Engineering Technician

Environmental Engineering Technician applies theory and principles of environmental engineering to modify, test, and operate equipment and devices used in the prevention, control, and remediation of environmental pollution, including waste treatment and site remediation. May assist in the development of environmental pollution remediation devices under direction of engineer. Perform environmental quality work in field and office settings. Receive, setup, test, and decontaminate equipment. Arranges for the disposal of lead, asbestos and other hazardous

materials. Assists in the clean up of hazardous material spills.

Conducts pollution surveys, collecting and analysing samples such as air and groundwater. Develops work plans, including writing specifications and establishing material, manpower and facilities needed. Inspect facilities to monitor compliance with regulations governing substances such as asbestos, lead, and wastewater.

ISCO 08 Unit Group Details:

Code 3257

Title Environmental and Occupational Health Inspectors and Associates

3257.0600

Health, Safety and Environment Officer

Health, Safety and Environment Officer applies theory and principles of environmental engineering and occupational health and safety at the work site to ensure a safe and healthful working environment, protect the surrounding environment that may be impacted by the facility, improve employee relations and productivity, and minimize business risk through the identification and elimination/minimization of environmental, health and safety risks.

ISCO 08 Unit Group Details:

Code 3257

Title Environmental and Occupational Health Inspectors and Associates

3257.9900

Environment Science and Protection Technicians, Other

Environmental Science and Protection Technicians, other include all other

technicians engaged in monitoring the environment and investigating the sources of pollution, not elsewhere classified.

ISCO 08 Unit Group Details:

Code 3257

Title Environmental and Occupational Health Inspectors and Associates

Family 3258 **Ambulance Workers**

Ambulance Workers provide emergency health care to patients who are injured, sick, infirm, or otherwise physically or mentally impaired prior to and during transport to medical facilities.

Family 3259

Modern Health Associate Professionals, Not Elsewhere Classified

This family covers health associate professionals not classified elsewhere. For instance, the group includes occupations such as chiropractor, osteopath and other health associate professionals.

Sub Division 33

Business and Administration Associate Professionals

Business and Administration Associate professionals perform mostly technical tasks connected with the practical application of knowledge relating to financial accounting and transaction matters, mathematical calculations, human resource development, selling and buying financial instruments, specialized secretarial tasks, and enforcing or applying relevant government rules. Also

included are workers who provide business services such as customs clearance, conference planning, job placements, buying and selling real estate or bulk commodities, and serving as agents for performers such as athletes and artists.

Tasks performed by workers in this sub-major group usually include recording and transmitting buy and sell orders for securities, stocks, bonds or other financial instruments and for foreign exchange for future or immediate delivery; submitting credit and loan applications to management with recommendations for approval or rejection; approving or rejecting applications within authorized limits ensuring that credit standards of the institution is respected; maintaining complete records of all financial transactions of an undertaking according to general bookkeeping principles, with guidance from Accountants; assisting in planning and performing mathematical, statistical, actuarial, accounting and related calculations; selling and buying financial instruments.

Occupations in this Sub Division are classified into the following Groups:

331 Financial and Mathematical Associate Professionals
332 Sales and Purchasing Agents and Brokers
333 Business Service Agents
334 Administrative and Specialized Secretaries
335 Government Regulatory Associate Professionals

Group 331 Financial and Mathematical Associate Professionals

Financial and Mathematical Associate professionals place a value on various items and property, maintain records of financial transactions, analyse loan application information and render a decision, buy and sell financial instruments, and perform mathematical and related calculations.

Occupations in this Group are classified into the following Families:

3311 Securities and Finance Dealers and Brokers
3312 Credit and Loan Officers
3313 Accounting Associate Professionals
3314 Statistical, Mathematical and Related Associate Professionals
3315 Valuers and Loss Assessors

Family 3311 Securities and Finance Dealers and Brokers

Securities and Finance Dealers and Brokers buy and sell securities, stocks, bonds and other financial instruments, and deal on the foreign exchange, on spot, or on futures markets, on behalf of their own company or for customers on a commission basis. They recommend transactions to clients or senior management.

3311.0100 Broker, Share Market

Broker, Share-Market; Dalal, Share Market furnishes information to prospective customers regarding shares, bonds, securities, prospects of business and market conditions and buys and sells shares bonds, securities, etc. on behalf of customer in stock exchange on commission basis. Studies balance sheets

of various business concerns and market rates of important shares, bonds, securities, etc. and explains to customers about the advantages and disadvantages of purchasing, selling or exchanging different types of shares, bonds, etc. Buys and sells shares etc. in stock exchange on behalf of customers according to instructions. Maintains account of day-to-day transactions and settles account with client periodically after deducting his commission. Transacts business either personally or through agent in trading-ring with other Brokers or their authorised agents. Attends to all correspondence connected with his business. May purchase and sell shares, securities, bonds, etc. on his own behalf.

ISCO 08 Unit Group Details:

Code	3311
Title	Securities and Finance Dealers and Brokers

3311.0200

Jobber, Share Market

Jobber, Share-Market purchases and sells shares, securities, etc. in trading-ring of stock-exchange (place where Brokers and Jobbers meet at stipulated hours for making transactions) to speculate and make profits due to fluctuations in prices of shares, securities, etc. Attends trading-ring of Stock-Exchange at stipulated hours. Watches market trend and movement of prices of different shares, securities etc. Makes transactions with other Brokers, Jobbers or their authorised agents at prices which appear favourable to him. Keeps record of transactions made by him on note-book called 'Soda-Book'. Remains alert and tries to make profit even out of minor fluctuations. May purchase and sell shares and securities on

behalf of client for brokerage. May maintain record of his transactions.

ISCO 08 Unit Group Details:

Code	3311
Title	Securities and Finance Dealers and Brokers

3311.0201

Equity Dealer

Equity Dealers buy and sell investment and financial instruments on behalf of their clients. They also provide market insights and investment advice to potential and existing clients as per the organizational standards and procedures

Qualification Pack Details:

QP NOS Reference	BSC/Q 0201
QP NOS Name	Equity Dealer
NSQF Level	4

ISCO 08 Unit Group Details:

Code	3311
Title	Securities and Finance Dealers and Brokers

3311.0202

Mutual Fund Agent

Mutual Fund Agent is representative of a bank or similar financial institution, who offers mutual funds to prospective investors, maintains records of their investments and conducts regular market research to advise customers.

Qualification Pack Details:

QP NOS Reference	BSC/Q 0601
QP NOS Name	Mutual Fund Agent
NSQF Level	4

ISCO 08 Unit Group Details:

Code	3311
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Title Securities and Finance Dealers and Brokers

3311.9900

Securities and Finance Dealers and Brokers, Other

Securities and Financial Dealers and Brokers, other buy and sell financial instruments, real estate, securities and services and include all such workers not elsewhere classified.

ISCO 08 Unit Group Details:

Code 3311

Title Securities and Finance Dealers and Brokers

Family 3312

Credit and Loan Officers

Credit and Loan Officers analyse and evaluate financial information on applications for credit and loans and determine approval or disapproval of the client for the credit or loan or recommend to management approval or disapproval.

3312.0100

Finance Agent

Finance Agent arranges loan for clients from financiers on security of real estate, property, etc. Obtains from client details regarding amount of loan needed, rate of interest willing to pay, period for which required, security offered, etc. Scrutinises list of financiers maintained by him, to find out financiers willing to advance loan on specified terms. Negotiates between parties concerned and helps them to arrive at agreement. Goes to legal experts along with parties for drawing out terms of contract and finalising deal. Gets his commission from clients on amount of

loan arranged by him. May collect amount of interest due from clients and pay to financier. May also act as Estate Broker. May arrange loan for client through bank without security and by operating hundis.

ISCO 08 Unit Group Details:

Code 3312

Title Credit and Loan Officers

3312.0101

Loan Approval Officer

Loan Approval Officers evaluate, authorize, or recommend approval of loan applications for people and businesses. Their tasks include compiling the loan application file, performing preliminary checks, approving loans and submitting recommendations for loans beyond their limits for further processing.

Qualification Pack Details:

QP NOS Reference BSC/Q 0401

QP NOS Name Loan Approval Officer

NSQF Level 4

ISCO 08 Unit Group Details:

Code 3312

Title Credit and Loan Officers

3312.9900

Credit and Loan Officers, Other

Credit and Loan Officers, Other include officers who analyse and evaluate financial information on applications for credit and loans and determine approval or disapproval of the client for the credit or loan or recommend to management approval or disapproval not elsewhere classified.

ISCO 08 Unit Group Details:

Code 3312
 Title Credit and Loan Officers

collected. Compiles, tabulates and processes data in prescribed forms for analysis and interpretation. Reports to superiors on results achieved.

Family 3313
Accounting Associate Professionals

Accounting Associate Professionals maintain complete records of financial transactions of an undertaking and verify accuracy of documents and records relating to such transactions.

Family 3314

Statistical, Mathematical and Related Associate Professionals

Statistical, Mathematical and Actuarial Associate professionals assist in planning the collection, processing and presentation of statistical, mathematical or actuarial data and in carrying out these operations, usually working under the guidance of statisticians, mathematicians and actuaries.

3314.0100
Economic Investigator

Economic Investigator collects statistical and other data on prescribed forms by observation, interview, interrogation or by application of other standardized technique for study, analysis and interpretation of various economic problems. Fixes time table or arranges programme of investigation work as directed. Visits areas or places for collection of data according to schedule in prescribed forms. Records information on prescribed forms by observation, interview, interrogation or by application of other standardized technique. Conducts sample verification of data

ISCO 08 Unit Group Details:

Code 3313
 Title Statistical, Mathematical and Related Associate Professionals

3314.0200

Statistical Assistant

Statistical Assistant; Statistical Investigator Collects, compiles and scrutinises statistical data and arranges it in systematic manner to facilitate its analysis, interpretation and presentation, Checks collected data for consistency and reduces quantitative data in convenient form by making statistical calculations. Analyses data to find out dispersion and magnitude of errors. Attends to computation for advanced statistical calculations. Arranges analysed data in proper order in charts, graphs, diagrams etc. for interpretation and publication. May conduct field investigation to collect data on prescribed schedule. May write reports of investigation. May supervise work of Computers and Investigators and guide them when necessary. May operate calculating machines.

ISCO 08 Unit Group Details:

Code 3313
 Title Statistical, Mathematical and Related Associate Professionals

3314.9900

Statistical, Mathematical and Related Associate Professionals, Other

Statistical, Mathematical and Related Associated Professionals, other include those mathematicians, statisticians and related associate professionals not elsewhere classified.

ISCO 08 Unit Group Details:

Code 3313

Title Statistical, Mathematical and Related Associate Professionals

Family 3315

Valuers and Loss Assessors

Valuers and Loss Assessors value property and various goods and assess losses covered by insurance policies.

3315.0100

Valuer

Valuer; Appraiser determines current monetary value of real estate, personal and household effects, books, paintings and other art objects on instructions from seller, creditor, bank, court, archives, etc. on commission basis. Visits place where property to be valued is located. Examines items of property for condition and authenticity and estimates its value. Consults jewellers, artists, etc. for determining current value, where necessary. Makes inventory of property and submits estimates regarding value to clients concerned. Charges commission for work done.

ISCO 08 Unit Group Details:

Code 3315

Title Valuers and Loss Assessors

3315.0200

Claims Inspector, Railways

Claims Inspector, Railway inspects booking, transportation and delivery to ensure strict compliance of railway rules for safety against loss or damages during transit and investigates claims. Examines goods and articles booked for defective packing and inspects seals and locks of waggons in transit to check tampering. Calculates booking charges for correct assessment of charges. Investigates claims for loss or damage filed in conjunction with booking tariff. Evaluates loss by examination of traders' or claimants' account books and market rates. Determines responsibility of railway staff, if any, for loss or damages and arranges recovery. Traces missing consignment, if possible. May attend case hearings for claims made in court.

ISCO 08 Unit Group Details:

Code 3315

Title Valuers and Loss Assessors

3315.0300

Appraiser, Customs

Appraiser, Customs determines monetary worth of merchandise and various kinds of goods, such as art objects, gold ornaments, gems and other luxury goods for assessment of customs duty. Examines bills presented by importer or his agent and ensures that entries are properly made. Gives first check order to shed-appraiser calling for further details or sample if necessary. Supervises examination of all imported merchandise and inspects or examines articles in question, using knowledge and experience of scientific tests and original values to arrive at final estimate. Submits estimate to importer. Furnishes Customs Collector with necessary information for assessment of duty on imported merchandise as per Act. May be a

specialized appraiser in particular type of articles and be designated accordingly.

ISCO 08 Unit Group Details:

Code 3315
Title Valuers and Loss Assessors

3315.0501

Warranty In charge

Warranty In charge manages warranty claims and spare parts replaced under warranty. He is responsible for taking all major warranty decisions as per the OEM guidelines/manual. The individual should provide information on warranty policies and supervise both the replacement of failed parts/aggregates replaced under warranty as well as disposal of the same.

Qualification Pack Details:

QP NOS Reference ASC/Q 1604
QP NOS Name Warranty In charge
NSQF Level 6

ISCO 08 Unit Group Details:

Code 3315
Title Valuers and Loss Assessors

3315.9900

Valuers and Loss Assessors; Other

Appraisers, Valuers and Auctioneers, other include all other associate professional engaged in valuation of property and various goods and assessment of losses covered by insurance policies, or sell objects, properties and goods by auction not elsewhere classified.

ISCO 08 Unit Group Details:

Code 3315
Title Valuers and Loss Assessors

Group 332

Sales and Purchasing Agents and Brokers

Sales and purchasing agents and brokers represent companies, governments and other organizations to buy and sell commodities, goods, insurance, shipping and other services to industrial, professional, commercial or other establishments, or act as independent agents to bring together buyers and sellers of commodities and services.

Occupations in this Group are classified into the following Families:

3321	Insurance Representatives
3322	Commercial Sales Representatives
3323	Buyers
3324	Trade Brokers

Family 3321

Insurance Representatives

Insurance representatives advise on and sell life, accident, automobile, liability, endowment, fire, marine and other types of insurance to new and established clients.

3321.0100

Insurance Agent

Insurance Agent contacts prospective clients and canvasses sale of insurance policies covering risk to life, property, etc. Compiles list of prospective clients through social contacts, business directories, etc. Draws out programme of contacts and interviews with prospective clients. Acts as licensed representative of insurer and procures insurance business on commission basis. Attempts to sell insurance by explaining benefits of various

suitable plans devised by company to cover risk to life, family, property, business, etc. Gets proposal form filled by client. Makes arrangements for medical examination, property inspection or other policy stipulations. Collects advance deposit against first premium and deposits same in Branch Office, Bank, etc. if authorised. Assists policy-holders in servicing their policies. Ensures that he secures stipulated business annually. Keeps record of business booked by him and collects from company amount of commission due to him. Takes guidance of Field or Development Officer, whenever necessary. May assist policyholders in getting their claims settled. May collect premium on behalf of company and deposit same in Branch Office, Bank, etc.

ISCO 08 Unit Group Details:

Code	3321
Title	Insurance Representatives

3321.0101

Sales Officer (Auto Insurance)

Sales Officer (Auto Insurance) is responsible for the selling of retail insurance products, such as for general vehicles, bulk/institutional vehicles, commercial vehicle and collection of their premiums.

Qualification Pack Details:

QP NOS Reference	ASC/Q2101
QP NOS Name	Sales Officer (Auto Insurance)
NSQF Level	5

ISCO 08 Unit Group Details:

Code	3321
Title	Insurance Representatives

3321.0102

Sales Consultant (Auto Finance)

Sales Consultant (Auto Finance) is also known as Branch Sales Manager, Sales Executive, Field Officer, Business Development Manager, Customer Relationship Manager and Field Sales Officer. A Sales Consultant (Auto Finance) is responsible for the sale of retail financial products such as vehicle/automobile loans, bulk/institutional vehicle loans and commercial vehicle loans and collection post the financial product is sold.

Qualification Pack Details:

QP NOS Reference	ASC/Q2001
QP NOS Name	Sales
Consultant (Auto Finance)	
NSQF Level	4

ISCO 08 Unit Group Details:

Code	3321
Title	Insurance Representatives

3321.0200

Insurance Adjuster, Examiner, Surveyor and Investigator

Insurance Adjuster, Examiner, surveyor, and Investigator investigates, analyses, and determines the extent of insurance company's liability concerning personal, casualty, or property loss or damages, and attempts to effect settlement with claimants. Corresponds with or interviews medical specialists, agents, witnesses, or claimants to compile information. Calculates benefit payments and approves payment of claims within a certain monetary limit. Interviews or corresponds with claimant and witnesses, consults police and hospital records, and inspects property damage to determine extent of liability. Investigates and assesses damage to property. Examines claims form and other records to determine insurance coverage. Analyses information gathered

by investigation and report findings and recommendations. Negotiates claim settlements and recommends litigation when settlement cannot be negotiated. Prepares report of findings of investigation. Collects evidence to support contested claims in court. Interviews or corresponds with agents and claimants to correct errors or omissions and to investigate questionable claims. Refers questionable claims to investigator or claims adjuster for investigation or settlement. Examines titles to property to determine validity and act as company agent in transactions with property owners.

ISCO 08 Unit Group Details:

Code 3321
Title Insurance Representatives

3321.0201 Finance, Insurance and Registration Co-ordinator

Finance, Insurance and Registration Co-ordinator is responsible for handling financing and insurance of the vehicle prior to its sale and registration process after the sale of the vehicle at the dealership. The individual is also responsible for managing the financing and insurance liaison with OEM and finance/Insurance Banks/NBFCs

Qualification Pack Details:

QP NOS Reference	ASC/Q 1201
QP NOS Name	Finance,
Insurance and Registration Co-ordinator	
NSQF Level	5

ISCO 08 Unit Group Details:

Code 3321
Title Insurance Representatives

3321.9900

Insurance Representatives, Other

Insurance Representatives, other include those who advise on and sell life, accident, automobile, liability, endowment, fire, marine and other types of insurance to new and established clients not elsewhere classified.

ISCO 08 Unit Group Details:

Code 3321
Title Insurance Representatives

Family 3322 Commercial Sales Representatives

Commercial sales representatives represent companies to sell various goods and services to businesses and other organizations and provide product specific information as required.

3322.0101

Sales Representative, Technical

Sales Representative, Technical travels in allotted area and canvasses for sale of machinery, plants, equipment, accessories, etc. Plans daily visits to prospective clients in allotted area. Introduces his products by showing samples, catalogues and relevant literature. Arranges demonstration of his products if necessary and renders necessary instructions regarding use, operations, maintenance, servicing and other technical details. Advises customers in computing costs of installation and savings in production costs, and gives them estimates, blueprints etc. Follows up his visits, discusses and finalises with clients, price, cost of installation, credit terms, etc. Books orders and forwards them to controlling office for compliance.

Submits report to controlling office on day-to-day progress of work and makes suggestions for improving sales. Studies literature supplied by manufacturers and keeps abreast with latest technical developments. May attend to erection and servicing of machinery or plant supplied and ensure that Technical Demonstrators, Fitters, etc. execute their tasks properly.

Qualification Pack Details:

QP NOS Reference	ASC/Q1801
QP NOS Name	Sales
Representative	
NSQF Level	5

ISCO 08 Unit Group Details:

Code	3322
Title	Commercial Sales Representatives

3322.0200

Commercial Traveller, General

Commercial Traveller, General; Touring Salesman; Travelling Salesman travels in allotted areas and canvasses local dealers and consumers to buy his products. Plans daily visits to cover all important dealers and consumers in his area. Introduces products by showing samples, catalogues etc. Persuades intending purchasers to buy and stock his products. Discusses and finalises terms regarding sales, commission, credit facilities, etc. Books order and forwards it to head office for compliance. Gives advance information to dealers and consumers of contemplated rise in prices, etc. Ensures that publicity material is properly displayed in area. Submits report of his canvassing activities and marketing conditions to head office and makes suggestions for imp roving sales. Keeps record of orders booked and sales effected by him. Maintains contacts with officers of head office to ensure that

orders placed are executed promptly. May deliver or arrange to deliver products to dealers if required urgently. May collect payments for products sold.

ISCO 08 Unit Group Details:

Code	3322
Title	Commercial Sales Representatives

3322.0300

Canvasser, Sales

Canvasser, Sales; Salesman Demonstrator calls on customers in area allotted and solicits business for goods by creating buying interest among customers. Plans out his visits and goes from door to door in allotted area. Explains purpose of visit and introduces product concerned to customers. Explains uses, merits, durability and other distinguishing features of goods to customers. Distributes literature and sample and gives demonstration if necessary. Follows up visits by calling again to find out result and views of customers. Books orders and posts them to delivery department for execution. Visits old customers to find out their difficulties and requirements. Submits report on his canvassing activities and makes suggestions for improvement of sales to employer. May work on salary or commission basis or both.

ISCO 08 Unit Group Details:

Code	3322
Title	Commercial Sales Representatives

3322.0500

Sales Supervisor, Wholesale Trade

Sales Supervisor, Wholesale Trade supervises wholesale business of any commodity in particular area of specified zone to effect better sale and improve supply and demand position. Contacts

businessmen and takes stock of available business in his area. Directs Representatives or area Salesmen to contact prospective retail businessmen. Advises Stockists and Distributors to supply goods as required and maintains registers of sales effected. Supervises work of Representatives or area Salesmen to popularise and promote business by undertaking advertisement and publicity drives and looks into complaints of service and defective or poor quality of goods for improvement. Informs head office of market trends and of defects or complaints noticed in products, suggesting improvements to avoid adverse effects on business. Submits prescribed returns and reports performance of juniors and subordinates to head office for service benefits or otherwise.

ISCO 08 Unit Group Details:

Code 3322

Title Commercial Sales Representatives

3322.0601

Key Accounts Sales Manager

Key Accounts Sales Manager is responsible for tracking all activities in the assigned area for selling vehicle to corporate, fleet, bulk or institutional customers. The individual is responsible for ensuring smooth flow of sales process to bulk customers from the channel partner or directly through the OEM.

Qualification Pack Details:

QP NOS Reference ASC/Q 0102

QP NOS Name Key Accounts Sales Manager

NSQF Level 5

ISCO 08 Unit Group Details:

Code 3322

Title Commercial Sales Representatives

3322.0701

Regional Parts Manager

Regional parts Manager is responsible for managing spare parts business for the OEM across the region. The individual manages and ensures spare parts movement.

Qualification Pack Details:

QP NOS Reference ASC/Q0606

QP NOS Name Regional Parts Manager

NSQF Level 6

ISCO 08 Unit Group Details:

Code 3322

Title Commercial Sales Representatives

3322.0801

Area Manager (Auto Components)

Area Manager (Auto Components) will be accountable for achieving the sales objectives of their area, and is responsible for budget preparation and cost management of the distributors along with ensuring the development, tracking and reporting of sales and action plans in collaboration with the sales teams. The responsibility also includes generating additional sales through new accounts/customers in the allocated territory/area.

Qualification Pack Details:

QP NOS Reference ASC/Q 1702

QP NOS Name Area Manager (Auto Components)

NSQF Level 7

ISCO 08 Unit Group Details:

Code 3322

Title Commercial Sales Representatives

3322.0802

Sales Officer (Auto Components)

Sales Officer (Auto Components) is responsible for planning sales target for the auto components used by various OEMs through Auto Components distributors/OEM dealers and ensure higher sales

Qualification Pack Details:

QP NOS Reference	ASC/Q 1701
QP NOS Name	Sales Officer
(Auto Components)	

NSQF Level 4

ISCO 08 Unit Group Details:

Code 3322
Title Commercial Sales Representatives

3322.0900

Sales Supervisor, Retail Trade

Sales Supervisor, Retail Trade supervises performance of Sales girls and Salesmen in department stores, emporia, etc. to co-ordinate their functions and ensure smooth selling activities. Gets merchandise properly arranged by Shop Attendants according to quality, demand, price range, etc. and labels them for display to prospective Buyers. Ensures that Salesmen, Retail and Shop Assistants attend to customers promptly and politely and effect sales in regular manner by creating purchasing interest in customers. Watches measuring or weighing, collection of money, packing and other selling activities and ensures cordial and renewed interest of customers for future purchases. Maintains stock of goods in demand and replenishes them as necessary. May personally attend to customers during rush hours. May take

special interest in attending, introducing new items and selling articles to patrons, foreigners and important persons. May handle cash and maintain stock and sales accounts. May work as Field Supervisor, co-ordinate function of Sales Representatives and publicise marketing activities.

ISCO 08 Unit Group Details:

Code 3322
Title Commercial Sales Representatives

3322.1001

Territory Sales Manager

Territory Sales Manager (Retail) is responsible for planning and analysing annual sales targets for the OEM vehicles delivered through the various channel partners including dealers/distributors and to ensure better customer satisfaction through the channel partners.

Qualification Pack Details:

QP NOS Reference	ASC/Q 0101
QP NOS Name	Territory Sales Manager (Retail)
NSQF Level	5

ISCO 08 Unit Group Details:

Code 3322
Title Commercial Sales Representatives

3322.1002

Territory Sales Manager (Used Vehicles)

Territory Sales Manager (Used Vehicles) is responsible for analysing and planning annual sales targets for the company, ensuring valuation for used vehicles and manage operations to achieve targeted sales.

Qualification Pack Details:

QP NOS Reference	ASC/Q 0104
QP NOS Name	Territory
Sales Manager (Used Vehicles)	
NSQF Level	5

Qualification Pack Details:

QP NOS Reference	ASC/Q0607
QP NOS Name	Regional
Manager-Customer Care	
NSQF Level	6

ISCO 08 Unit Group Details:

Code	3322
Title	Commercial
Sales Representatives	

3322.1101**Customer Relationship Manager**

Customer Relationship Manager is responsible for assisting in sales support and expansion through customer satisfaction, activities such as enhancing customer experience at the dealership showroom, recording their effectiveness and supervising the overall implementation are also part of the job role.

Qualification Pack Details:

QP NOS Reference	ASC/Q 1104
QP NOS Name	Customer
Relationship Manager	
NSQF Level	7

ISCO 08 Unit Group Details:

Code	3322
Title	Commercial
Sales Representatives	

3322.1102**Regional Manager-Customer Care**

Regional Manager-Customer Care is responsible for the proper co-ordination of management and development of key accounts within the region, to maintain and ensure customer satisfaction, drive business growth and achieve sales targets.

ISCO 08 Unit Group Details:

Code	3322
Title	Commercial Sales Representatives

3322.1201**Regional Sales Manager (Pre-owned Vehicles)**

Regional Sales Manager (Pre-owned Vehicles) is responsible for planning and analysing sales for used/pre-owned vehicles and co-ordinate with sales and service functions to manage and supervise the used/preowned vehicle sales at the channel partner over a specified area.

Qualification Pack Details:

QP NOS Reference	ASC/Q 0105
QP NOS Name	Regional Sales
	Manager (Pre-owned Vehicles)
NSQF Level	6

ISCO 08 Unit Group Details:

Code	3322
Title	Commercial Sales Representatives

3322.1202**Sales Lead (Pre-owned Vehicles)**

Sales Lead (Pre-owned Vehicles) is responsible for managing sales of pre-owned automobile units at dealership. Analysing and driving sales as per the business target, managing and maintaining backend operations and supervising sales operations are also some of his responsibilities.

Qualification Pack Details:

QP NOS Reference	ASC/Q 1008
QP NOS Name	Sales Lead (Pre-owned Vehicles)
NSQF Level	7

QP NOS Reference	ASC/Q 1009
QP NOS Name	Sales Manager
NSQF Level	8

ISCO 08 Unit Group Details:

Code	3322
Title	Commercial Sales Representatives

3322.1203**Sales Consultant (Pre-owned Vehicles)**

Sales Consultant (Pre-owned Vehicles) handles potential customer leads, presents value proposition for vehicles and manages vehicle sales for used/pre-owned vehicles. The individual also performs support activities like valuations post checking the overall vehicle condition

Qualification Pack Details:

QP NOS Reference	ASC/Q 1003
QP NOS Name	Sales Consultant (Pre-owned Vehicles)
NSQF Level	6

ISCO 08 Unit Group Details:

Code	3322
Title	Commercial Sales Representatives

3322.1302**Sales Consultant (Institutional Sales)**

Consultant (institutional sales) handles potential customer leads, presents value proposition for vehicles and manages vehicle sales

Qualification Pack Details:

QP NOS Reference	ASC/Q1002
QP NOS Name	Sales Consultant (Institutional Sales)
NSQF Level	5

ISCO 08 Unit Group Details:

Code	3322
Title	Commercial Sales Representatives

3322.1303**Sales Consultant (Retail)**

Sales Consultant (Retail) Level 5 handles potential customer leads, presents value proposition for vehicles and manages vehicle retail sales.

Qualification Pack Details:

QP NOS Reference	ASC/Q1005
QP NOS Name	Sales Consultant (Retail) Level 5
NSQF Level	5

ISCO 08 Unit Group Details:

Code	3322
Title	Commercial Sales Representatives

Qualification Pack Details:

Sales Manager is responsible for supporting sales function of the assigned area at the dealership including planning and analysing annual sales targets given by the OEM to the dealership. Managing personnel and assisting in interoperability of various dealer-OEM functions are also some of the other responsibilities.

3322.1304 Sales Consultant

Sales Consultant Level 4 handles potential customer leads, presents value proposition for vehicles and manages vehicle retail sales.

Qualification Pack Details:

QP NOS Reference	ASC/Q1005
QP NOS Name	Sales Consultant
NSQF Level	4

ISCO 08 Unit Group Details:

Code	322
Title	Commercial Sales Representatives

3322.1305 Floor Manager

Floor Manager in the jewellery retail store manages a section of sales counters, mostly, of similar product categories, e.g., gold section, or diamond section. The individual is responsible for the sales at the sections and also the performance of human resource working there. Sometimes, the individual may also manage the store alongside the Store Manager.

Qualification Pack Details:

QP NOS Reference	G&J/Q8304
QP NOS Name	Floor Manager
NSQF Level	5

ISCO 08 Unit Group Details:

Code	322
Title	Commercial Sales Representatives

3322.1306 Store Manager

Store Manager in the jewellery retail store manages the sales and operations of the jewellery retail store. The individual is responsible for the performance of human resource and decides on product management, sales and promotion strategy to be followed at a store level.

Qualification Pack Details:

QP NOS Reference	G&J/Q6201
QP NOS Name	Store Manager
NSQF Level	6

ISCO 08 Unit Group Details:

Code	3322
Title	Commercial Sales Representatives

3322.1400

Other Sales Supervisor

Sales Supervisors, other includes all other Sales Supervisors engaged in wholesale or retail trade to effect, popularise and promote business, not elsewhere classified.

ISCO 08 Unit Group Details:

Code	3322
Title	Commercial Sales Representatives

3322.1501

Regional Sales Manager (RSM)

Regional Sales Manager (RSM) is responsible for selling and managing retail and wholesale automobile units through dealer network over a specified area.

Qualification Pack Details:

QP NOS Reference	ASC/Q 0103
QP NOS Name	Regional Sales Manager (RSM)
NSQF Level	7

ISCO 08 Unit Group Details:

Code 3322
Title Commercial Sales Representatives

3322.1601**Regional Dealer Development Manager/Network Expansion Manager**

Regional Dealer Development Manager is responsible for identifying investors for new dealers in open markets to support the growth of the dealer network by strategically placing dealerships in growing markets.

Qualification Pack Details:

QP NOS Reference	ASC/Q 0301
QP NOS Name	Regional Dealer Development Manager/Network Expansion Manager
NSQF Level	6

ISCO 08 Unit Group Details:

Code 3322
Title Commercial Sales Representatives

3322.1701**Marketing Manager—Line of Business**

Marketing Manager-LOB is responsible for developing and maintaining marketing strategies to meet agreed company objectives and evaluate customer research, market conditions, competitor's data and implement marketing plan alterations as needed.

Qualification Pack Details:

QP NOS Reference	ASC/Q 0504
QP NOS Name	Marketing Manager – Line of Business
NSQF Level	7

ISCO 08 Unit Group Details:

Code 3322
Title Commercial Sales Representatives

3322.1702**Marketing and Social Media Manager**

Marketing and Social Media Manager is responsible for designing and formulating branding and marketing activities of dealership in close co-ordination with the sales and marketing of OEM. Developing and executing market plans for the promotion of dealership which includes social media strategy are also part of this job role.

Qualification Pack Details:

QP NOS Reference	ASC/Q 1110
QP NOS Name	Marketing and Social Media Manager
NSQF Level	7

ISCO 08 Unit Group Details:

Code 3322
Title Commercial Sales Representatives

3322.2101**Regional Retail Finance and Insurance Manager**

Regional Retail Finance and Insurance Manager is responsible for assisting and supervising in financing process of the automobile units at the overall dealership network of the region.

Qualification Pack Details:

QP NOS Reference	ASC/Q 0401
QP NOS Name	Regional Retail Finance and Insurance Manager
NSQF Level	6

ISCO 08 Unit Group Details:

Code 3322

Title Commercial Sales Representatives

3322.2501**Service Supervisor**

Service Supervisor oversees service; repair and maintenance work in the workshop done as per the OEM guidelines and manage the work done by mechanics and other aggregate specialists within the expected time and cost to ensure minimum repeat complaints.

Qualification Pack Details:

QP NOS Reference ASC/Q1412

QP NOS Name Service Supervisor

NSQF Level 7

ISCO 08 Unit Group Details:

Code 3322

Title Commercial Sales Representatives

3322.2502**Service Advisor**

Service Advisor manages customer relationships at the workshop promotion. The individual is responsible for understanding the various complaints from the customer and post that identified the service or repair requirements to resolve the customer issues in a timely and cost effective manner as agreed with the customer.

Qualification Pack Details:

QP NOS Reference ASC/Q1602

QP NOS Name Service Advisor

NSQF Level 6

ISCO 08 Unit Group Details:

Code 3322

Title Commercial Sales Representatives

3322.2503**Service Office Manager**

Service Office Manager is also known as Plant Vehicle Team Manager. A Service Office Manager ensures liaising between plant and on-field services functions for smoother operability and monitors and reviews reporting of product performance.

Qualification Pack Details:

QP NOS Reference ASC/Q0902

QP NOS Name Service Office Manager

NSQF Level 5

ISCO 08 Unit Group Details:

Code 3322

Title Commercial Sales Representatives

3322.2504**Service Office Executive**

Service Office Executive is responsible for co-ordinating between Field Service and Plants for better customer satisfaction.

Qualification Pack Details:

QP NOS Reference ASC/Q0901

QP NOS Name Service Office Executive

NSQF Level 4

ISCO 08 Unit Group Details:

Code 3322

Title Commercial Sales Representatives

3322.4001**Pre Delivery Inspection In Charge**

Pre Delivery Inspection In charge is responsible for managing the overall process of functional and visual inspection of the vehicles before delivery to ensure it

meets the customers' expectations. The individual is responsible for ensuring stringent checks/inspections (including thorough cleaning and washing) through PDI Supervisor and his team of technicians and washers.

Qualification Pack Details:

QP NOS Reference	ASC/Q 1108
QP NOS Name	PDI In
Charge	
NSQF Level	6

ISCO 08 Unit Group Details:

Code	3322
Title	Commercial Sales Representatives

3322.4002

Pre Delivery Inspection Supervisor

Pre Delivery Inspection Supervisor is responsible for functional and visual inspection of the overall vehicle before delivery to ensure that it meets the customers' expectations. The individual is responsible for thorough product check including the oil and lubricant levels and other quality checks as specified by the OEM along with ensuring that the vehicle is cleaned and thoroughly washed before delivery.

Qualification Pack Details:

QP NOS Reference	ASC/Q 1107
QP NOS Name	PDI
Supervisor	
NSQF Level	5

ISCO 08 Unit Group Details:

Code	3322
Title	Commercial Sales Representatives

3322.5001

Plumbing Products Sales Officer

Plumbing Products Sales Officer is responsible for management of sales of plumbing products manufactured by the Company in within a defined geographic area, province or country.

Qualification Pack Details:

QP NOS Reference	PSC/Q0302
QP NOS Name	Plumbing Products Sales Officer
NSQF Level	3

ISCO 08 Unit Group Details:

Code	3322
Title	Commercial Sales Representatives

3322.5002

Plumber Aftersales Service

Plumber (After Sales Service) is responsible for maintenance and servicing of the company's products used in plumbing systems of housing, commercial and institutional setups.

Qualification Pack Details:

QP NOS Reference	PSC/Q0303
QP NOS Name	Plumber Aftersales Service
NSQF Level	3

ISCO 08 Unit Group Details:

Code	3322
Title	Commercial Sales Representatives

3322.6001

Export Executive

Export Executive plans and co-ordinates the international shipment of goods. During the course of their work, they may negotiate with a variety of people, such as shippers, agents and vendors, and are

expected to have excellent customer service skills in dealing with customers/buyers. Their work includes preparation and management of all shipment related documents, interpret export financing methods and terms of payment, handle the Central Excise/Customs Clearance: Regulations, Procedures and Documentation.

Qualification Pack Details:

QP NOS Reference	AMH/Q 1602
QP NOS Name	Export Executive
NSQF Level	5

ISCO 08 Unit Group Details:

Code	3322
Title	Commercial Sales Representatives

3322.6011

Export Assistant

Export Assistant is responsible for managing all the processes in the export department of a company. This includes preparation and management of all shipment related documents, interpret export financing methods and terms of payment, understand foreign trade practices and procedures, handle the Central Excise/Customs Clearance: Regulations, Procedures and Documentation.

Qualification Pack Details:

QP NOS Reference	AMH/Q1601
QP NOS Name	Export Assistant
NSQF Level	4

ISCO 08 Unit Group Details:

Code	3322
Title	Commercial Sales Representatives

3322.9900

Commercial Sales Representatives, Other

Technical and Commercial Sales Representatives, other include all other representatives engaged in selling of various goods on a wholesale basis including installations, equipment and technical products and related services, and provide specialized information as required not elsewhere classified.

ISCO 08 Unit Group Details:

Code	3322
Title	Commercial Sales Representatives

Family 3323

Buyers

Buyers buy goods and services for use or resale on behalf of industrial, commercial, government or other establishments and organizations.

3323.0100

Buyer

Buyer buys goods, such as farm produce, used clothing, old newspapers, waste materials, etc. for company use or for resale. Appraises and weighs goods to determine their value. Goes around different localities or areas and purchases goods from sellers according to authorisation or prospect for resale. Sorts purchased goods according to type, quality and value and sells them to business establishments or private individuals. May deal in old machinery parts, waste paper, used cans, worn garments, etc. according to investment, resale value and personal capacity.

ISCO 08 Unit Group Details:

Code	3323
Title	Buyers

3323.0101**Merchandiser-Gem and Jewellery**

Merchandiser is the person in charge of deciding the jewellery product to be procured for sales in the jewellery store. The individual at work in the jewellery store estimates the demand for the product, plans for jewellery product to be ordered, identify and select the best vendor and place the order. The individual is responsible for executing the strategy of the organization.

Qualification Pack Details:

QP NOS Reference	G&J/Q8202
QP NOS Name	Merchandiser
NSQF Level	6

ISCO 08 Unit Group Details:

Code	3323
Title	Buyers

3323.0102**Merchandiser-Apparel**

Merchandiser plays a major role right from order booking process to Shipment. The critical role of merchandising department can be divided into three major heads: Order Booking Process, Product Development Process and Pre – Production Process.

Qualification Pack Details:

QP NOS Reference	AMH/Q0901
QP NOS Name	Merchandiser
NSQF Level	5

ISCO 08 Unit Group Details:

Code	3323
Title	Buyers

3323.0200**Purchasing Agent**

Purchasing Agent purchases goods at favourable prices on behalf of wholesalers, big consumers, Government authorities, etc. on salary or commission basis. Receives instructions from clients on specification of goods and rates at which goods are to be purchased. Contacts Manufactures Agents or Wholesale Dealers and finds out prevailing rates, quality and quantity of goods available. Acquaints clients with latest information. Purchases goods according to instructions of clients. Takes delivery of goods purchased and makes arrangements for packing and delivering of goods to clients. Forwards receipts, bills through bank for collection. Attends to all correspondence and inquiries pertaining to business. Keeps close liaison with Procedures, Agents and Wholesale Dealers for knowing market fluctuations and advises clients accordingly. May offer quotations against tenders issued by Government, Local Authorities and other big consumers.

ISCO 08 Unit Group Details:

Code	3323
Title	Buyers

3323.0301**Vendor Development Executive**

Vendor Development Executive needs to identify new vendors and evaluate their technical, commercial and capacity capabilities. The individual also needs to work with selected vendors for development of parts constantly improving quality, cost and delivery performance.

Qualification Pack Details:

QP NOS Reference	ASC/Q6201
QP NOS Name	Vendor Development Executive
	Level 5
NSQF Level	5

ISCO 08 Unit Group Details:

Code	3323
Title	Buyers

3323.0401**Purchase Executive**

Purchase Executive is also known as Purchase Officer, the Purchase Executive purchases materials of specified quality in timely manner at competitive prices to maintain the optimum inventory. The individual at work collects information about the materials required by different departments, selects the right supplier, purchases materials in a timely manner at the lowest cost and maintains the optimum inventory of materials.

Qualification Pack Details:

QP NOS Reference	ELE/Q7701
QP NOS Name	Purchase Executive
NSQF Level	4

ISCO 08 Unit Group Details:

Code	3323
Title	Buyers

3323.0501**Purchase Executive-Solar**

Purchase Executive-Solar is also known as Procurement Executive, the Purchase Executive purchases materials of desired quality in timely manner at competitive prices to maintain the optimum inventory level. The individual at work collects information about the materials required by different departments, selects the right

supplier, purchases materials in a timely manner at the lowest cost and maintains the optimum inventory of materials. The individual at work collects information about the materials required by different departments, selects the right supplier, purchases materials in a timely manner at the lowest cost and maintains the optimum inventory of materials.

Qualification Pack Details:

QP NOS Reference	ELE/Q5701
QP NOS Name	Purchase Executive-Solar
NSQF Level	5

ISCO 08 Unit Group Details:

Code	3323
Title	Buyers

3323.0601**Associate-Supply Chain Management**

Associate-Supply Chain Management help clients in optimising their supply chain. The key activities they are involved in include generating orders, taking orders, collecting unpaid bills, reviewing customer/vendor payment and trends, performing dispatch follow-up, managing suppliers, managing inventories and providing procurement/sourcing support.

Qualification Pack Details:

QP NOS Reference	SSC/Q 3001
QP NOS Name	Associate-SCM
NSQF Level	7

ISCO 08 Unit Group Details:

Code	3323
Title	Buyers

3323.0602

Supply Chain Field Assistant

Supply Chain Field Assistant: Supply Chain Field Assistant arranges for flow of agricultural produce from farmer to buyer. The person manages the flow of goods and ensures continuity of supply by identifying the needs right from procurement, packing and transporting the goods to ensuring all requisites carried out for fresh quality of stock maintained till it reaches the buyer.

Qualification Pack Details:

QP NOS Reference	AGR/Q7801
QP NOS Name	Supply Chain Field Assistant
NSQF Level	4

ISCO 08 Unit Group Details:

Code	3323
Title	Buyers

3323.9900

Buyers, Other

Buyers, other include all other buyers who buy goods and services on behalf of industrial, commercial or other enterprises not elsewhere classified.

ISCO 08 Unit Group Details:

Code	3323
Title	Buyers

Family 3324

Trade Brokers

Trade brokers buy and sell commodities and shipping services, usually in bulk, on behalf of their own company or for customers on a commission basis.

Group 333

Business Service Agents

Business service agents establish contacts to sell various business services such as advertising space in the media, carry out customs clearance activities ensuring that necessary documents are in order, match jobseekers with vacancies, find workers for employers, arrange contracts for the performance of athletes, entertainers and artists, as well as for the publication of books, the production of plays, or the recording, performing and sale of music, plan and organize conferences and similar events.

Occupations in this Group are classified into the following Families:

3331	Clearing and Forwarding Agents
3332	Conference and Event Planners
3333	Employment Agents and Contractors
3334	Real Estate Agents and Property Managers
3339	Business Service Agents, Not Elsewhere Classified

Family 3331

Clearing and Forwarding Agents

Clearing and forwarding agents carry out customs clearing procedures and ensure that insurance, export/import licences and other formalities are in order.

Family 3332

Conference and Event Planners

Conference and event planners organize and co-ordinate services for conferences, events, functions, banquets and seminars.

Family 3333

Employment Agents and Contractors

Employment agents and contractors match jobseekers with vacancies, find workers for employers and contract labour for particular projects at the request of enterprises and other organizations including government, institutions, or find places for jobseekers for a commission.

Family 3334 Real Estate Agents and Property Managers

Real Estate Agents and Property Managers arrange the sale, purchase, rental and lease of real property, usually on behalf of clients and on a commission basis.

3334.0100 Property Dealer

Property Dealer; Estate Broker; advises clients on purchase, sale and lease of real estate and assists them in settlement of deal on commission basis. Contacts intending sellers of property, and obtains details of property to be sold or purchased. Estimates value of property, finding out prevailing rates in locality. Consults engineers, municipal authorities, Govt. authorities, etc. for getting further details regarding title, mortgage taxes, etc. of property. Scrutinises list of sellers and prospective purchasers maintained by him, contacts them to find out their requirements and to place before them proposals regarding different estates available for sale or lease. Takes buyer to sites and shows him estates available for sale. Negotiates between seller and buyer and helps them to arrive at agreement.

Collects earnest money from purchasers and hands it over to seller thereafter. Approaches Legal Adviser with parties concerned, draws out terms of contract and finalises deal. Charges commission from his clients when deal is finalised. Attends to correspondence pertaining to his business and advertises property for purchase, sale or lease.

ISCO 08 Unit Group Details:

Code 3334
Title Real Estate Agents and Property Managers

3334.0200 House Agent

House Agent; Property Agent assists house owners and tenants in renting out and securing suitable accommodation on commission basis. Contacts house-owners of vacant houses, flats, shops etc. to obtain details regarding accommodation available, rent, etc. Maintains list of accommodation available and of prospective tenants. Publicises accommodation available for lease or rent. Contacts prospective tenants and gives them information about available accommodation along with rent demanded by owner. Conducts client to site to show him available accommodation. Negotiates between house-owner and prospective tenant and helps them in arriving at agreement. Charges commission according to prevailing rates. May collect rent and manage property on behalf of client, by charging nominal fee on monthly basis.

ISCO 08 Unit Group Details:

Code 3334
Title Real Estate Agents and Property Managers

3334.9900

Estate Agents, Other

Estate Agents, Other include agents who arrange the sale, purchase, rental and lease of real property, usually on behalf of clients and on a commission basis not elsewhere classified.

ISCO 08 Unit Group Details:

Code 3334
Title Real Estate Agents and Property Managers

Family 3339

Business Service Agents, Not Elsewhere Classified

This family covers business services agents not classified elsewhere. For instance, the group includes those who establish business contacts, sell business services such as advertising space in the media, arrange contracts for performances of athletes, entertainers and artists, for the publication of books, the production of plays, or the recording, performance and sale of music and who sell property and goods by auction.

3339.0200

Brand Manager

Brand Manager liaises with principals to negotiate product pricing and maintain relationships. Provides inputs with regards to product pricing and positioning through competitor analysis and market surveys/benchmarking. Meticulously plans and executes marketing business plans, based on market trends to promote presence in the global market. Directs the sales team and designs innovative

schemes to motivate them. Recruits and develops staff.

ISCO 08 Unit Group Details:

Code 3339
Title Business Service Agents Not Elsewhere Classified

3339.0300

Auctioneer

Auctioneer organizes auction of movable and immovable property and sells it to highest bidder. Receives or makes arrangements to bring articles to be auctioned at his place or conducts auction at site. Makes inventories of items of property to be sold giving their short description and allotting numbers to each item of property. Fixes date and time of auction in consultation with seller. Publicises auction through hand bills, posters, beat of drums, advertisements in newspapers, personal talks, etc. Displays property in shop or at site. Distributes copies of inventory to intending purchasers and describes articles to persons gathered and invites persons to quote prices. Supervises sale on day of auction. Sells property to highest bidder and hands over property on receipt of full payment. Keeps account of money realised and remits it to seller after deducting his commission. Attends to all correspondence relating to his business. May also act as Crier during auction-sale. May be appointed as AUCTIONEER to Govt., High Court; Municipality, etc.

ISCO 08 Unit Group Details:

Code 3339
Title Business Service Agents Not Elsewhere Classified

3339.0400**Crier, Auction**

Crier, Auction stimulates competitive bidding at auction sale by inviting bids from buyers and closes sale to highest bidder at instances of Auctioneer. Stands on raised platform or sits on high chair with wooden mallet in hand. Describes briefly article to be auctioned and invites bids from buyers assembled. Extols article on sale and calls loudly bids offered to stimulate competitive bidding. Repeats highest and final bid three times and closes sale to highest bidder by hanging mallet on desk on advice of Auctioneer. Writes against each item auctioned, name of highest bidder and price offered. May withdraw items of property from sale if reserved-price is not forthcoming, under direction of Auctioneer. May assist Auctioneer in discharge of his duties when called upon to do so.

ISCO 08 Unit Group Details:

Code 3339

Title Business Service Agents Not Elsewhere Classified

3339.0500**Conductor, Auction Sale**

Conductor, Auction-Sale prepares list of property to be auctioned and gives description or demonstrates working to buyers assembled to stimulate competitive bidding. Arranges property in room, hall or at site, makes inventory of property giving short description and allots number to each item of property. Gets copies of inventory prepared and distributes them amongst intending buyers. Reads description of property and demonstrates working etc. if required. Hands over keys and other accessories to buyers. May work as Crier Auction.

ISCO 08 Unit Group Details:

Code 3339

Title Business Service Agents Not Elsewhere Classified

3339.0601**Delivery Management Cell Agent**

Delivery Management Cell Agent answer in person or on the phone, enquiries from customers and investigates complaints regarding goods, services and policies; arranges for funds, exchange and credit for returned merchandise; receives account payments; and receives credit and employment applications. They take customer orders for goods or services; promote goods or services; responds to enquiries and emergencies; investigates complaints and updates accounts. They explain the type and cost of services enquired by the customer, initiates billing and process claim payments. Provides information to customers and the public concerning goods, services, schedules, rates, regulations and policies. May also be called Customer Care Executive.

ISCO 08 Unit Group Details:

Code 3339

Title Business Service Agents Not Elsewhere Classified

Group 334**Administrative and Specialized Secretaries**

Administrative and specialized secretaries provide organizational, communication and documentation support services, utilizing specialized knowledge of the business activity of the organization in which they are employed. They take supervisory responsibility for office Clerks in the organization.

Occupations in this Group are classified into the following Families:

3341 Office Supervisors
3342 Legal Secretaries
3343 Administrative and Executive Secretaries
3344 Medical Secretaries

Family 3341
Office Supervisors

Office supervisors supervise and co-ordinate the activities of workers in division 3, Clerical support workers.

3341.0200
Overseer, Postmen

Overseer, Postmen, Head Postman assigns and supervises work of Postmen. Ensures punctuality of staff and delivery of mail promptly and to correct addresses. Investigates complaints against Postmen, reports cases of fraud and misappropriation to higher authorities.

ISCO 08 Unit Group Details:

Code 3341
 Title Office

Supervisors

3341.0400
Supervisor, Telephone

Supervisor, Telephone; Engineering Supervisor Phone (Traffic) supervises performance of Telephone Operators, Monitors, Telephone and ensure quick disposal of traffic and proper maintenance of all telephone equipment. Checks flow of traffic and quick disposal of transit, inward and outward tickets and maintains discipline in switch-room. Checks Interruption Register to determine delay in traffic, dislocation of lines and period of dislocation. Supervises installation and

maintenance of telephone exchange equipment and controls technical staff such as Telephone Operators, Monitors, Telephone. May be designated as Engineering Supervisor, Trunks if engaged in Trunk Telephone exchange. May settle traffic disputes.

ISCO 08 Unit Group Details:

Code 3341
 Title Office Supervisors

3341.0500
Monitor, Telephone

Monitor, Telephone supervises and ensures efficient operation of allotted section of telephone exchange. Allocates duties to Telephone Operators within section. Checks traffic on lines, periodically. Times and signs transit inward and outward tickets. Assists Telephone Operators in putting through built-up calls, checks and verifies defective traffic and records dislocations in Interruption Register. Informs appropriate authority for detection of fault and its rectification inside exchange. Receives subscribers' complaints and takes remedial action. Is responsible for safe custody of call tickets, their disposal and rendition of statement.

ISCO 08 Unit Group Details:

Code 3341
 Title Office Supervisors

3341.0600
Supervisor, Wireless

Supervisor, Wireless supervises work and progress of Wireless Operators and ensures efficient operation of wireless station. Controls and co-ordinates utilization of personnel, and checks efficiency in receiving and transmitting

messages to minimise delays. Test-checks wireless equipment for location and removal of defects and supervises maintenance and repairs of equipment. Records details of breakdown, and maintains liaison with operating agencies, to remove causes of complaints.

ISCO 08 Unit Group Details:

Code	3341
Title	Office Supervisors

3341.0700

Headlight Keeper

Head Light-Keeper controls and supervises working of light-houses under his charge and arranges for supply of provisions, stores, etc. to units as required. Prepares and maintains duty-roster of Light-Keepers and assigns work accordingly. Checks proper functioning of light-houses daily and supplies meteorological data to controlling authorities. Provides required stores and equipment for replacement. Ensures proper maintenance of all equipment and apparatus and sees that lens, lantern panes, etc. are cleaned daily by Light-Keeper. Keeps watch on movement of ship in adjacent areas. May perform duties of Light-Keeper, Light-houses. May provide necessary assistance to vessels in distress.

ISCO 08 Unit Group Details:

Code	3341
Title	Office Supervisors

3341.0800

Section Officer

Section Officers; Office Superintendent; Head Clerk; Section-in-charge; Head Assistant; Supervisor(clerical) organizes and controls all clerical work within establishment or office thereof. Allocates

duties to staff under him, co-ordinates and supervises their work ensuring efficiency, discipline and observance of prescribed procedure. Studies all files, draft letters, notes, etc. put up by clerk. Disposes routine and intermediary matter. Deals with important files and complicated cases personally and puts up notes, reports, drafts etc. to superior for orders. Ensures that prescribed procedure is followed by staff in dealing with cases. Keeps important, secret and confidential records in his personal custody. Supervises preparation of budget estimate, statement of accounts, financial bills, payment of wages, salaries etc. to staff and maintenance of various accounts and registers.

ISCO 08 Unit Group Details:

Code	3341
Title	Office Supervisors

3341.0900

Inspectors and Supervisors, Other (Clerical)

Inspectors and Supervisors, other (Clerical) perform variety of supervisory and executive tasks in any branch of public or private sector department such as revenue, income-tax, education, labour, sales, housing etc. and ensure satisfactory working and execution of policy decisions. Instruct staff members and others concerned on procedural matters, records and registers to be maintained, policy decisions, connected rules and regulation, etc. and guide them as necessary. Visit related offices, institutions, shops, establishments, etc. check records and connected papers; examine working conditions; reconcile labour disputes and perform other supervisory and executive tasks according to nature of post held. Ensure satisfactory

working and execution of policy decisions, public dealing, implementation of connected rules and regulations and take prescribed remedial or legal steps to remove mistakes or defaults noticed. Submit periodical reports and returns to appropriate authorities. Is designated according to work performed or post held, such as: CIRCLE INSPECTOR. REVENUE INSPECTOR. INCOME-TAX INSPECTOR. CIVIL SUPPLIES INSPECTOR. SHOP INSPECTOR. SALES TAX INSPECTOR. LABOUR INSPECTOR. RATIONING INSPECTOR. INSPECTOR OF CO-OPERATIVE SOCIETIES. MOTOR VEHICLE INSPECTOR. ENFORCEMENT INSPECTOR. FOREST RANGER. HOUSING INSPECTOR, etc.

ISCO 08 Unit Group Details:

Code	3341
Title	Office Supervisors

3341.1000

Office Assistant

Office Assistant; Senior Clerk prepares notes, drafts memoranda and summaries quoting precedents, references, rules, etc. Draws out reports, statements and attends to correspondence. Assists superior in disposal of complicated or important cases. Makes entries in register regarding nature and number of papers received by him for disposal. Studies letters and correspondence and links connected papers on subject. Prepares brief notes, reports or draft replies quoting precedent, rules, regulations and existing orders, if any, puts them to superior for consideration. Keeps watch over movement of files. Supervises work of subordinates and assists them in disposal of case correctly and expeditiously. Maintains prescribed registers. May do his own typing. May handle cash and maintain accounts. May

prepare budget, bills and other statements.

ISCO 08 Unit Group Details:

Code	3341
Title	Office Supervisors

3341.1100

Briefing Assistant

Briefing Assistant; Operation Assistant (Air Service) performs clerical duties incidental to operation of aircraft through airport. Makes out clearance papers to authorize cross country flights and submits them to authority for approval. Prints weather information on clearance and weather report forms using duplicating machine. Prepares despatch papers including such items as time of departure and arrival, names of crew members and cargo weighed. Posts progress of flights, using chalk and black board, or special indicator board and keeps permanent flight record. Prepares messages to be sent by radio and teletype to other fields concerning flights. May arrange for substitutes for crew members.

ISCO 08 Unit Group Details:

Code	3341
Title	Office Supervisors

3341.1200

Sub-Post Master

Sub-Post Master performs various functions involved in provision of postal facilities to public in sub-office in rural and urban areas. Sells postal stationery, collects money-orders, parcels, letters, etc. and arranges for delivery of mail, money-orders and other postal articles to local addresses. Maintains records of all cash transactions with public, sale

proceeds of stamps etc. May operate telegraphic signal instruments.

ISCO 08 Unit Group Details:

Code	3341
Title	Office Supervisors

3341.9900

Office Supervisors, Other

Administrative Associate Professionals, other include associate professionals involved in administrative activities not elsewhere classified.

ISCO 08 Unit Group Details:

Code	3341
Title	Office Supervisors

Family 3342

Legal Secretaries

Legal secretaries apply specialized knowledge of legal terminology and procedures in providing support to legal professionals with communication, documentation and internal managerial co-ordination activities, in law offices, legal departments of large firms and governments.

Family 3343

Administrative and Executive Secretaries

Administrative and Executive Secretaries perform liaison, co-ordination and organizational tasks in support of managers and professionals and/or prepare correspondence, reports and records of proceedings and other specialized documentation.

Family 3344

Medical Secretaries

Medical secretaries, using specialized knowledge of medical terminology and health care delivery procedures, assist health professionals and other workers by performing a variety of communication, documentation, administrative and internal co-ordination functions, to support health workers in medical facilities and other health-care related organizations.

Group 335

Government Regulatory Associate Professionals

Regulatory government associate professionals administer, enforce or apply relevant government rules and regulations relating to national borders, taxes, social benefits, and issue or examine applications for licences or authorizations in connection with travel, exports and imports of goods, establishment of businesses, erection of buildings and other activities subject to government regulations.

Occupations in this Group are classified into the following Families:

3351	Customs and Border Inspectors
3352	Govt. Tax and Excise Officials
3353	Government Social Benefits Officials
3354	Government Licensing Officials
3355	Police Inspectors and Detectives
3359	Government Regulatory Associate Professionals, Not Elsewhere Classified

Family 3351

Customs and Border Inspectors

Customs and border inspectors check persons and vehicles crossing national borders to administer and enforce relevant government rules and regulations.

3351.0100

Inspector, Customs

Inspector Customs; Preventive Officer, Customs; Examiner Customs examines Cargo and baggage of passengers to detect and prevent smuggling of goods in ports, aerodromes and across national borders. Obtains passengers' declaration regarding import and export of articles and examines their baggage and carries out personal search of suspects, passengers, issues clearance of baggage of passengers as per customs regulations. Keeps control over officers and sepoys and ensures proper guarding of vital points in Docks and Bunders. Gathers information and intelligence reports about smuggling, takes requiring action and ensures that defaulters have been brought to book. May carry out surprise checks in vessels of merchant navy, country crafts, aircrafts, shops, etc.

ISCO 08 Unit Group Details:

Code 3351
Title Customs and Border Inspectors

3351.0200

Supervisor, Customs

Supervisor, Customs supervises search of passengers and their baggage at ports, aerodromes and across national borders for detecting smuggling of goods. Assists Examiner Customs in examining Cargo and

baggage of passengers and arranges for deposit of unclaimed and uncleared goods of customs duty in go-downs for assessment of duty by Appraiser Customs. Ensures that all vital points of restricted area are guarded to prevent passage of dutiable goods without clearance.

ISCO 08 Unit Group Details:

Code 3351
Title Customs and Border Inspectors

3351.0300

Searcher

Searcher, Customs, searches persons or passengers at airports and bunders coming from or leaving to foreign countries to prevent smuggling of any contraband, prohibited and restricted articles. Interrogates passengers about the possession of any restricted goods and searches persons in doubtful cases. Undertakes search of personal luggage in possession, records detailed searches in register and prepares other clerical duties when required.

ISCO 08 Unit Group Details:

Code 3351
Title Customs and Border Inspectors

3351.9900

Customs and Border Inspectors, Other

Customs and Border Inspectors, other include all other inspectors involved in checking persons and vehicles crossing national borders to enforce relevant government rules and regulations not elsewhere classified.

ISCO 08 Unit Group Details:

Code 3351

Title Customs and Border Inspectors

Family 3352
Govt. Tax and Excise Officials

Government tax and excise officials examine tax returns, bills of sale and other documents to determine the type and amount of taxes, duties and other types of fees to be paid by individuals or businesses, referring exceptional or important cases to accountants, senior government officials or Managers.

3352.0100
Inspector, Excise

Inspector Excise detects, prevents unauthorised production, smuggling, sale and use of dutiable goods and assesses excise duty on them. Surveys plant-producing dutiable goods for verification at various stages of manufacture, visits store-room for verification of final products with manufacturers account. Checks weight or counts number of packages of excisable commodities and verifies daily production with factory accounts relating to raw materials and final products. Inspects excisable commodities, assesses excise duty and allows clearance of commodities after adjusting amount in accounts. Maintains records regarding production of commodities, levy of excise duties, permits for clearance of commodities from factories, etc., as required.

ISCO 08 Unit Group Details:

Code 3352
Title Govt. Tax and Excise Officials

3352.9900
Govt. Tax and Excise Officials,
Other

Government Tax and Excise Officials, other include associate professionals engaged in examining tax returns, bills of sale and other documents to determine the type and amount of taxes, duties and other types of fees to be paid by individuals or businesses not classified elsewhere.

ISCO 08 Unit Group Details:

Code 3352
Title Govt. Tax and Excise Officials

Family 3353
Government Social Benefits Officials

Government social benefits officials examine applications for government, financial or service programmes to determine eligibility and amount of benefit or appropriate services, referring exceptional or important cases to senior government officials or Managers.

3353.0100
Village Level Worker

Village Level Worker, Gram Sevak guides and assists villagers to lead better and fuller life. Visits various villages in his area and contacts people. Discusses their problems and assists in solving them. Advises farmers in better farming, benefits of fertiliser, pesticides, etc. Reports complaints and needs of farmers and other villagers to respective authorities for necessary action. Advises people on personal and public hygiene and sanitation. May arrange adult literacy programmes. Is designated as GRAM SEVIKA, if female worker, and engaged in training and assisting women in child care, house crafts, sanitation, etc.

ISCO 08 Unit Group Details:

Code 3353
 Title Government Social Benefits Officials

3353.0200**Patroller, Women**

Patroller, (Women); Care Worker (Women) assists girls in need of shelter by getting them admitted in care institutions and acts as liaison between care institutions and public. Renders advice to girls and women from going astray. Meets fallen women and arranges shelter for them in care institutions. Acts as liaison between care institutions and public to give information as required. May assist in rehabilitation of fallen women.

ISCO 08 Unit Group Details:

Code 3353
 Title Government Social Benefits Officials

3353.9900**Government Social Benefits Officials, Other**

Government Social Benefit Officials, other include associate professionals who examine applications for benefits, in cash or kind, to determine eligibility and amount of benefit, not classified elsewhere.

ISCO 08 Unit Group Details:

Code 3353
 Title Government Social Benefits Officials

Family 3354**Government Licensing Officials**

Government licensing officials examine applications for licences to export or import goods, set up businesses, build houses or other structures, or to obtain passports, determine eligibility of applications for issuing licences or passports, and identify specific conditions or restrictions to be attached to licences issued, referring exceptional or important cases to Senior government officials or Managers.

Family 3355**Police Inspectors and Detectives**

Police inspectors and detectives investigate facts and circumstances relating to crimes committed in order to identify suspected offenders and obtain information not readily available or apparent concerning establishments or the circumstances and behaviour of persons, mostly in order to prevent crimes.

3355.0100**Inspector, Police**

Inspector, Police maintains law and order, protects property and persons from hazard and unlawful acts and apprehends violation of the law. Inspects periodically police stations under his charge. Studies reports and other records and informs higher authorities about inadequacies such as delays or improper actions. Investigates serious crimes such as dacoity, murder, conspiracy and maintains crimes register and acts to minimize crimes by rounding up bad character or keeping watch over them. Keeps Superintendent of Police informed of important occurrences within his jurisdiction by regular rendition of reports. May conduct cases against

accused in court. May specialize in security arrangements, traffic control, intelligence, enforcement and anticorruption work, and be designated as INSPECTOR POLICE (criminal investigation department); TRAFFIC INSPECTOR, POLICE. May be known as RESERVE INSPECTOR OF POLICE if in charge of armed and ordinary reserves, magazine and other stores, training of recruits, drill, discipline and use of arms, arranging of orderly rooms, etc.

ISCO 08 Unit Group Details:

Code 3355

Title Police Inspectors and Detectives

3355.0200

Sub-Inspector, Police

Sub-Inspector, Police; Station House Officer maintains law and order in his jurisdiction, investigates crimes, arrests criminals, protects persons and property from hazards of unlawful acts and controls staff working in police station. Allots duties to Police Constables and other staff working under him. Familiarises with the people in the area and gets acquainted with local problems. Studies records of notorious and bad characters and keeps watch over their activities. Receives intelligence reports and other information through official and private sources and takes action or disseminates them to appropriate authorities for instructions. Supervises Patrolling and checks duties of Sentries. Takes action to prevent crime wherever possible. Examines first information reports and complaints lodged in police station, investigates situation and takes appropriate action such as issuing warnings or making arrests. Investigates crimes and submits report to higher authorities. Supplies relevant information to Public Prosecutor

in conduct of criminal cases. Inspects kits of Police Constables and drills his subordinates on fixed days. Keeps control over police out-posts under his charge and maintains law and order in public functions. May present criminal cases in court. May be in charge of traffic control and perform other duties except crime investigation and he designated as SERGEANT, POLICE.

ISCO 08 Unit Group Details:

Code 3355

Title Police Inspectors and Detectives

3355.0300

Detective

Detective carries out investigations to prevent and solve criminal cases. Investigates known or suspected criminals or facts of particular case to detect planned criminal activity or clues. Frequent known haunts of criminals and familiarizes themselves with criminals to determine their habits and other personal information. Records such information and reports it to concerned officer. Reports any occurrence or information regarding planned or committed crime that comes to his attention. Investigates circumstances of crime and questions witnesses when assigned to specific case. Examines scene of crime to obtain clues and gather evidence. Interrogates suspected persons to establish guilt or innocence. Reports progress of investigation. Arrests or assists in arrest of criminals or suspects. Prepares assigned cases for court, according to formalized procedure. May investigate and find out missing persons or articles for restoration to legal owner. May be designated according to type and nature of crime investigated.

ISCO 08 Unit Group Details:

Code 3355

Title Police Inspectors and Detectives

3355.9900**Police Inspectors and Detectives,
Other**

Police Inspectors and Detectives, other include associate professionals who investigate facts and circumstances relating to crimes committed and obtain information in order to prevent crime not elsewhere classified.

ISCO 08 Unit Group Details:

Code 3355

Title Police Inspectors and Detectives

Family 3359**Government Regulatory Associate
Professionals, Not Elsewhere
Classified**

This unit group covers government regulatory associate professionals not classified elsewhere in Division 3, Technicians and associate professionals. For instance, the group includes agricultural, fisheries, forestry, prices, wages and weights and measures inspectors.

Sub Division 34**Legal, Social, Cultural and Related
Associate Professionals**

Legal, social, cultural and related associate professionals perform technical tasks connected with the practical application of knowledge relating to legal services, social work, culture, food preparation, sport and religion.

Tasks performed in this sub-major group usually include: providing technical and practical services and support functions in legal processes and investigations, social and community assistance programmes, and religious and cultural activities; participating and adjudicating in sporting events; developing and delivering sports coaching, fitness and recreational programmes; combining creative and technical skills in a variety of artistic, cultural and culinary activities; creating dishes and menus and overseeing the preparation of meals

Occupations in this Sub Division are classified into the following Groups:

341 Legal, Social and Religious Associate Professionals
342 Sports and Fitness Workers

Group 341**Legal, Social and Religious
Associate Professionals**

Legal, social and religious associate professionals provide technical and practical services and support functions in legal processes and investigations, social and community assistance programmes and religious activities.

Occupations in this Group are classified into the following Families:

3411 Legal and Related Associate Professionals
3412 Social Work Associate Professionals
3413 Religious Associate Professionals

Family 3411**Legal and Related Associate
Professionals**

Legal and related associate professionals perform support functions in courts of law or in law offices, provide services related to such legal matters as insurance contracts, the transferring of property and the granting of loans and other financial transactions or conduct investigations for clients.

3411.0100 Legal Assistant

Legal Assistant; Law Assistant assists Solicitors and Advocate in their work by collecting documents from clients, or organizations in which employed, studying details of cases, preparing briefs, supplying relevant decisions or similar cases and laws connected, etc. in support of pleadings. Interviews clients, discusses case history and collects documents pertaining to case, if any. Examines witnesses and discusses case with senior (Solicitor or advocate). Studies relevant case laws, prepares briefs for pleading as instructed and files case in court. Assists Advocate in preparing witnesses for evidence and cross examination, and in conducting case. Accompanies Advocate to courts and performs other legal duties as instructed. May visit spots occurrence or dispute to ascertain additional facts.

ISCO 08 Unit Group Details:

Code 3411
Title Legal and Related Associate Professionals

3411.0200 Shirestdar

Shirestdar; Reader; Bench Clerk; Judicial Clerk; Peshkar renders clerical assistance to Judge or Magistrate in conducting judicial proceedings in court. Receives records of cases, paper-books, etc. from

ministerial office (clerical section where records are kept) of court. Arranges daily board (list of cases to be heard) in consultation with Judge or Magistrate. Attends Court, calls out case names of parties and relevant details and hands over necessary papers to Judge or Magistrate. Marks documents and retains custody of items submitted as exhibits by parties on orders of Judge or Magistrate. Maintains order in court room and takes notes of proceedings. Records orders passed by Judge or Magistrate and hands them over to office for drafting decrees and orders. Maintains statistical summary of work performed by court and answers correspondence pertaining to case allotted to Court. May draft decree and furnish certified copies thereof to parties. May arrange interviews of parties with Judge in his chamber. May administer oath to witnesses. May act as Interpreter, when Interpreter is not available.

ISCO 08 Unit Group Details:

Code 3411
Title Legal and Related Associate Professionals

3411.0300 Petition Writer

Petition Writer writes petitions for public. Sits in premises of courts and other offices with permission of authorities. Writes petitions for public and types them. Collects charges from customers. May also sell stamps if in possession of proper license.

ISCO 08 Unit Group Details:

Code 3411
Title Legal and Related Associate Professionals

3411.9900

Legal and Related Associate Professionals, Other

Legal and Related Business Associate Professionals, other include associate professionals engaged in Legal and related business activities not elsewhere classified.

ISCO 08 Unit Group Details:

Code 3411

Title Legal and Related Associate Professionals

Family 3412 Social Work Associate Professionals

Social work associate professionals administer and implement social assistance programmes and community services and assist clients to deal with personal and social problems.

3412.0100 Blood Donor Unit Assistant

Blood-Donor-Unit Assistant performs any combination of following supportive duties at blood-collection unit of blood bank. Schedules appointments over telephone for blood donors. Interviews blood donors and records identifying and blood-credit information on registration form. Notifies nurse if donor appears to be underweight or too old to give blood. Takes blood donor's temperature and pulse to assist during medical interview. Unpacks, labels, and stamps date on empty blood packs. Posts donor names, blood-control numbers, and donor-group numbers to unit log sheet. Seals filled blood packs and sample tubes, using hand tools and heat-sealing machine. Serves refreshments, such as coffee, juice, cookies, and jelly beans, to donors to

prevent or relieve adverse reactions and to begin replenishment of blood fluids.

ISCO 08 Unit Group Details:

Code 3412

Title Social Work Associate Professionals

3412.0200

Equal Opportunity Officer

Equal Opportunity Officers monitor and evaluate compliance with equal opportunity laws, guidelines, and policies to ensure that employment practices and contracting arrangements give equal opportunity without regard to race, religion, colour, national origin, sex, age, or disability. Conduct surveys and evaluate findings in order to determine if systematic discrimination exists. Counsel newly hired members of minority and disadvantaged groups, informing them about details of civil rights laws. Interpret civil rights laws and equal opportunity regulations for individuals and employers. Investigate employment practices and alleged violations of laws, in order to document and correct discriminatory factors. Meet with persons involved in equal opportunity complaints in order to verify case information, and to arbitrate and settle disputes. Prepare reports of selection, survey, and other statistics, and recommendations for corrective action. Provide information, technical assistance, and training to supervisors, managers, and employees on topics such as employee supervision, hiring, grievance procedures, and staff development. Review company contracts to determine actions required to meet governmental equal opportunity provisions. Study equal opportunity complaints in order to clarify issues.

ISCO 08 Unit Group Details:

Code 3412
 Title Social Work Associate Professionals

3412.9900

Social Work Associate Professionals

Social Worker Associate Professionals include associate professionals who provide guidance to clients in social and related matters to enable them to find and use resources to overcome difficulties and achieve particular goals not elsewhere classified.

ISCO 08 Unit Group Details:

Code 3412
 Title Social Work Associate Professionals

Family 3413

Religious Associate Professionals

Religious associate professionals provide support to ministers of religion or to a religious community, undertake religious works, preach and propagate the teachings of a particular religion and endeavour to improve well-being through the power of faith and spiritual advice.

Group 342

Sports and Fitness Workers

Sports and Fitness Workers prepare for and compete in sporting events for financial gain, train amateur and professional sportsmen and women to enhance performance, promote participation and standards in sport, organize and officiate sporting events, and provide instruction, training and

supervision for various forms of exercise and other recreational activities.

Occupations in this Group are classified into the following Families:

3421 Athletes and Sports Players
3422 Sports Coaches, Instructors and Officials
3423 Fitness and Recreation Instructors, and Programme Leaders

Family 3421

Athletes and Sports Players

Athletes and sport players participate in competitive sporting events. They train and compete, either individually or as part of a team, in their chosen sport.

3421.0100

Professional

Sportsman/Professional, Athlete

Professional Sportsman takes part in public exhibitions or competitions of games or sports for gain. Discusses details of engagement with clubs, institutions etc. for participation in exhibition games or sports. Plays games or participates in sports according to established rules, exhibiting his talent, prowess, skill, style, etc. Visits different centres and places to participate in games according to engagement. May coach players in particular games for consideration. May sign contracts for engagement. May be designated as Cricket Professional; Football Professional; Tennis Professional etc. according to games in which proficient and engaged.

ISCO 08 Unit Group Details:

Code 3421
 Title Athletes and Sports Players

3421.0200**Jockey**

Jockey rides racehorse at racetrack for consideration, observing rules. Makes daily visits to race-track during racing season to ride race horses on track at different speeds to keep horses in fit condition. Observes horse's performances during run and discusses with Race Horse Trainer horse's behaviour for further training. Receives riding instructions from Trainer on racing day regarding race events, names and positions of horses and other particulars and hints. Wears prescribed coloured apparel, number etc., according to turf rules for race event. Mounts horse and takes it round paddock for punters' view. Rides and positions horse at prescribed place on starting gate on track at scheduled time and runs horse on start signal at top speed along track to winning post according to track rules. Dismounts from horse after event and removes saddle from horse and goes to weighing room for weighing if required. Takes exercises to keep body fit and maintain correct weight. May undertake stable management.

ISCO 08 Unit Group Details:

Code 3421
 Title Athletes and Sports Players

Family 3422

Sports Coaches, Instructors and Officials

Sports coaches, instructors and officials work with amateur and professional sportspersons to enhance performance, encourage greater participation in sport, and organize and officiate in sporting events according to established rules.

3422.0100**Athletic Coach**

Athletic Coach trains or coaches athletes in technique, and rules of competitive track and field events such as sprints, shot-put, javelin throw, pole-vault etc. Prepares schedule of field and track events in which coaching is desired and explains and instructs on fundamental skills and rules of event to individual or groups of athletes under training. Demonstrates techniques of play by personal example; Pays specific attention to health building and improving stamina by recommending and demonstrating various types of exercises, drills and assists them to acquire proficiency. May accompany teams going out for competition.

ISCO 08 Unit Group Details:

Code 3422
 Title Sports Coaches, Instructors and Officials

3422.0201**Sports Coach**

Sports Coach coaches potential sportsmen or player with talent and promise in fundamentals, techniques and rules of competitive sports or games. Selects potential sportsmen or players of talent and instructs them in fundamentals and rules of game and teaches them planning and movements. Demonstrates techniques of play by action and actual playing. Drills in fundamentals until players become familiar with all phases of a game. Watches players in action and offers helpful criticism and corrective methods. Suggests or recommends various physical exercises to keep body fit and supple. Accompanies team on tours, maintains discipline and team spirit

among players. May act as Umpire or Referee in matches or in tournaments. May settle disputes of contending teams in play. May be designated according to the sport coached, such as Tennis Coach, Football Coach, Hockey Coach, Cricket Coach etc.

Qualification Pack Details:

QP NOS Reference	SPF/Q1101
QP NOS Name	Sports Coach
NSQF Level	7

ISCO 08 Unit Group Details:

Code	3422
Title	Sports Coaches, Instructors and Officials

3422.0300

Riding Instructor

Riding Instructor instructs and teaches pupil in technique of horsemanship, equitation, showing how to mount horse, how to post, and how to control horses, actions in walking, galloping, trotting, cantering, and jumping. Takes pupil to track and provides horse as per requirements and explains various riding equipment and their uses. Demonstrates positions and postures of body and limbs for mounting horses positioning of saddle. Controlling horses' actions in walking, trotting and galloping etc. Familiarises pupils in fundamentals of horsemanship by regular practice until proficiency is acquired. Gives instructions in stable management such as grooming and feeding of horses, maintenance of cleanliness of stable and keeping riding kit in good condition. May give coaching in tent pegging and playing polo. May give instructions in horse keeping on scientific lines.

ISCO 08 Unit Group Details:

Code	3422
Title	Sports Coaches, Instructors and Officials

3422.0400

Umpire

Umpire; Referee (Sports) conducts games and sports in accordance to rules and pronounces instantaneous decisions. Inspects playground or area before commencement of game to ensure that lines and other markings in the field are made properly and according to rules of the game. Examines sports material such as balls, rackets, bats, hockey sticks to be used in the game for proper specifications. Calls contestants or captains of contesting teams in field and tosses or supervises toss for choice of field side or team to start game. Observes movement and position of ball and players for infringement of game rules, and awards scoring points or imposes penalties, by giving hand signals, calling loud or blowing whistle. Warns and cautions erring players for deliberate breach of game-rules. Pronounces instantaneous judgement on appeal by either party of contestant during play. Stops play at scheduled hour for close of game or earlier in emergency. May suspend any player from match or game for gross misconduct or persistent foul play. May be designated according to type of game judged such as Cricket Umpire; Hockey Umpire; Football Referee; Volleyball Referee. May check bona fide players in a tournament.

ISCO 08 Unit Group Details:

Code	3422
Title	Sports Coaches, Instructors and Officials

3422.0500

Marker/Groundsmen and Women

Marker (Sports) marks and maintains athletic tracks and courts for various sports events and games. Measures and marks out ground, courts according to specifications using measuring tape, lime powder, or chalk. Supervises cleaning, sweeping, lining and rolling of cricket pitch, hockey or football fields, tennis or badminton courts, sport tracks etc. Maintains billiard table by periodical ironing of cushion surface and marking out playing and scoring lines. Attends courts and fields events, follows game in progress and supplies sporting gear and equipment when necessary. Exhibits scoring board, and notes and announces scoring points of players. Collects charges or fees for game, where prescribed, and accounts it to superior. Maintains sports equipment like cricket bats, badminton and tennis racquets, nets, posts etc. May act as professional coach in particular game, give practice to players or teach game to beginners.

ISCO 08 Unit Group Details:

Code 3422

Title Sports Coaches, Instructors and Officials

3422.9900

Sports Coaches, Instructors and Officials, Other

Athletes, Sportspersons and Related Associate Professionals, other include associate professionals who participate in competitive sporting events, conduct sports training, compile rules concerning sports events, and control the progress of these events not classified elsewhere.

ISCO 08 Unit Group Details:

Code 3422

Title Sports Coaches, Instructors and Officials

Family 3423

Fitness and Recreation Instructors, and Programme Leaders

Fitness and Recreation Instructors and Programme leaders lead, guide and instruct groups and individuals in recreational, fitness or outdoor adventure activities.

3423.0101

Fitness Trainer/Fitness Instructor

Fitness Trainer is also known as Gym trainer, Trainer or Gym Coach or Fitness coach. Individuals in this role are involved in the physical training of others through various fitness activities. The responsibilities of a Fitness trainer include to help trainees of all ages, shape and sizes to get healthier and achieve desired fitness levels through focused exercises and activities.

Qualification Pack Details:

QP NOS Reference SPF/Q1102

QP NOS Name Fitness Trainer

NSQF Level 4

ISCO 08 Unit Group Details:

Code 3423

Title Fitness and Recreation Instructors and Programme Leaders

3423.0200

Physical Training Instructor/Physical Education Teacher

Physical Training Instructor conducts physical training classes, organizes games and trains students in games and

athletics. Trains and engages students of colleges, schools and allied institutions individually or in-groups in calisthenics (science of bodily exercise without any apparatus or with light hand apparatus), gymnastics, and other physical exercises to promote strength and gracefulness, or to reduce and correct body. Teaches use of dumbbells, bars and other equipment. Organizes, leads, instructs and referees games such as hockey, basketball, football or kabaddi and organizes inter-class, inter-units, or inter-district sports competitions and athletic meets. Supervises maintenance of gymnasium and sports equipment. Organizes picnics, tours and other re-creational activities of students. May give health talks and ensure personal cleanliness and community hygiene among students. May be designated as Physical Director, Drill Master, Games Teacher, Physical Training Mistress (for girls) according to degree of responsibility and nature of duties performed.

ISCO 08 Unit Group Details:

Code 3423

Title Fitness and Recreation Instructors and Programme Leaders

3423.0501

Lifeguard

Lifeguards are also known as pool guard, beach lifeguard or lifesavers. Lifeguards work at swimming pools, beaches and inland waterways to keep swimmers safe. Individuals in this role would observe and supervise swimming areas to prevent accidents. Responsibilities include making swimmers aware of dangerous situations, and in an emergency carrying out a rescue procedure.

Qualification Pack Details:

QP NOS Reference SPF/Q1104

QP NOS Name Lifeguard

NSQF Level 4

ISCO 08 Unit Group Details:

Code 3423

Title Fitness and Recreation Instructors and Programme Leaders

3423.9900

Fitness and Recreation Instructors and Programme Leaders

Fitness and Recreation Instructors and Programme Leaders Others, include instructors and programme leaders who lead, guide and instruct groups and individuals in recreational, fitness or outdoor adventure activities not elsewhere classified.

ISCO 08 Unit Group Details:

Code 3423

Title Fitness and Recreation Instructors and Programme Leaders

Family 3431

Photographers

Photographers operate still cameras to photograph people, events, scenes, materials, products and other subjects.

3431.0100

Photographer, General

Photographer, General takes photograph of persons, places, or other subjects, using various kinds of photographic equipment. Measures day light using exposing meter or arranges artificial lighting and holds or places camera at desired angle and distance from subject to be photographed. Focuses lens and adjusts lens opening and exposure time. Loads camera with film or plate. Presses lever to open lens shutter and exposes film or plate by pressing lever, allowing time, if

necessary and removes negative from camera. Develops negative in darkroom by dipping it in developer, washing it in fixing solution and further washing it in water and allows developed film to dry. Examines developed film for defects, and retouches negative using pencil or brush after applying retouching medium. Makes prints or enlargements in sensitized paper; dries them by grazing on glazing-sheet or by spreading on flat surface and trims glazed or unglazed prints according to required size and mounts them. May take colour photographs and develop colour films adopting special processes. May specialize in studio photography or take photographs of important events for reproduction in newspapers, buildings, machinery, industrial plants, for trade advertisements.

ISCO 08 Unit Group Details:

Code	3431
Title	Photographers

3431.0200

Photographer News

Photographer News; Press Photographer photographs news events, persons or objects for use in news-papers, magazines and other publications. Receives instructions from News Editor or Chief Reporter regarding nature of pictures to be taken. Travels to location; loads camera with film, waits for suitable moment and takes photographs. Attends State functions and parties and takes photographs of important persons arousing special interest of news value for publication. Accompanies important visitors and dignitaries and takes photographs of significant events associating important persons. Removes exposed film for developing and printing. Examines print, gives appropriate title or heading, and hands it over to News Editor

for publication. Supplies series of pictures on selected topics, for writing feature articles in magazines. May develop films and print copies.

ISCO 08 Unit Group Details:

Code	3431
Title	Photographers

3431.0300

Photographer, Aerial

Photographer, Aerial photographs objects, places and areas of vital importance from aeroplanes in flight, for use in surveys, planning, development and other scientific and military purposes. Determines number of exposures and time lapse between them by making necessary calculations. Loads camera, adjusts exposure-time and exposes film by opening shutter at calculated intervals. Operates and maintains automatic camera and photo equipment for aerial photographs. Develops aerial films of various types in automatic, semi-automatic or manual tank developers. Makes prints for photo interpretation.

ISCO 08 Unit Group Details:

Code	3431
Title	Photographers

3431.9900

Photographers, Other

Photographers and Image and Sound Recording Equipment Operators, Other take photographs of persons, places and objects and record sound for different purposes and include Photographers, Image and Sound Recording Equipment Operators not elsewhere classified.

ISCO 08 Unit Group Details:

Code	3431
Title	Photographers

Family 3432**Interior designers and decorators**

Interior designers and decorators plan and design commercial, industrial, public, retail and residential building interiors to produce an environment tailored to a purpose, taking into consideration factors that enhance living and working environments and sales promotion. They co-ordinate and participate in their construction and decoration.

3432.0100**Interior Designer**

Interior Designer plans, designs, and furnishes interiors of residential, commercial, or industrial buildings. Formulates design which is practical, aesthetic, and conducive to intended purposes, such as raising productivity, selling merchandise, or improving life style. May specialize in a particular field, style, or phase of interior design. Estimates material requirements and costs, and presents design to client for approval. Confers with client to determine factors affecting planning interior environments, such as budget, architectural preferences, and purpose and function. Advises client on interior design factors, such as space planning, layout and utilisation of furnishings and equipment, and colour co-ordination. Selects or designs and purchases furnishings, art works, and accessories. Subcontract fabrication, installation, and arrangement of carpeting, fixtures, accessories, draperies, paint and wall coverings, art work, furniture, and related items. Render design ideas in form of paste-ups or drawings. Plans and designs interior environments for boats, planes, buses, trains, and other enclosed spaces.

ISCO 08 Unit Group Details:

Code 3432

Title Interior Designers and Decorators

3432.0200**Decorator**

Decorator; Designer creates artistic and ornamental designs in colour for interior and exterior decorations and displays and arranges in attractive manner wares, products, furniture etc. Creates own designs to satisfy clients requirements and taste etc. showing style, shape, size and other characteristics or products. Makes sketches and diagrams or design keeping into consideration purpose, cost and preferences of client. Arranges decorative material, furniture, wares, products etc. in artistic manner. May specialize in setting and decorating stages and may be known as Set Decorator. May be known as Interior Decorator, Decorative Designer, Window Display Designer, Display Artist, etc., according to field of specialisation.

ISCO 08 Unit Group Details:

Code 3432

Title Interior Designers and Decorators

3432.0501**Bathroom and Kitchen Designer**

Bathroom and Kitchen Designer is responsible for design of bathrooms and kitchens in a housing setups.

Qualification Pack Details:

QP NOS Reference PSC/Q0204

QP NOS Name Bathroom and Kitchen Designer

NSQF Level 6

ISCO 08 Unit Group Details:

Code 3432

Title Interior Designers and Decorators

3432.9900**Decorators and Commercial Designers, Other**

Decorators and Commercial Designers, other include other associate professionals who apply artistic techniques to product design, interior decoration and sales promotion not elsewhere classified.

Requisitions or purchases food supplies and kitchen equipment as necessary and checks them for quality and quantity and supervises cooks and other kitchen workers. May hire and discharge cooks.

ISCO 08 Unit Group Details:

Code	3434
Title	Chefs

ISCO 08 Unit Group Details:

Code 3432

Title Interior Designers and Decorators

Family 3433**Gallery, Museum and Library Technicians**

Gallery, museum and Library Technicians prepare artworks, specimens and artefacts for collections, arrange and construct gallery exhibits, and assist Librarians to organize and operate systems for handling recorded material and files.

Family 3435**Other Artistic and Cultural Associate Professionals****3435.0100****Tattoo Artist**

Tattoo Artist pricks skin of patron, using needled electric tool, that inserts indelible nontoxic pigment into skin to form decorative or ornamental design. Shaves area to receive tattoo and washes it, using germicidal soap. Presses charcoal-coated stencil, draws design, or traces pattern of design onto skin of patron, to mark outline of design. Dips needles of tool into coloured pigment solution and presses needles into skin to insert indelible pigment into skin following outline of design. Applies sterile dressing to area. Sterilises needles in steam-heated cabinet (steriliser). Mixes nontoxic coloured pigments according to formula. Adjusts and repairs needled electric tool, using hand tools, such as screwdrivers and pliers. May draw original designs on paper, trace designs onto acetate sheet, and cut out design to form pattern or stencil, using stylus and knife.

Family 3434**Chefs****3434.0100****Head Cook/Head Chef**

Head Cook plans meals and supervises and co-ordinates work of cooks and other kitchen helpers in large hotels, restaurants or other establishments and abroad ships or railway trains. Plans daily menu, taking into account probable number of guests, marketing conditions, popularity of various dishes and recency of menus used, and assigns prices to items. Supervises preparation and cooking of food, and instructs cooks as required. Concocts special dishes and invents recipes. Tests cooked foods by tasting or smelling them.

ISCO 08 Unit Group Details:

Code 3435

Title Other Artistic and Cultural Associate Professionals

3435.0200**Stuntman**

Stuntman performs dare-devil feats such as diving stunts, perilous rides, or spectacular jumps for dramatic productions. Wears appropriate dress and ensures, that all requisites, to feat are in order. Performs, dare-devil feats such as diving from high tower on altitude after setting fire to dress in to deep well filled with water below, riding bicycle, motor cycle or motor car at high speed jumping over hollow space or from raised platform, riding motor cycle at great speed inside walls of-hollow circular globe or well (wooden or metal structure specially prepared for performance of perilous feat etc.

ISCO 08 Unit Group Details:

Code 3435

Title Other Artistic and Cultural
Associate Professionals**3435.0300****Prompter**

Prompter prompts Actors who forget their lines in operatic productions by whispering to them from behind stage. Stands behind stage and follows script of performance closely. Speaks cues and lines by whispering to Actors when they forget their lines. May direct actions of Actors while prompting. May substitute Actors when necessary.

ISCO 08 Unit Group Details:

Code 3435

Title Other Artistic and Cultural
Associate Professionals**3435.0400****Merry-go-Round Operator**

Merry-go-Round Operator; Amusement Equipment Operator operates and controls or instructs patrons how to

control mechanical riding devices such as merry-go-round, giant wheels, midget auto and other amusement contrivances or equipment furnished by amusement parks, carnivals or similar places of entertainment for use of patrons. Sets riding devices and gives them trial run to ensure that they are in working order. Informs patrons to fasten belt, bar, or other safety device determining that they are safely seated and not overcrowded. Move controls to start to permit operation of ride by patron and stops equipment after allotted time. Adds to or removes equipment, according to amount of patronage. Oils, refuels, adjusts and repairs device. Tests equipment daily before opening ride to patrons. May notify patron of expiration of period for which fee was paid to use device. May collect tickets or cash fares from patrons. May space rides operated in cars or sections to avoid danger of collisions. May be designated according to equipment operated as Railroad Operator, Roller-Coaster Operator; Auto-speedway Operator.

ISCO 08 Unit Group Details:

Code 3435

Title Other Artistic and Cultural
Associate Professionals**3435.0500****Floral Designer**

Floral Designer designs, cuts, and arranges live, dried, or artificial flowers and foliage. confers with clients regarding price and type of arrangement desired and the date, time, and place of delivery. Plans arrangement according to client's requirements, utilizing knowledge of design and properties of materials, or select appropriate standard design pattern. Waters plants, and cut, condition, and clean flowers and foliage for storage.

Selects flora and foliage for arrangements, working with numerous combinations to synthesize and develop new creations. Order and purchase flowers and supplies from wholesalers and growers. Wraps and price completed arrangements. Trims material and arranges bouquets, wreaths, terrariums, and other items using trimmers, shapers, wire, pins, floral tape, foam, and other materials. Performs office and retail service duties such as keeping financial records, serving customers, answering telephones, selling giftware items and receiving payment. Informs customers about the care, maintenance, and handling of various flowers and foliage, indoor plants, and other items. Decorates or supervises the decoration of buildings, halls, churches, or other facilities for parties, weddings and other occasions.

ISCO 08 Unit Group Details:

Code 3435

Title Other Artistic and Cultural Associate Professionals

3435.9900

Other Artistic and Cultural Associate Professionals, Other

Clowns, Magicians, Acrobats and Related Associate Professionals, Other include those who entertain audiences in circuses and other places by performing a variety of acts not elsewhere classified.

ISCO 08 Unit Group Details:

Code 3435

Title Other Artistic and Cultural Associate Professionals

Sub Division 35

Information and Communications Technicians

Information and Communications Technicians provide support for the day-to-day running of computer systems, communications systems and networks and perform technical tasks related to telecommunications, broadcast of image and sound as well as other types of telecommunication signals on land, sea or in aircraft.

Tasks performed by workers in this sub-major group usually include: providing assistance to information and communication system users. Installing new programs and equipment; establishing, operating and maintaining network and other data communications systems; installing, monitoring and supporting Internet and Intranet websites or web server hardware or software; modifying web pages; and performing web server backup and recovery operations; controlling equipment to record sound, edit and mix image and sound recordings; controlling and maintaining transmitting and broadcast systems and satellite systems for radio and television programmes. Controlling and maintaining radio communications systems, satellite services, and multiplex systems on land, sea or in aircraft; providing technical assistance connected with research and the development of computer systems and telecommunications equipment, or testing prototypes; designing and preparing blueprints of circuitry according to the specifications given; providing technical supervision of the manufacture, utilization, maintenance and repair of telecommunications systems.

Occupations in this Sub Division are classified into the following Groups:

351 Information and Communication Technology Operations and User Support Technicians
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352 Telecommunication and Broadcasting Technicians

Group 351

Information and Communication Technology Operations and User Support Technicians

Information and Communication Technology Operations and User Support Technicians provide support for the day-to-day running of communications systems, computer systems and networks and provide technical assistance to users

Occupations in this Group are classified into the following Families:

3511	Information and Communication Technology Operations Technicians
3512	Information and Communication Technology User Support Technicians
3513	Computer Network and Systems Technician
3514	Web Technician

Family 3511

Information and Communication Technology Operations Technicians

Information and Communications Technology Operations Technicians support the day-to-day processing, operation and monitoring of information and communications technology systems, peripherals, hardware, software and related computer equipment to ensure optimal performance, and identify problems.

3511.0101

Domestic Biometric Data Operator

Domestic Biometric Data Operator is mainly responsible for the smooth running of biometric data capture and ensuring users get maximum benefits from them. Individual tasks vary depending on the size and structure of the organization, but may include installing and configuring computer hardware operating systems and applications; monitoring and maintaining computer systems and networks, troubleshooting the biometric system and network problems and diagnosing and solving hardware/software faults etc.

Qualification Pack Details:

QP NOS Reference	SSC/Q2213
QP NOS Name	Domestic Biometric Data Operator
NSQF Level	4

ISCO 08 Unit Group Details:

Code	3511
Title	Information and Communication Technology Operations Technicians

Family 3512

Information and Communication Technology User Support Technicians

Information and Communications Technology User Support Technicians provide technical assistance to users, either directly or by telephone, e-mail or other electronic means, including diagnosing and resolving issues and problems with software, hardware, computer peripheral equipment, networks, databases and the Internet, and providing guidance and support in the deployment, installation and maintenance of systems.

3512.0100**Data Recovery Planner/System Administrator**

Data Recovery Planner; Disaster Recovery Manager develops, co-ordinates implementation of, and tests plan to continue establishment data processing activities at off-site location in case of emergency, such as fire, at main site. Establishes priority of data processing activities according to importance to business. Determines hardware, software, data files, safe storage facilities, and other resources required. Develops plan to meet emergency data processing needs. Identifies personnel needed to implement plan. Presents plan to management and recommends means of obtaining required facilities, such as contracting with off-site vendor. Co-ordinates implementation of plan. Tests emergency data processing system, using computer and test data. Writes report to document test results and updates emergency recovery procedures.

ISCO 08 Unit Group Details:

Code 3512

Title Information and Communication Technology User Support Technicians

3512.0101**Domestic IT Helpdesk Attendant**

Domestic IT Helpdesk Attendant is mainly responsible for the smooth running of computer systems and ensuring users get maximum benefits from them. Individual tasks vary depending on the size and structure of the organization, but may include installing and configuring computer hardware operating systems and applications; monitoring and maintaining computer systems and

networks; talking staff/clients through a series of actions, either face to face or over the telephone to help set up systems or resolve issues; troubleshooting system and network problems and diagnosing and solving hardware/software faults etc.

Qualification Pack Details:

QP NOS Reference	SSC/Q0110
QP NOS Name	Domestic IT Helpdesk Attendant
NSQF Level	4

ISCO 08 Unit Group Details:

Code	3513
Title	Computer Network and Systems Technician

3512.0200**Desk Top Publishing Operator**

Desk Top Publishing Operator lays out pages, selects size and style of type, and enters text and graphics into computer to produce printed materials, such as advertisements, brochures, newsletters, and forms, applying knowledge of graphic arts techniques and typesetting and using computer: Reviews layout and customer order. Enters text into computer, using input device such as mouse, keyboard, scanner, or modem. Scans artwork, using optical scanner which changes image into computer-readable form. Enters commands to position text and illustrations on page grid of computer monitor. Creates spaces between letters, columns, and lines, applying knowledge of typesetting, and enters commands, using input device. Arranges page according to aesthetic standards, layout specifications of Graphic Designer, and applying knowledge of layout and computer software. Prints paper or film copies of completed material. May alter illustration to enlarge, reduce, or clarify image. May

operate automatic film developer to process photographs. May assemble artwork into paste-up and perform key lining manually.

ISCO 08 Unit Group Details:

Code 3512
Title Information and Communication Technology User Support Technicians

3512.0202

Associate-Desktop Publishing (DTP)

Associate-Desktop Publishing (DTP) puts research reports into standard templates. These templates could be in flash, macromedia, acrobat or html.

Qualification Pack Details:

QP NOS Reference	SSC/Q2702
QP NOS Name	Associate-Desktop Publishing (DTP)
NSQF Level	7

ISCO 08 Unit Group Details:

Code 3512
Title Information and Communication Technology User Support Technicians

3514.0300

Programming Assistant/Junior Software Engineer

Programming Assistant installs, maintains and updates computer programs by making minor changes and adjustments to them under the guidance of computing professionals. Maintains and updates documents of computer programs and installations. Applies knowledge of principles and practices in the area of programming and computing in order to identify and solve problems arising in the

course of their work. They may receive guidance from managers or professionals. May supervise other workers also.

ISCO 08 Unit Group Details:

Code 3512
Title Information and Communication Technology User Support Technicians

3512.0401

Disk Duplicator

Disk Duplicator creates a master hard disk by loading appropriate files and duplicates them in multiple disks for use in end-user computing systems. The individual at work is responsible for creating a master hard disk and using it for duplicating on empty hard disks to be used by original equipment manufacturers.

Qualification Pack Details:

QP NOS Reference	ELE/Q4302
QP NOS Name	Disk Duplicator
NSQF Level	4

ISCO 08 Unit Group Details:

Code 3512
Title Information and Communication Technology User Support Technicians

3512.0501

IT Co-ordinator in School

IT Co-ordinator in School is also called ‘e-learning Facilitator’, the IT Co-ordinator provides support on the e-learning content and hardware used for training in schools. The individual at work is responsible for operating and maintaining e-learning hardware and updating and operating e-learning applications. The individual also assists teachers and

students in operating the e-learning applications.

Qualification Pack Details:

QP NOS Reference	ELE/Q4701
QP NOS Name	IT Co-ordinator in School
NSQF Level	4

ISCO 08 Unit Group Details:

Code	3512
Title	Information and Communication Technology User Support Technicians

3512.0601

Associate-Clinical Data Management

Associate-Clinical Data Management are required to organize and maintain information related to medical research and records, and perform data coding of records. They need to ensure completeness, correctness and quality of the data generated during clinical trials with high accuracy.

Qualification Pack Details:

QP NOS Reference	SSC/Q2401
QP NOS Name	Associate-Clinical Data Management
NSQF Level	7

ISCO 08 Unit Group Details:

Code	3512
Title	Information and Communication Technology User Support Technicians

3512.0700

Medical Transcriptionist

Medical Transcriptionists use computer and transcribing machines with headset

and foot pedal or voice mail to listen to recordings by physicians and other healthcare professionals dictating a variety of medical reports, such as emergency room visits, diagnostic imaging studies, operations, chart reviews, and final summaries. Carries out programming tasks connected with the installation and maintenance of computer hardware and software. Transcribes dictated reports and translates medical jargon and abbreviations into their expanded forms. Edits as necessary and returns reports in either printed or electronic form by mail/e-mail to the dictator for review and signature, or correction.

ISCO 08 Unit Group Details:

Code	3512
Title	Information and Communication Technology User Support Technicians

3512.0702

Associate-Medical Transcription

Associate-Medical Transcription is responsible for documentation of medical records dictated and authored by medical professionals. This involves basic documentation, verification and validation of the documents such as history and physical reports, clinic notes, office notes, operative reports, consultation notes, discharge summaries, letters, psychiatric evaluations, laboratory reports, x-ray reports and pathology reports.

Qualification Pack Details:

QP NOS Reference	SSC/Q2402
QP NOS Name	Associate-Medical Transcription
NSQF Level	7

ISCO 08 Unit Group Details:

Code	3512

Title Information and Communication
Technology User Support
Technicians

3512.0801 Engineer-Technical Support

Engineer-Technical Support is responsible for resolving Level 1/2 incidents affecting the operation of production systems, through troubleshooting and implementing known fixes. It involves framing of long term and short term plans for IT Support/Helpdesk.

Qualification Pack Details:

QP NOS Reference	SSC/Q0101
QP NOS Name	Engineer-Technical Support (Level 1)
NSQF Level	5

ISCO 08 Unit Group Details:

Code	3512
Title	Information and Communication Technology User Support Technicians

3512.9900 Information and Communication Technology User Support Technicians, Other

Computer Assistants, Other include all other Computer Assistants not elsewhere classified.

ISCO 08 Unit Group Details:

Code	3512
Title	Information and Communication Technology User Support Technicians

Family 3513

Computer Network and Systems Technician

Computer Network and Systems Technicians establish, operate and maintain network and other data communication systems.

3513.0100 System Administration Assistant/Junior System Administrator

System Administration Assistant provides assistance to users of microcomputers and standard software systems at installation and when a problem occurs. Installs/reinstalls new computer programs on particular hardware and operating system configurations. Installs new peripheral units and makes necessary parameter adjustments in operating systems and drives. Performs back-up operations. Keeps log of computing systems. May receive guidance from Managers or professionals. May supervise other workers also.

ISCO 08 Unit Group Details:

Code	3513
Title	Computer Network and Systems Technician

3513.0200 Computer Security Specialist

Computer Security Specialist regulates access to computer data files, monitors data file use, and updates computer security files: Enters commands into computer to allow access to computer system for employee who forgot password. Reads computer security files to determine whether denial of data access reported by employee is justified.

Modifies security files to correct error, or explains that employee authorisation does not permit access. Answers employee questions about computer security. Modifies security files to add new employees, delete former employees, and change employee name, following notice received from computer user departments and personnel office. Sends printouts listing employee data authorisation to computer user departments to verify or correct information in security files. Reviews data use records and compares user names listed in records with employee authorisation to ensure that all employees who accessed data files were entitled to do so. Deletes data access of unauthorised users, and for users who have not used data for specified time.

ISCO 08 Unit Group Details:

Code 3513
Title Computer Network and Systems Technician

3513.0301 Infrastructure Engineer

Infrastructure Engineer provides technical assistance in the installation, configuration, administration, support and maintenance of systems, storage or back-up services of databases etc. These roles provide cross-functional IT Services Management and work closely with multiple domains on the development, maintenance and reporting of service catalogues, processes/procedures, and new technology/tools.

Qualification Pack Details:

QP NOS Reference	SSC/Q0801
QP NOS Name	Infrastructure Engineer
NSQF Level	5

ISCO 08 Unit Group Details:

Code 3513
Title Computer Network and Systems Technician

3513.9900 Computer Network and Systems Technician, other

Computer Network and Systems Technician, other include technicians who establish, operate and maintain network and other data communications systems not elsewhere classified.

ISCO 08 Unit Group Details:

Code 3513
Title Computer Network and Systems Technician

Family 3514 Web Technician

Web Technicians maintain, monitor and support the optimal functioning of Internet and Intranet websites and web server hardware and software.

Group 352

Telecommunication and Broadcasting Technicians

Telecommunications and Broadcasting Technicians control technical functioning of equipment to record and edit images and sound and for transmitting radio and television broadcasts of images and sounds, as well as other types of telecommunication signals on land, sea or in aircraft, perform technical tasks connected with telecommunications engineering research and with the design,

manufacture, assembly, construction, operation, maintenance and repair of telecommunications systems.

Occupations in this Group are classified into the following Families:

3521	Broadcasting and Audio-visual Technicians
3522	Telecommunication Engineering Technicians

Director Motion Picture; turns on motor switch of camera, puts his eyes close to view finder or looks through film with eye-piece, and follows scene of action, moving or adjusting his camera by hand. Unloads camera when film reel is fully exposed for further processing. Writes camera reports indicating details of shooting, lighting conditions, types of lenses, filters and diffusers used. May direct setting up and making of various adjustment of power driven motion picture camera.

ISCO 08 Unit Group Details:

Code 3521

Title Broadcasting and Audio-Visual Technicians

Family 3521 Broadcasting and Audio-Visual Technicians

Broadcasting and Audio-Visual Technicians control technical functioning of equipment to record and edit images and sound and for transmitting radio and television broadcasts of images and sounds, and other types of telecommunication signals on land, sea or in aircraft.

3521.0100 Cinematographer

Cinematographer; Cameraman, Motion Picture, photographs persons, scenes and places with motion picture camera for production of feature films. Receives instructions from Producer, Motion Picture as to type and photographic effect desired on scenes to be filmed. Directs loading of camera with reel of film. Positions or supervises setting up of camera by assistant; focusses and sets camera on scene or object to be shot; controls lighting for desired general detail of scene to be photographed; hooks up motor on camera at starting signal of

3521.0200 Movie Cameraman

Movie Cameraman; Cine Cameraman photographs persons, places and events with movie camera (cine) for purposes other than production of feature films. Loads cine camera with film either coloured or black and white as required. Visits place of interest, event or assembly. Holds or places camera at desired angle and distance from subject to be photographed; adjusts lens, aperture, depending on type of subject and lighting condition or arranges artificial light for better effect; focusses camera lens or lenses to subject holding his eye close to view finder or looking through film with eye-piece and exposes certain length of film by pressing lever to run motor inside camera. Alters angle or distance of shot as required. Unloads camera when film is exposed and sends film for developing. Views processed film against light and cuts and trims films to make desired strip of subject. Projects or exhibits film on screen using projector to explain events function, for audience. May develop and

process films. May enlarge prints. May attend to minor repair to cine cameras. May be designated as Television Cameraman if engaged in television studio.

ISCO 08 Unit Group Details:

Code 3521
Title Broadcasting and Audio-Visual Technicians

3521.0300

Cameraman, Animation

Cameraman (Animation) operates special camera to make animated cartoon motion picture film. Discusses with Director and Producer, (Film) and renders advise about can era movements and feasibility of variety of shot; envisages in script and chart and suggests alternatives wherever necessary. Receives animation charts and drawings. Sets and adjusts camera and lighting exposure appropriate to type of film used and mood and effect to be emphasised. Installs frame on camera table for exposure and positions overhead camera suspended securely over frame. Shoots frame by frame in a predetermined sequence and regulates exposure and aperture to obtain special effect such as fade out or fade in. Instructs Laboratory Technicians about method of processing of films, which need special treatment for effective development of striking feature of certain shots.

ISCO 08 Unit Group Details:

Code 3521
Title Broadcasting and Audio-Visual Technicians

3521.0401

Sound Recording Equipment Operator/Sound Assistant

Sound Recording Equipment Operator operates electronic equipment which records sound in pulses on composition discs or on reels of tape, wire or film for such uses as film and gramophone record production and radio broadcasting. Places microphones in position and connects them to recording equipment. Places blank discs or reels of tape, wire or film in machine. Sets volume and tone controls and makes other adjustments as necessary. Starts machine, watches its operation closely and listens, by means of headphones or loudspeaker, to sound being recorded. Manipulates controls during operation as required. May perform minor repairs.

Qualification Pack Details:

QP NOS Reference	MES/Q3403
QP NOS Name	Sound Assistant
NSQF Level	3

ISCO 08 Unit Group Details:

Code 3521
Title Broadcasting and Audio-Visual Technicians

3521.0501

Film Editor/Editor

Film Editor edits motion picture films in sequence as per script by cutting away unwanted portion of film and synchronises picture and sound negatives. Studies script or story of picture. Examines picture and sound negatives over editing table fitted with special lighting effects. Marks unnecessary portions of film and cuts them. Joins ends of selected lengths of films in proper sequence on splicer machine using special adhesives (cement). Arranges film in convenient number of reels or parts and inserts appropriate titles and banners for distinction. Views assembled film on screen for corrections if

any. Synchronises picture negative with sound negative and fills up void portions with necessary music track.

Qualification Pack Details:

QP NOS Reference	MES/Q1401
QP NOS Name	Editor
NSQF Level	4

ISCO 08 Unit Group Details:

Code	3521
Title	Broadcasting and Audio-visual Technicians

3521.0511

Sound Editor

Sound Editor is responsible for preparing, organizing and editing sound sequences that meet the quality standards and requirements of production

Qualification Pack Details:

QP NOS Reference	MES/Q3404
QP NOS Name	Sound Editor
NSQF Level	4

ISCO 08 Unit Group Details:

Code	3521
Title	Broadcasting and Audio-Visual Technicians

3521.0600

Supervisor, Broadcasting Audio-Visual Projection and Sound Equipment Operations

Supervisors, Broadcasting, Audio-Visual Projection and Sound Equipment Operations supervise upkeep, setting and proper operations of television and radio broadcasting and recording units, cinema projectors and other audio-visual and some equipment and ensures their proper performance. Examines broadcasting,

recording, transmitting and receiving units, projectors and other audio-visual and sound equipment for operational efficiency. Checks equipment part by part according to prescribed specifications, gets defects removed and puts them in trial to observe density, linearity, clarity of picture and voice and other factors, as appropriate. Synchronises sound with picture in audio-visual projections such as in television, cinematography, etc., and ensures correct matching. Gets machines and equipment set according to programme and adjusts them as necessary and guides workers in proper operations to meet audience desired result. Maintains prescribed records and registers and ensures proper upkeep of all machines and equipment under his charge. May be designated as SUPERVISOR BROADCASTING UNIT; SUPERVISOR RECORDING UNIT, etc., according to nature of work performed.

ISCO 08 Unit Group Details:

Code	3521
Title	Broadcasting and Audio-Visual Technicians

3521.0700

Television Broadcasting Station Operator

Television Broadcasting Station Operator operates and adjusts equipment associated with transmitter of television broadcasting station. Switches on transmitter, views programmes through television monitor and adjusts picture for quality. Listens to programmes through loud speaker or headphone, observes indicators and adjusts tone and volume. Switches off transmitter on completion of programme, gets defects removed if any and keeps it ready for next set. May make minor repairs and replace parts.

ISCO 08 Unit Group Details:

Code 3521

Title Broadcasting and Audio-visual
Technicians**3521.0800****Radio Operator, Broadcasting
Station**

Radio Operator, Broadcasting Station; Engineering Assistant, Broadcasting Station adjusts tunes and operates transmitting and receiving equipment for broadcasting news and other programmes. Switches on and operates transmitter for broadcasting news or programme. Listens to broadcast through headphone or loudspeaker and manipulates control knobs to adjust volume and tone. Fixes up microphone, adjusts amplifier level and monitors loudspeakers by further tuning, if necessary, to ensure clarity of reception. Adjusts and tunes receivers for relaying different stations. May work at transmitting of receiving station or at Studio Centre. May operate transmitter of television station. May do minor repairs and replace defective parts. May record music, talk etc. for relaying.

ISCO 08 Unit Group Details:

Code 3521

Title Broadcasting and Audio-Visual
Technicians**3521.0900****Cinematograph Operator**

Cinematograph Operator; Cinema Projectionist; Cinema Operator, Cine Projectionist sets and operates motion-picture projector with sound-reproducing projector with sound-reproducing equipment on screen and attends to their

repairs. Winds films on reel, places reel on projector and draws filmstrip through guide rollers and light chamber to collecting film roller below. Starts machine. Adjusts lens and sound reproduction equipment to obtain clear image of projected film on screen, synchronise sound reproduction at required pitch and get machine ready for show. Projects film on screen as scheduled through projection box and checks correct focus and sound reproduction while film is being shown. Stops machine in case of film stripping or breakage, joins ends of film and resumes projection after necessary setting within minimum possible time. Removes collected film on lower reel to rewind and keep it ready for next show. Cleans and oils projector parts periodically. May project films on portable screens, outdoors, etc.

ISCO 08 Unit Group Details:

Code 3521

Title Broadcasting and Audio-visual
Technicians**3521.1000****Public Address Equipment
Operator**

Public Address Equipment Operator installs and operates sound amplifying equipment used at public functions. Places loudspeakers in position and connects loudspeaker wires to amplifiers. Places microphones near speaker, orchestra or other sources of sound. Connects microphone wires to amplifiers. Tests installation by switching it on and listening from various points while some one talks into microphone. Adjusts position of microphones and loud speakers, if necessary, and regulates volume and tone during operation of

equipment. May operate tape recorder or record player. May repair sound-amplifying equipment.

ISCO 08 Unit Group Details:

Code 3521

Title Broadcasting and Audio-visual Technicians

3521.1100

Station Officer, Overseas Communication

Station Officer, Overseas Communication Engineer Overseas Communication sets, operates and maintains wireless transmission and receiving equipment on prescribed cycle at scheduled hours for communications of over-seas and long distance (inter-nations) messages. Adjusts communication transmission instrument to have maximum number of messages despatched and receiving stations contacted on allotted frequency channels and prescribed cycles at scheduled hours. Adjusts receiving instruments for selectivity, sensitivity, and clarity of messages received and sent and decides on most appropriate wave length, frequency, aerial etc. Detects disturbances or jamming of communication interference with transmission, etc. and reports unauthorized use of frequency channels by other organizations to higher authorities. Evolves maintenance schedules of equipment power supply, carrier channel, etc. and supervises repairs and replacements of defective parts using test equipment like cathode rays, oscilloscopes and distortion sets. Supervises work of Station Technical Assistants, advises higher formation for speedy clearance of traffic on particular frequency at scheduled hours and guides them where necessary. Maintains necessary records for reference and other

official purposes. May specialize in operation, design and maintenance of any particular kind of telecommunication equipment like aerials, transmission equipment, receiving equipment, etc. May work at transmitting and receiving stations or at telegraph office.

ISCO 08 Unit Group Details:

Code 3521

Title Broadcasting and Audio-visual Technicians

3521.1200

Station Technical Assistant, Overseas Communication

Station Technical Assistant, Overseas Communication; assists Station Officer Overseas Communication in setting, operating and maintaining wireless transmission and receiving equipment. Receives instructions from Station Officer Overseas Communication and sets and operates wireless receiving and transmitting equipment such as radio transmitting and receiving equipment, land line and V.F.T. (Voice Frequency telephony) equipment, radio telephone and terminal equipment, transistors, radio-photo equipment (equipment for radio photography), radio facsimile equipment (equipment for radio black and white sketches and diagrams) etc., on prescribed frequency channels and cycles during scheduled hours to receive and transmit messages. Assists Station Officer Overseas Communication in running submarine cable circuits, operating automatic error correcting and detecting equipment, measuring radio frequency, checking radio signals, choosing right aerial to obtain optimum signal; changing transmitter waves, clearing faults, etc. and in their installation and maintenance work. May be designated as PHOTO-

RADIO OPERATOR if engaged only for receiving and transmitting radio photographs. May appreciate sub-normal radio condition and assists in improving them. May work as transmitting or receiving station or at central telegraph office.

ISCO 08 Unit Group Details:

Code 3521

Title Broadcasting and Audio-visual Technicians

3521.1300

Wireless Operator

Wireless Operator operates, tunes and maintains wireless equipment for receiving and transmitting messages in code or plain language on particular wavelength and deciphers coded messages received for onward delivery. Operates switches to connect transmitter to generator and telephone or telegraph equipment. Sets wireless equipment to required frequency by turning dial and tunes it to requisite volume and tone. Transmits messages by radiotelephone or radiotelegraph in plain or coded message. Receives messages in coded or plain language, writes them on special forms, deciphers coded messages, if necessary, and delivers them to proper authority through messengers. Maintains records and logbooks of messages received and despatched. May charge batteries, change valves of wireless equipment and rectify minor faults.

ISCO 08 Unit Group Details:

Code 3521

Title Broadcasting and Audio-visual Technicians

3521.1400

Radio Operator, Ship

Radio Operator, Ship operates radio equipment on board ship for receiving and transmitting code messages by radio telephone or radio-telegraph system. Adjusts and sets apparatus to operate on desired frequency. Maintains regular contact with nearest coastal radio stations to obtain weather reports and time-signals and reports necessary information about ship's navigation and location. Keeps regular watch to pick up signals from ships in distress. Provides navigational warnings and reports weather conditions. Maintains wireless equipment in working order, record of messages received or sent and does minor repairs and replacements of parts. May also maintain radar equipment.

ISCO 08 Unit Group Details:

Code 3521

Title Broadcasting and Audio-visual Technicians

3521.1500

Radio Operator, Aircraft

Radio Operator, Aircraft; Radio Officer, Aircraft operates and adjusts radio equipment on board aircraft in flight to maintain contact with ground station, exchange messages and to inform Pilot about weather conditions, landing instructions etc. Inspects equipment including radar before undertaking flights. Operates radio to send and receive messages and maintains contact with ground stations. Receives weather information and other messages in prescribed code from Control Tower Operator and transmits them to Pilots during flights. Operates radio navigational equipment and frequently tunes to detect or listen to international distress signals. Maintains log of all messages and

instructions received and despatched. May do repairs to radio during emergency. May operate direction finding equipment and report readings to Pilot.

ISCO 08 Unit Group Details:

Code 3521
Title Broadcasting and Audio-visual Technicians

3521.1600

Control Tower Operator, Aerodrome

Control Tower Operator, Aerodrome Operates and adjusts wireless equipment for transmitting and receiving messages to and from aircrafts for landing, taking off, etc. Adjusts wireless equipment to proper wavelength and correct frequency. Establishes radio contact with incoming air-transports and transmits messages received from Traffic Controller for Pilots to fly on specific course at definite flying level and also communicates other information regarding weather condition at field. Signals aircraft at down-wind end of runway when to take off by means of electric ray gun or flag. Controls airport lights (boundary, runway, hazard and flood lights) by electric push batteries. Maintains record of all messages received and despatched for inspection. Reports defects in lighting arrangements to Chief Controller to arrange for rectification. May operate radar for aircraft identification and weather conditions. May signal aircraft not equipped with radio by means of flag or electric-ray gun.

ISCO 08 Unit Group Details:

Code 3521
Title Broadcasting and Audio-visual Technicians

3521.1700

Radar Operator

Radar Operator operates and maintains radar equipment to give range and direction of targets or objects such as aircrafts, fog, rain clouds and cyclonic storm in sky around operating station. Switches on radar set and opens filaments and blower units. Allows set to warm up and raises high-tension voltage slowly to achieve operating condition. Switches aerial rotation circuit, and observes image on radar screen with aid of short, medium or long range scales to determine distance altitude, direction and speed of object detected. Employs voice communication (Radio-telephone or Morse) to convey information to operating room. May attend to minor faults to maintain set in operating conditions.

ISCO 08 Unit Group Details:

Code 3521
Title Broadcasting and Audio-visual Technicians

3521.2000

Signaller, Ship

Signaller, Ship; Signalman, Ship signals messages by waving flag or flashing semaphore (light) depending on natural light and weather conditions to port authorities and nearby ships. Keeps watch at port, observes approaching ships with binoculars and informs authorities accordingly. Obtains instructions from superiors regarding place or position where incoming ship is to be communicated to ship authorities at sea. Passes messages in inter-national signalling system to ship authorities by signalling with flags or flashes of semaphore depending on visibility and weather conditions. Maintains record of all messages sent out or received.

Receives messages from ships, informs Pilot and arranges for piloting ship in to port. Arranges launches and board for shipping crew or Pilot for going to ship or coming to shore. Takes barometer readings, observes force and direction of wind, wave positions, etc. and records them in log book. Attends to telephone calls regarding movement of ships and any messages to be sent. Maintains shipping register indicating name of ship, time of arrival and departure, place where berthed, etc. Hoists weather signals or flags at time of emergency, warning ships to stay at sea. Performs watch duty by shifts from observations tower.

ISCO 08 Unit Group Details:

Code 3521

Title Broadcasting and Audio-visual Technicians

3521.2100

Light Keeper, Light House

Light Keeper, Light House operates light house signalling equipment to guide incoming or passing ships, keeps watch during the night and maintains equipment in working order. Lights gas lamps (lighting equipment) at dusk by lighting its burner with spirit lamp. Opens valve of oil drum to supply oil under pressure through pipe to gas lamp. Cleans nozzle hole of burner using pin to remove obstruction if any. Maintains supply of oil to burner at prescribed pressure as indicated in meter of oil drum. Ensures that mantles of gas lamp burns brightly without any flame. Winds machine to full tension by rotating or winding driving pulley with hand lever or handle and then releases it to rotate lens around light or lamp to throw out light rays at set speed. Winds driving pulley at prescribed interval (once an hour) to keep it under full tension.

Records meteorological data, direction of wind, temperature (both inside and outside) of lamp-room, condition of seas (whether calm, moderate or rough) etc.; at prescribed intervals. Puts out light at sunrise by cutting off oil supply to gas lamp. Cleans and polishes lenses, lamp and glass panes daily using special cloth and solution. Oils bearing wheel, clock work, weight shaft mechanism and other equipment during day. Ensures that oil drum is full and is maintained at prescribed pressure. Submits periodical reports regarding condition of light-house, meteorological data etc.; to superiors. Attends to minor breakdowns and replaces parts such as burner, mantle etc.; as required. Reports to superiors about cases of major breakdowns for rectifications. Maintains general cleanliness and ensures that ladder platform, galleries, dome, etc. are in perfect service condition. Replenishes stores as required. May light buoys in harbour.

ISCO 08 Unit Group Details:

Code 3521

Title Broadcasting and Audio-visual Technicians

3521.9900

Broadcasting and Audio-visual Technicians, Other

Broadcasting and Telecommunications Equipment Operators, other include those who control technical functioning of equipment for transmitting radio and television broadcasts of pre-recorded or live images and sounds, as well as other types of telecommunications signals, not elsewhere classified.

ISCO 08 Unit Group Details:

Code 3521

Title Broadcasting and Audio-visual
Technicians

standard production and stipulated performance. May undertake complicated work to avoid mistakes and to train workers by actual demonstration.

Family 3522

Telecommunication Engineering Technicians

Telecommunications Engineering Technicians perform technical tasks connected with telecommunications engineering research, as well as with the design, manufacture, assembly, construction, operation, maintenance and repair of telecommunications systems.

3522.0100 Telecommunication, Technician

Technician, Telecommunication receives instructions regarding work to be done and guides workers in installation, operation and maintenance of television, telegraph, telephone, telex system, radio, radar, sound recording and other equipment under his charge. Studies standing duty chart, sketches, blue prints etc., and determines method of work to be adopted. Calculates data by original observations or from available sources. Draws necessary stores and guides workers in correct manufacture and assembly of units, alignments, synchronizing, tuning, continuity, voltage control, output, etc. according to nature of work in which engaged. Checks work during manufacture, repair or installation and on completion for current consumption, resistance, frequency, output, leakage, performance and other factors, using instruments such as voltmeter megger, frequency meter oscillograph, resonance recorder, etc., and makes adjustments, alterations or replacements as necessary to ensure

ISCO 08 Unit Group Details:

Code 3522

Title Telecommunication Engineering
Technicians

3522.0200

Line Inspector, Telephone

Line Inspector, Telephone Supervises execution of new installations and maintenance of existing telephone lines. Estimates expenditure and equipment required for executing new installations. Supervises work of installation of telephone lines at site. Checks faulty lines to locate and remove defects, and conducts maintenance check of lines to ensure efficient performance of communication system. Supervises utilization of staff engaged in installation and maintenance work and is responsible for maintenance of line books.

ISCO 08 Unit Group Details:

Code 3522

Title Telecommunication Engineering
Technicians

3522.0300

Telephone Inspector

Telephone Inspector; inspects telephone installation to ensure efficient operation of equipment. Scrutinizes complaints by subscribers, visits premises of subscribers, test-checks instruments installed, detects and rectifies faults. Conducts periodical maintenance checks of installed equipment to ensure efficient, uninterrupted operation. Supervises personal engaged in maintenance of telephone equipment. May prepare

estimates for new installations and supervise installation work.

ISCO 08 Unit Group Details:

Code 3522

Title Telecommunication Engineering Technicians

3522.0400

Wireless Inspector Electronics

Wireless Inspector; Wireless Licence Inspector inspects radio licences and checks unauthorised use of receiving-sets. Visits premises of radio-set users, checks licences and initiates prosecution proceedings against pirates (non-holder of licences). Makes enquiries about character, antecedents and solvency of new dealers in wireless receiving sets for grant of licences. Maintains liaison with and conducts periodical inspection of premises of authorised dealers in wireless receiving sets. Organizes anti-piracy drives. Examines applications of owners of defective sets for exemption of licence fee.

ISCO 08 Unit Group Details:

Code 3522

Title Telecommunication Engineering Technicians

3522.9900

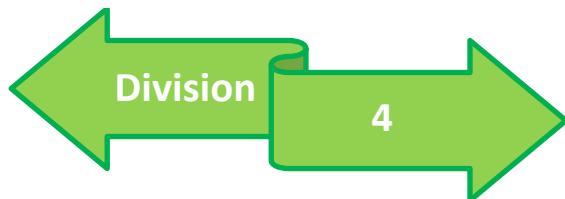
Telecommunication Engineering Technicians, Other

Telecommunications Engineering Technicians other, include Engineering Technicians who design, manufacture, assemble, construct, operate, maintain and repair telecommunication systems not elsewhere classified.

ISCO 08 Unit Group Details:

Code 3522

Title Telecommunication Engineering Technicians



Clerks/Clerical Support Workers

Clerical support workers record, organize, store, compute and retrieve information related, and perform a number of clerical duties in connection with money-handling operations, travel arrangements, requests for information, and appointments.

Tasks performed by clerical support workers usually include: stenography, typing, and operating word processors and other office machines; entering data into computers; carrying out secretarial duties; recording and computing numerical data; keeping records relating to stocks, production and transport; keeping records relating to passenger and freight transport; carrying out clerical duties in libraries; filing documents; carrying out duties in connection with mail services; preparing and checking material for printing; writing on behalf of illiterate persons; performing money-handling operations; dealing with travel arrangements; supplying information requested by clients and making appointments; operating a telephone switchboard. Supervision of other workers may be included.

Occupations in this Division are classified into the following Sub Divisions:

41	General and Keyboard Clerks
42	Customer Services Clerks

43	Numerical and Material Recording Clerks
44	Other Clerical Support Workers

Sub Division 41
General and Keyboard Clerks

General and Keyboard Clerks record, organize, store and retrieve information and perform a range of clerical and administrative tasks according to established procedures.

Tasks performed by workers in this sub-major group usually include: operating personal computers; word-processors or typewriters, recording, inputting and processing data using computers; to record input and process text, calculating, bookkeeping and similar office machines to input and process text and data; performing a wide range of general clerical duties including preparing invoices, checking figures, filing, faxing or processing mail.

Occupations in this Sub Division are classified into the following Groups:

411	General Office Clerks
412	Secretaries (General)
413	Keyboard Operators

Group 411
General Office Clerks

General Office Clerks perform a range of clerical and administrative tasks according to established procedures.

Occupations in this Group are classified into the following Families:

4110	General Office Clerks
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Family 4110
General Office Clerks

General Office Clerks perform a range of clerical and administrative tasks according to established procedures.

4110.0100
Clerk, General

Clerk, General performs variety of clerical duties such as maintenance of records, receipt and dispatch of dak, routine correspondence, tabulating data, preparing production schedules, wage bills, and insurance and provident fund accounts, keeping record of issue and receipt of library books, maintaining record of incoming and outgoing railway waggons and carriages, booking and delivering of goods, maintaining auction accounts, calculating and releasing octroi, attending to clerical duties of court, allocating and supervising work of process serving staff, receiving applications for granting arms licences, doing clerical work for legal practitioner, copying and comparison work, etc. May do his own typing. May operate office computing and accounting machine. Is designated according to nature of duties performed such as: Record Clerk/Record Keeper/Record Supplier if engaged on receipt, issue and maintenance of record. Diarist/Receipt Clerk/Dispatch Clerk if engaged on receipt and dispatch of dak. Correspondence Clerk if engaged in dealing with correspondence from individuals, customers, offices etc. Personnel Clerk if attends to clerical work regarding recruitment, employment and service condition of personnel employed. Production Clerk/Progress Clerk if engaged on preparation of production schedule based on time and operations involved in various stages of production.

Wages Clerk if engaged on calculation, preparation of pay bills or wage sheets based on workers' attendance and terms of employment. Insurance Clerk If engaged on performing routing clerical tasks, connected with transaction of life, fire, automobile or other type of insurance. Provident Fund Clerk if engaged on maintenance of provident fund accounts. Postal Clerk if engaged on performing various clerical tasks in post office such as accepting money for money orders or saving bank deposits, receiving parcels, insured and registered letters. Telegraph Clerk if engaged in performing various tasks in receiving and transmitting telegrams. Trains Clerk (Railway) if engaged in keeping records waggons or carriages (their number and capacity) coming in and going out of railway station. Weighing Clerk if engaged in weighing goods and articles received or issued on weighing machine and maintains relevant clerical records. Commercial Clerk (Transport)/Goods Clerk, Parcel Clerk, Freight Clerk if attends to booking and delivery of goods by rail, road, water or air routes. Auction Clerk if engaged in maintaining records of auction transactions. Octroi Clerk if engaged in calculating and realising octroi duty, terminal or toll-tax on listed goods entering municipal limits. Administrative Clerk, Court/Nazir Court if engaged in allocating and supervising work of process serving staff and realization of fines and dues imposed by court. Arms Clerk if engaged in receiving applications for granting arms' licences, their renewals etc. Copyist if engaged in preparing copies of document by hand or by typewriter. Lawyer's Clerk; Munshi if engaged in performing clerical work for legal practitioner. Examiner Court if engaged in comparing hand-written or typed matter from original documents.

ISCO 08 Unit Group Details:

Code 4110

Title General Office Clerks

4110.0200

Clerk, Enquiry

Clerk, Inquiry; Information Clerk attends to inquiries made personally, on phone or by post and gives required information either by personal knowledge or after consulting relevant record or official concerned. Exhibits at inquiry counter publicity material and other notices for public. Supplies required information to enquiries made personally, on telephone or by post either through personal knowledge or by consulting books or other relevant records of official concerned. Maintains record of enquiries. Directs visitors to official concerned. May operate telephone switch Board.

ISCO 08 Unit Group Details:

Code 4110

Title General Office Clerks

4110.0300

Copyright Clerk

Clerk, Inquiry; Information Clerk attends to inquiries made personally, on phone or by post and gives required information either by personal knowledge or after consulting relevant record or official concerned. Exhibits at inquiry counter publicity material and other notices for public. Supplies required information to enquiries made personally, on telephone or by post either through personal knowledge or by consulting books or other relevant records of official concerned. Maintains record of enquiries. Directs visitors to official concerned. May operate telephone switch Board.

ISCO 08 Unit Group Details:

Code 4110
 Title General Office Clerks

4110.0400**Copy Holder**

Copy Holder reads manuscript aloud to Proof Reader to enable him to make corrections in proof. Uses prescribed technical terminology to indicate capital letters, italics, punctuation's, paragraph divisions etc.

ISCO 08 Unit Group Details:

Code 4110
 Title General Office Clerks

4110.0500**Time Keeper**

Time Keeper keeps day to day attendance of workers employed in establishment, institution or factory showing time of arrival and departure. Gets gate of factory opened at prescribed time to allow workers to go in for work. Arranges worker's time cards or tokens on special racks near automatic time punching clock or collection box. Observes workers collecting, punching-clock and depositing them in collection boxes. Collects all time-cards and marks their attendance. Prepares periodical statements, absentee statements and muster rolls of workers, indicating total number of hours worked per day, week or month. Sends prepared muster roll to wage section for computing total wages earned. Supervises collection of gate passes, at gate to permit workers going out earlier than usual time and keeps record of such passes. Attends to enquiries of visitors. Issues passes or entry and directs them to section or officer concerned. Maintains visitors' book indicating visitor's name, purpose, time of

arrival and departure. May issue tokens to individual worker. May assist wage office in preparation and distribution of pay packets to workers. May use calculating machine or computation table.

ISCO 08 Unit Group Details:

Code 4110
 Title General Office Clerks

4110.0600**Time Keeper, Motor Transport**

Time-Keeper; Starter; Vehicle Time Recorder,(Motor Transport) keeps daily record of arrival and departure of buses at bus stations or terminus. Regulates running of buses to time schedule. Records serial number of tickets blocks on bus-conductors way bill at start and end of each journey. Informs superior officers about heavy rush of traffic necessitating diversion of buses or running of extra buses. Attends to enquiries from public about timings, fare, etc. Marks attendance of Bus Drivers and Bus Conductors, allots them duties and arranges for relief crew in place of absentees. Reports to supervisors, cases of gross irregularities and malpractices. May take charge of lost property handed over by Bus Conductors.

ISCO 08 Unit Group Details:

Code 4110
 Title General Office Clerks
Group 412
Secretaries (General)

Secretaries (General) use typewriters, personal computers or other word-processing equipment to transcribe correspondence and other documents, check and format documents prepared by other staff, deal with incoming and outgoing mail, screen requests for

meetings or appointments, and perform a variety of administrative support tasks.

Occupations in this Group are classified into the following Families:

4120 Secretaries (General)

**Family 4120
Secretaries (General)**

Secretaries (General) use typewriters, personal computers or other word-processing equipment to transcribe correspondence and other documents, check and format documents prepared by other staff, deal with incoming and outgoing mail, screen requests for meetings or appointments, and perform a variety of administrative support tasks.

**4120.0100
Private Secretary**

Private Secretary-cum-Stenographer; Personal Assistant takes dictation in shorthand and reproduces it on paper using typewriter and performs various other clerical duties to assist superiors. Takes dictations in shorthand and transcribes them using typewriter. Receives and opens mail and submits it to superiors for information and further action. Maintains diary to note time, date and place of meetings and other engagements for employer or superior. Reminds employer or superior of engagements and accompanies him if required. Attends to routine enquiries in person, writing or over phone. Receives visitors and arranges their interviews with superior. Keeps important and confidential records. May attend to

routine correspondence on behalf of employer.

ISCO 08 Unit Group Details:

Code 4120
Title Secretaries (General)

4120.0200

Personal Secretary

Personal Secretary performs routine clerical and administrative functions such as drafting correspondence, scheduling appointments, organizing and maintaining paper and electronic files, or providing information to callers. Operates office equipment such as fax machines, copiers, and phone systems, and use computers for spreadsheet, word processing, database management, and other applications. Answers telephones and give information to callers, take messages, or transfer calls to appropriate individuals. Greets visitors and callers, handle their inquiries, and direct them to the appropriate persons according to their needs. Sets up and maintains paper and electronic filing systems for records, correspondence, and other material. Locates and attaches appropriate files to incoming correspondence requiring replies. Opens, reads, routes, and distributes incoming mail and other material, and prepares answers to routine letters. Completes forms in accordance with company procedures.

ISCO 08 Unit Group Details:

Code 4120
Title Secretaries (General)

4120.0300

Panchayat Secretary

Panchayat Secretary performs administrative and executive duties for

execution of community development programmes entrusted by the village panchayat. Assembles and prepares village people for extension of community work. Organizes social welfare programmes and educational and co-operative activities. Gives guidance to field staff in improvement of rural communications and hygienic conditions. Makes arrangements for recovery of taxes and issues licenses and permits granted by Panchayat.

ISCO 08 Unit Group Details:

Code 4120
Title Secretaries (General)

4120.9900

Secretaries, Other

Secretaries, other include secretaries who use typewriters or word-processing equipment to check and transcribe correspondence and other documents, deal with incoming and outgoing mail, and deal with routine correspondence on their own initiative not elsewhere classified.

ISCO 08 Unit Group Details:

Code 4120
Title Secretaries (General)

Group 413

Keyboard Operators

Keyboard Operators input and process text and data, and prepare, edit and generate documents for storage, processing, publication and transmission.

Occupations in this Group are classified into the following Families:

4131 Typists and Word Processing Operators

4132 Data Entry Clerks

Family 4131

Typists and Word Processing Operators

Typists and Word Processing Operators type, edit and print using typewriter, personal computer or other word processor, and record oral or written matter in shorthand.

4131.0100

Secretary/Back Office Support

Stenographers; Steno-typist records dictations in shorthand and transcribe them in typewritten form. Takes dictation in shorthand. Transcribe dictated material from note book, using typewriter. Compares typed matter and submits them to superiors. May cut stencil on typewriter for use on duplicating machine.

ISCO 08 Unit Group Details:

Code 4131
Title Typists and Word Processing Operators

4131.0200

Reporter

Reporter records in shorthand verbatim reports of meetings, conferences etc. and transcribes them into longhand using typewriter. Attends conferences, meetings or lectures or other proceedings and makes verbatim record in rapid shorthand. Transcribes shorthand notes into longhand by using typewriter. Checks transcribed matter with notes for accuracy and passes them to superiors. May attend law courts, legislative assemblies etc. to cover proceedings.

ISCO 08 Unit Group Details:

Code 4131
 Title Typists and Word Processing Operators

receipt of messages, break-downs, repairs and number of messages received etc. May clean and oil machine.

4131.0400

Braille Typist

Braille Typist operates braille typewriter to transcribe reading matter for people with visual impairment: Reads copy and operates braille typewriter to emboss specially treated paper with various combinations of dots that characterize braille alphabet, using braille code form.

ISCO 08 Unit Group Details:

Code 4131
 Title Typists and Word Processing Operators

ISCO 08 Unit Group Details:

Code 4131
 Title Typists and Word Processing Operators

4131.0500

Teleprinter Operator

Teleprinter Operator; Teletype Operator transmits and receives telegraphic messages to and from outside station by operating teleprinter or teletype machine (electrically operated machine having typewriter key-board for transmission and type-printing for receiving). Adjusts roll of paper on machine for typing. Starts machine and connects places for receiving or transmitting messages. Receives messages, reports or news items to be transmitted and places them on holding device of machine. Types messages to be transmitted by operating key board of Tele-printer Machine with fingers. Observes machine typing automatically incoming messages on paper to detect mistakes, if any, and to tear off paper when message is complete. Rectifies mistakes from transmitting and by getting confirmation. Tears off typed paper from machine, sorts them out and sends them for delivery. Maintains record of time of

4131.0600

Computer Operator

Computer Operator operates computer and peripheral equipment to process business, scientific, engineering, or other data, according to operating instructions. Enters commands, using keyboard of computer terminal, and presses buttons and flips switches on computer and peripheral equipment, such as tape drive, printer, data communications equipment, and plotter, to integrate and operate equipment, following operating instructions and schedule. Loads peripheral equipment with selected materials, such as tapes and printer paper for operating runs, or oversees loading of peripheral equipment by Peripheral Equipment Operators. Enters commands to clear computer system and start operation, using keyboard of computer terminal. Observes peripheral equipment and error messages displayed on monitor of terminal to detect faulty output or machine stoppage. Enters commands to correct error or stoppage and resume operations. Notifies supervisor of errors or equipment stoppage. Clears equipment at end of operating run and reviews schedule to determine next assignment. Records problems which occurred, such as down time, and actions taken. May answer telephone calls to assist computer users encountering problem. May assist workers in classifying, cataloguing, and maintaining tapes.

ISCO 08 Unit Group Details:

Code 4131

Title Typists and Word Processing Operators

4131.9900**Typists and Word Processing Operators, Other**

Word processor and Related Operators, other include all others who type, edit, and print various documents using word-processing equipment not elsewhere classified.

ISCO 08 Unit Group Details:

Code 4131

Title Typists and Word Processing Operators

Family 4132**Data Entry Clerks**

Data Entry Clerks enter coded, statistical, financial and other numerical data into electronic equipment, computerized databases, spreadsheets or other data repositories using a keyboard, mouse, or optical scanner, speech recognition software other data entry tools. They enter data into mechanical and electronic devices to perform mathematical calculations.

4132.0401**Data Entry Machine Operator**

Data Entry Operator operates keyboard or other data entry device to enter data into computer or onto magnetic tape or disk for subsequent entry: Enters alphabetic, numeric, or symbolic data from source documents into computer, using data

entry device, such as keyboard or optical scanner, and following format displayed on screen. Compares data entered with source documents, or re-enters data in verification format on screen to detect errors. Deletes incorrectly entered data, and re-enters correct data. May compile, sort, and verify accuracy of data to be entered. May keep record of work completed.

Qualification Pack Details:

QP NOS Reference G&J/Q4303

QP NOS Name Data Entry Person

NSQF Level 2

ISCO 08 Unit Group Details:

Code 4132

Title Data Entry Clerks

4132.0402**Domestic Data Entry Operator**

Domestic Data Entry Operator is responsible to provide daily work reports and work on daily hour bases. The individual is responsible for electronic entry of data from the client side to the office site or vice-versa. Individual tasks vary depending on the size and structure of the organization.

Qualification Pack Details:

QP NOS Reference SSC/Q2212

QP NOS Name Domestic Data Entry Operator

NSQF Level 4

ISCO 08 Unit Group Details:

Code 4132

Title Data Entry Clerks

4132.0600**Coding Machine Operator**

Coding Machine Operator tends coding machine to print identification codes on material, such as wire, tape and plastic tubing. Installs specified type, code letters and symbols in machine mandrel, using tweezers. Moves controls to regulate pressure of stamping die and heating device on mandrel. Starts machine and inserts end of material between feed rollers of machine. Coils and ties printed material with code and stacks it on rack. May operate machine equipped with reel-feeding mechanism, electronic or mechanical counters, and automatic wire cutting and stripping devices.

ISCO 08 Unit Group Details:

Code	4132
Title	Data Entry Clerks

4132.0800

Duplicating Machine Operator/Photocopier

Duplicating Machine Operator; Photocopier Machine Operator sets and operates electrically operated duplicating or photocopying machine for reproducing copies of type written or hand written matter. Loads and adjusts duplicating paper at feeding end. Checks impressions on duplicate copies for clarity and uniformity. Makes necessary adjustments when required. Reports defects in working of machine if necessary to superiors. May oil and clean machine. May maintain record of work turned out and number of copies taken. May keep stock of duplicating paper, ink paste, brushes etc. and record of supply, repairs, servicing etc.

ISCO 08 Unit Group Details:

Code	4132
Title	Data Entry Clerks

4132.0900

Embossing Machine Operator

Embossing Machine Operator (Clerical) operates power driven machine to emboss names, addresses and other details in metal plates. Receives subject matter to be embossed. Places metal plate in holder of machine. Sets desired character or letter in correct position and presses foot pedal to lower dye and emboss character or letter on plate giving necessary spacing, etc. Collects embossed plates and stores them in racks in serial order. Supplies embossed plates to Addressing Machines Operator. May operate addressing machine and print addresses on envelopes, documents, etc. May oil and clean machine.

ISCO 08 Unit Group Details:

Code	4132
Title	Data Entry Clerks

4132.1000

Addressing Machine Operator

Addressing Machine Operator operates electrically driven machine which automatically prints names, addresses etc. on envelopes, documents, forms, etc. Loads magazine of machine with required number of embossed metal plates to effect printing. Adjusts levers to set speed of machine and number of copies required for each plate. Places stock of form, envelopes and other documents to be printed on table of machine. Starts machine to automatically release embossed plate to correct position for printing. Removes printed material from machine and stocks them separately. Ensures clear and accurate printing on documents, forms, etc. Ejects metal plate at delivery end into tray after printing. Changes ribbon of machine periodically to

effect clear impressions. Stocks embossed plates in special racks. Oils and cleans machine. May operate embossing machine.

ISCO 08 Unit Group Details:

Code	4132
Title	Data Entry Clerks

4132.1300

Book Keeping Machine Operator

Book Keeping Machine Operator uses computer software for calculating and recording business transactions of institution. Receives data for calculation to be made. May perform general clerical duties.

ISCO 08 Unit Group Details:

Code	4132
Title	Data Entry Clerks

4132.1400

Bill Processing Clerk

Bill Processing Clerk uses computer software to run mathematical processes, such as addition, subtraction, multiplication, and division, to calculate and record billing, accounting, statistical, and other numerical data. Duties include preparation of statements, bills, and invoices, and to copy and post data, make computations, and compile records of transactions. Balance and reconciles batch control totals with source documents or computer listings in order to locate errors, encode correct amounts, or prepare correction records. Computes monies due on personal and real property, inventories, redemption payments and other amounts, applying specialized knowledge of tax rates, formulas, interest rates, and other relevant information. Computes payroll and retirement

amounts, applying knowledge of payroll deductions, actuarial tables, disability factors, and survivor allowances. Encodes and adds amounts of transaction documents, such as checks or money orders, using encoding machines. Enters into machines all information needed for bill generation. Observes operation of sorters to locate documents that machines cannot read, and manually record amounts of these documents. Sends completed bills to Billing Clerks for information verification.

ISCO 08 Unit Group Details:

Code	4132
Title	Data Entry Clerks

4132.9900

Data Entry Clerks, Other

Computing Machine Operators, other include all other operators who operate bookkeeping and computing machines not elsewhere classified.

ISCO 08 Unit Group Details:

Code	4132
Title	Data Entry Clerks

Sub Division 42

Customer Services Clerks

Customer Service Clerks deal with clients in connection with money-handling operations, travel arrangements, requests for information, making appointments, operating telephone switchboards, and interviewing for surveys or to complete applications for eligibility for services.

Tasks performed by workers in this sub-major group include: performing money-handling operations in banks, post offices, betting and gambling establishments or dealing with travel arrangements;

supplying information requested by clients and making appointments; operating telephone switchboards; greeting and receiving visitors; interviewing survey respondents; interviewing applicants for services.

Occupations in this Sub Division are classified into the following Groups:

421	Tellers, Money Collectors and Related Clerks
422	Client Information Workers

Group 421 Tellers, Money Collectors and Related Clerks

Tellers, Money Collectors and Related Clerks perform money-handling operations in establishments relating to banking, postal services, betting or gambling, pawning and debt-collecting.

Occupations in this Group are classified into the following Families:

4211	Bank Tellers and Related Clerks
4212	Bookmakers, Croupiers and Related Gaming Workers
4213	Pawnbrokers and Money-lenders
4214	Debt Collectors and Related Workers

Family 4211 Bank Tellers and Related Clerks

Bank Tellers and Related Clerks deal directly with clients of banks or post offices in connection with receiving, changing and paying out money, or providing mail services.

4211.0100 Cashier, General

Cashier, General makes and receives payments and maintains record of cash transaction in Bank, office or Commercial and Industrial establishments. Receives cash remittances from customers. Counts cash and examines currency notes and coins to detect counterfeit ones. Makes entries in receipt registers, initials voucher and passes them to superiors for signature. Receives passed cheques, bills, vouchers etc., and makes payment to parties after making entries in register. Maintains Cash Book and other Account Registers and prepares statement of monetary transaction of receipt and payment made during day. Verifies statement of account from other daily records of actual receipt and payment. Draws or deposits money in treasuries or banks. Receives foreign currency and makes payment in local currencies to clients. Keeps cash and other valuables in strong rooms or vaults for safe custody. Renders periodical report on cash transactions to superiors. Makes payment of wages and salaries to staff against acquaintance rolls, pay bills etc. May check various cash registers of Shroff to scrutinize accounts. May supervise the work of Shroffs, Money Testers and Bill Collector. May assist Accountant in preparation of budgets, balance sheets, etc. May operate calculating machines.

ISCO 08 Unit Group Details:

Code 4211

Title Bank Tellers and Related Clerks

4211.0200 Cashier, Bank

Cashier, Bank; Shroff receives and makes payment in bank to customers against

pay-in slips, withdrawal slips, cheques, bills, drafts, vouchers, etc., and maintains account of daily transactions. Receives at counter, cash and pay-in slips from customers, counts money and examines currency notes or coins to detect counterfeit ones. Makes payment to customers against passed cheques, bills, vouchers, etc. received from different sections of bank after making necessary entries in register. Affixes appropriate rubber stamp on cheques, bills etc. to indicate payment. Closes accounts at end of day and totals entries in registers to show day's receipts and payments. Prepares accounts statements and sends them to superiors after tallying with records. Hands over cash in hand to Cashier General for keeping it in safe custody. Sends paid-cheques, bills, vouchers, slips etc. to ledger clerk for posting necessary debit or credit entries. May operate calculating machine. May post entries in ledgers.

ISCO 08 Unit Group Details:

Code 4211
Title Bank Tellers and Related Clerks

4211.0301 **Cashier, Cash Counter**

Cashier, Cash Counter; Cash Clerk; Clerk, Cash Counter; receives cash in payment against goods sold or services rendered in shop, firm or establishment. Receives cash in payment against goods sold or services rendered, ascertains amount from bill or from other sources prescribed, counts cash, detects counterfeit coins. Issues receipt for payment received. Maintains daily cash account of cash in hand against book record. Deposits money in Treasury or Bank as and when necessary.

Qualification Pack Details:

QP NOS Reference	RAS/Q0102
QP NOS Name	Cashier (Retail)
NSQF Level	2

ISCO 08 Unit Group Details:

Code 4211
Title Bank Tellers and Related Clerks

4211.0302

Cashier, Gem and Jewellery

Cashier is an employee in a retail store who handles cash transaction with the customers. The individual in the retail store is in charge of billing, collecting the payment from the customers and closing the sales transaction in a retail store. Also, they maintain the record of sales transaction and other documents required for compliance.

Qualification Pack Details:

QP NOS Reference	G&J/Q8301
QP NOS Name	Cashier
NSQF Level	4

ISCO 08 Unit Group Details:

Code 4211
Title Bank Tellers and Related Clerks

4211.0400

Teller, Bank

Teller Bank pays out money up to specified limit in bank at pay counter to depositors or their Authorised persons, presenting withdrawal forms or cheques and maintains up-to-date account of payments made. Receives cheques or withdrawal forms from payees and compares signatures with specimens retained in bank. Verifies depositor's balance from ledger book and pays out money. Makes debit entries in depositor's account card and draws up-to-date balance. Prepares account of amount drawn from Cashier and money disbursed

and submits it to Supervisor. May make debit entries in depositor's personal account book.

ISCO 08 Unit Group Details:

Code 4211

Title Bank Tellers and Related Clerks

4211.9900

Bank Tellers and Related Clerks, Other

Tellers and Other Counter Clerks, other include clerks who deal directly with clients of banks or post offices in connection with receiving, changing and paying out money, or providing mail services not elsewhere classified.

ISCO 08 Unit Group Details:

Code 4211

Title Bank Tellers and Related Clerks

Family 4212

Bookmakers, Croupiers and Related Gaming Workers

Bookmakers and croupiers and related gambling workers determine odds and receive and pay off bets on results of sporting or other events, or conduct games of chance in gambling establishments.

4212.0100

Booking Clerk, Recreation

Booking Clerk, Recreation issues tickets to public on cash payment in theatres, cinemas, exhibitions etc. on booking counters. Attends to enquiries for type or class of tickets required or for advance booking of seats. Issues tickets or reservation slips for required class of accommodation. Maintains record of sale

proceeds showing entertainment-tax collected separately. Deposits cash and unsold tickets with superiors at close of show. May maintain chart of available seats and indicate seat number on each ticket.

ISCO 08 Unit Group Details:

Code 4212

Title Bookmakers, Croupiers and
Related Gaming Workers

4212.0200

Book Maker

Book Maker; Bookie manages establishment to receive and pay off bets placed by horse racing patrons. Prepares and issues lists of approximate handicap odds on each horse prior to race, based on previous performance of horse under similar conditions. Determines risks on each horse to refuse additional bets beyond maximum limits of liability. Records bets placed over counter or by telephone and issues betting receipts. Pays off bets on track pari-mutuel basis and keeps account of cash transactions. Pays taxes on earnings.

ISCO 08 Unit Group Details:

Code 4212

Title Bookmakers, Croupiers and
Related Gaming Workers

4212.9900

Bookmakers, Croupiers and Related Gaming Workers, Other

Book Makers, Other include other bookmakers not classified elsewhere.

ISCO 08 Unit Group Details:

Code 4212

Title Bookmakers, Croupiers and Related Gaming Workers

Family 4213 Pawnbrokers and Money-lenders

Pawnbrokers and money-lenders lend money against articles deposited as pledges, or against property or other security.

4213.0100 Money Lender

Money Lender; Sahukar lends money to persons on personal or collateral security or on security of property and charges interest on loan advanced. Attends to clients visiting his establishment, funds out his requirements and details of security offered, if any. Scrutinises security offered and settles with client, rate of interest instalments and other terms. Prepares promissory note on stamped paper and obtains signature of client and of witnesses. Advances money to client and keeps promissory note in safe custody. Calculates interest on amount of loan periodically and collects it from client either personally or through his agent. Takes legal proceedings, against defaulting clients and collects or arranges to collect instalments from court. Keeps record of transmissions made.

ISCO 08 Unit Group Details:

Code 4213

Title Pawnbrokers and Money-lenders

4213.0200 Pawn Broker

Pawn-Broker advances money to persons on security of movable property such as jewellery, utensils, furniture, etc. pledged

with him and charges interest on amount of money advanced. Attends to clients visiting his establishment and finds out amount of loan required, and property he is willing to pledge. Evaluates property and informs client maximum amount which could be advanced against property pledged. Settles rate of interest and other terms of repayment. Issues receipt or gets promissory note on unstamped paper signed by client and witnesses mentioning amount of money advanced, property pledged, rate of interest fixed, etc. Keeps pledged property of client. Calculates interest due on amount of money advanced and settles accounts with clients at time of repayment of loan. Keeps record of transactions made and submits report to Government authorities if required. May effect sale or auction of property pledged with him after giving due notice to clients concerned.

ISCO 08 Unit Group Details:

Code 4213

Title Pawnbrokers and Money-lenders

4213.9900

Pawnbrokers and Money-lenders, Other

Pawnbrokers and Money-lenders, other include those who lend money against articles deposited as pledges, or against property or other security not classified elsewhere.

ISCO 08 Unit Group Details:

Code 4213

Title Pawnbrokers and Money-lenders

Family 4214 Debt Collectors and Related Workers

Debt Collectors and Related Workers collect payments on overdue accounts and bad cheques and collect charity payments.

4214.0100 Bill Collector

Bill Collector collects rent or payment of bills or other dues from customers, tenants, etc., on behalf of Government or other employer and issues receipts for collections made. Receives outstanding bills, invoices from cash section. Makes entries in register. Contacts parties, collects dues and issues receipt Remits cash so collected, to cash section and returns undelivered bills. May encash cheques or postal orders.

ISCO 08 Unit Group Details:

Code 4214
Title Debt Collectors and Related Workers

4214.0201 Debt Recovery Agents

Debt Recovery Agents (DRA) are representatives appointed by banks and lawful debt collection agencies to act as their agents and make calls or visit debtors to collect payments on any kind of past due bill without violating the regulations implemented by RBI. They are also responsible for providing debtors every important detail of their loan's terms and conditions and guide them accordingly for the payment.

Qualification Pack Details:

QP NOS Reference	BSC/Q0701
QP NOS Name	Debt Recovery Agent
NSQF Level	4

ISCO 08 Unit Group Details:

Code

Title

4214.9900

Debt Collectors and Related Workers, Other

Debt-collectors and Related Workers, other include workers who collect payments and perform clerical duties associated with these collections not elsewhere classified.

ISCO 08 Unit Group Details:

Code	4214
Title	Debt Collectors and Related Workers
Group	422

Client Information Workers

Client Information Clerks provide or obtain information in person, by telephone or electronic means such as e-mail in connection with making travel arrangements, describing the products or services of an organization, registering and greeting guests and visitors, making appointments, connecting telephone calls and collecting information from survey respondents or applicants for services.

Occupations in this Group are classified into the following Families:

4221 Travel Consultants and Clerks
4222 Contact Centre Information Clerks
4223 Telephone Switch Board Operators
4224 Hotel Receptionists
4225 Inquiry Clerks
4226 Receptionist (General)
4227 Survey and Market Research Interviewers

4229 Client Information Worker, Not Elsewhere Classified

Family 4221

Travel Consultants and Clerks

Travel Consultants and Clerks supply information, arrange travel itineraries, obtain travel and accommodation reservations and organize group tours.

4221.0100

Travel Consultants and Organizers

Travel Consultants and Organizers plan itineraries and schedule travel accommodation for customers. They organize or sell complete group travel tours for business and vacation.

ISCO 08 Unit Group Details:

Code 4221

Title Travel Consultants and Clerks

4221.0200

Flight Attendants and Travel Stewards

Flight Attendants and Travel Stewards render personal services to ensure the safety and comfort of passengers. They also plan and co-ordinate housekeeping and social activities in aircrafts and ships.

ISCO 08 Unit Group Details:

Code 4221

Title Travel Consultants and Clerks

4221.0300

Reservation Clerk, Transport/Reservation Assistant

Reservation Clerk, Transport reserves berths, cabins, seats in railway trains, boats, ships, motor vehicles or planes by

charging prescribed fees. Attends to enquiries of passengers in person, by post or on phone for reservation of cabin, berth or seat. Informs customers latest position regarding availability or non-availability of seats and berths after consulting reservation register. Collects fares and reservation charges from passengers and issues tickets and reservation slips. Makes reservation entries in register. Remits cash collected during day to superiors or Cashier General. May prepare reservation charts and exhibit them at platforms. May fix reservation labels on seats or berths and outside compartment.

ISCO 08 Unit Group Details:

Code 4221

Title Travel Consultants and Clerks

4221.0400

Booking Clerk, Transport/Concierge

Booking Clerk, Transport issues tickets to passengers at booking offices of railways, airlines, navigation and motor transport companies, etc., and maintains book record relating to sale of tickets. Ascertains from passenger destination, number of tickets and class of accommodation for which ticket is required. Collects fares from passengers, locates tickets from panel board, dates tickets and issues them to passengers. Maintains account of tickets sold and amount realised. Hands over daily cash collections to Cashier. Places indents for printed tickets on higher authorities. May book passengers' parcel and luggage. May issue platform tickets, meal tickets, or retiring room tickets. May give cash receipt to parties when required.

ISCO 08 Unit Group Details:

Code 4221

Title Travel Consultants and Clerks

4221.9900**Travel Consultants and Clerks,
Others**

Cashiers and Ticket Clerks, other include Cashiers and Ticket Clerks who receive, directly from clients, payments for goods or services bought in establishments not elsewhere classified.

ISCO 08 Unit Group Details:

Code 4221

Title Travel Consultants and Clerks

Family 4222**Contact Centre Information Clerks**

Contact Centre Information Clerks provide advice and information to clients, respond to queries regarding a company's or an organization's goods, services or policies, and process financial transactions using the telephone or electronic communications media, such as email. They are located in premises that may be remote from clients or other operations of the organizations or companies about whom information is provided.

4222.0101**Technical Support Executive-Non
Voice**

Technical Support Executive-Non Voice is responsible for resolving queries and customer cases over web-chat or email.

Qualification Pack Details:

QP NOS Reference SSC/Q7201

QP NOS Name Technical Support
Executive-Non
Voice

NSQF Level 5

ISCO 08 Unit Group Details:

Code 4222

Title Contact Centre Information Clerks

4222.0102**Technical Support Executive-Voice**

Technical Support Executive-Voice is responsible for managing and resolving client queries/issues primarily through telephonic calls.

Qualification Pack Details:

QP NOS Reference SSC/Q7202

QP NOS Name Technical Support
Executive-Voice

NSQF Level 5

ISCO 08 Unit Group Details:

Code 4222

Title Contact Centre Information Clerks

Family 4223**Telephone Switch Board Operators**

Telephone Switch Board Operators operate telephone communications switchboards and consoles to establish telephone connections, receive caller inquiries and service problem reports, and record and relay messages to staff or clients.

4223.0100**Telephone Operator, Trunk**

Telephone Operator, Trunk controls and operates telephones switch board for connecting and putting subscriber through long distance (trunk) calls. Attends to phone calls for booking trunk calls. Notes calling and called numbers, name of station, name of particular person if

desired, time, date, nature of call such as urgent, ordinary, no delay etc. in trunk call ticket book. Repeats particulars booked for corroboration by caller. Arranges calls in order of priority, booking time and station wise. Inserts answering or calling plug in switch-board to obtain required station, if on direct line. Transmits calls to next stage (telephone exchange) when caller and called are not on direct line or booking calls with Distant-End Operator. Rings calling number to bring them on line, on receipt of advice from caller-end about availability of called number or person. Puts through call when turn comes. Punches trunk call ticket by calculagraph and starts telephone meter for recording time. Watches timing lamp indication and informs subscriber on expiry unit period of three minutes. Extends time to six minutes if desired by caller. Allows extension of time beyond six minutes in higher priority calls and also in other calls if traffic permits. Punches ticket calculagraph on maturity of call. Draws cut plugs, fills time, duration and other particulars of calls in trunk call ticket. Takes down particulars of all incoming calls on inward ticket. Informs improper functioning of circuits or other operational systems to Monitor. May work on local, P.B.X. and special services. May work on trunk information services, give telephone numbers and rates of various places and calculate charges for calls.

ISCO 08 Unit Group Details:

Code 4223

Title Telephone Switch Board Operators

4223.0200

Telephone Operator, Local

Telephone Operator, Local operates telephone switch board to establish

telephone connections of subscribers for local calls. Watches calling indications on switch board. Inserts answering plug in corresponding jack, depresses speak key and attends calling indication by saying "Number Please". Repeats number called to subscriber for confirmation. Watches switch board plugs and informs caller if required number is engaged. Inserts calling plug in required jack, if free, and puts through call. Watches indication of finishing call and draws out plugs on noticing clearance. May work on trunk, P.B.X and special services.

ISCO 08 Unit Group Details:

Code 4223

Title Telephone Switch Board Operators

4223.0300

Telephone Operator, PBX

Telephone Operator, P.B.X operates telephone switch board in industrial, commercial or public establishment to put through incoming, outgoing and inter-office calls. Watches switchboard for indications of incoming outgoing and inter-office calls. Arranges maturity of calls by regulating answering or calling plugs in corresponding jacks. Draws out plugs when indicator shows clearance of call. Books and arranges trunk calls, attends to enquiries and receives and passes messages over telephone. Records local and trunk calls on register as necessary. May work on special services.

ISCO 08 Unit Group Details:

Code 4223

Title Telephone Switch Board Operators

4223.9900

Telephone Switch Board Operators, Other

Telephone Switch Board Operators, other include telephone operators who operate a telephone switchboard or a section thereof, and deal with local or long distance calls, and various telephone inquiries not elsewhere classified. SERVICE WORKERS AND SHOP AND MARKET SALES WORKERS Service workers and shop and Market Sales Workers provide personal and protective services related to travel, housekeeping, catering, personal care, or protection against fire and unlawful acts, or they pose as models for artistic creation and display, or demonstrate and sell goods in wholesale or retail shops and similar establishments, as well as at stalls and on markets. Most occupations in this division require skills at the second skill level.

ISCO 08 Unit Group Details:

Code 4223

Title Telephone Switch Board Operators

Family 4224

Hotel Receptionists

Hotel receptionists register guests, assign rooms, issue keys, provide information concerning the hotel services, make room reservations, keep a record of rooms available for occupancy and present statements of charges to departing guests and receive payment.

4224.0100

Receptionist (Hotel)/Front Office Associate

Receptionist (Hotel) receives customers, attends to enquiries, assigns rooms after consulting register for availability of room and looks after requirements of patrons. Settles terms and allot required accommodation if available to customers. Requests customers to fill and sign register to establish identity, time of

arrival and expected departure. Gets statutory form filled up by foreign visitors coming to stay. Guides customers to allotted rooms, maintains hotel 'Board' up-to-date showing name of occupants, etc. Maintains Hotel record up-to-date showing total number of rooms already occupied, rooms booked or reserved to show correct position of accommodation. Gives information to House Keepers, dining section and kitchen departments regarding arrival of new-comers and their requirements. Supplies details of services rendered to customers to concerned officer for preparing bills for presentation to customers. Presents bills to customers and realises amount from them prior to their departure. Receives dak and messages on behalf of management and clients and delivers it to them. Attends to other requirements of customers. May be required to do correspondence.

ISCO 08 Unit Group Details:

Code 4224

Title Hotel Receptionists

4224.9900

Hotel Receptionists, Other

Hotel Receptionists, Other include receptionists not elsewhere classified.

ISCO 08 Unit Group Details:

Code

Title

Family 4225

Inquiry Clerks

Inquiry Clerks respond to personal, written, electronic mail, and telephone enquiries and complaints about the organization's goods, services and policies, provide information and refer

people to other sources. They are employed in locations which put them in direct contact with clients or with the production of the goods and services provided.

4225.0100
Complaint Attending
Clerk/Customer Service
Desk/Customer Service Executive

Complaint Attending Clerk Investigates and resolves customers' inquiries concerning merchandise, service, billing, or credit rating. Examines pertinent information to determine accuracy of customers' complaints and responsibility for errors. Notifies customers and appropriate personnel of findings, adjustments, and recommendations, such as exchange of merchandise, refund of money, credit to customers' accounts, or adjustment to customers' bills. Reviews claims, adjustments with dealer, examines parts claimed to be defective and approves or disapproves of dealer's claim. Examines weather conditions, number of days in billing period, and reviews meter accounts for errors which might explain high utility charges. Writes work order. Prepares reports showing volume, types, and disposition of claims handled. Compares merchandise with original requisition and information on invoice and prepares invoice for returned goods. Orders tests to detect product malfunction and determines if defect resulted from faulty construction.

ISCO 08 Unit Group Details:
Code 4222
Title Contact Centre Information Clerks

4225.9900
Inquiry Clerks, Other

Receptionist and Information Clerks, other include Clerks who receive clients or patients, provide information and make appointments on behalf of various establishments including hospital, medical or dental surgeries not elsewhere classified.

ISCO 08 Unit Group Details:

Code 4222
Title Contact Centre Information Clerks

Family 4226
Receptionist (General)

Receptionists (General) receive and welcome visitors, clients, or guests and respond to enquiries and requests including arranging for appointments.

4226.0100
Reception Clerk/Front Desk
Executive/Receptionist

Reception Clerk; Receptionist receives and attends visitors, clients or customers in institutions or offices, for guiding them to proper places or sections and to arrange interviews, appointments etc. with officials concerned. Receives visitors and enquires purpose of their visit, nature of business to be transacted, person or persons to be interviewed, etc. Supplies required information and directs them to person or place concerned. Writes names and addresses of visitors, purpose of visit and obtains their signature on the visitor's book for record. Contacts officials concerned in person or over phone and arranges interviews. May attend to general clerical duties in office. May type letters and other correspondence. May operate telephone switch board.

ISCO 08 Unit Group Details:

Code 4222

Title Contact Centre Information Clerks

4226.0201**Showroom Hostess/
Host**

Showroom Hostess/Host is responsible for handling the front office work. The individual attends to the customers and co-ordinates response to their queries.

Qualification Pack Details:

QP NOS Reference ASC/Q1103

QP NOS Name Showroom Hostess
/Host

NSQF Level 3

ISCO 08 Unit Group Details:

Code 4222

Title Contact Centre Information Clerks

Family 4227**Survey and Market Research
Interviewers**

Survey and Market Research Interviewers interview people and record their responses to survey and market research questions on a range of topics.

Family 4229**Client Information Worker, Not
Elsewhere Classified**

This unit group includes Client Information Workers not included elsewhere in Group 422, Client Information Workers. For instance, it includes workers who obtain and process information from clients

needed to determine eligibility for services.

Sub Division 43**Numerical and Material Recording
Clerks**

Numerical Clerks and Material Recording Clerks obtain, compile and compute accounting, bookkeeping, statistical, financial, and other numerical data, and take charge of cash transactions incidental to business matters. Some occupations classified here keep records of goods produced, purchased, stocked, dispatched, and of materials needed at specified production dates, or keep records of operational aspects and co-ordinate the timing of passenger and freight transport.

Tasks performed by workers in this sub-major group usually include helping with accounting and bookkeeping records and computations; calculating unit production costs; calculating wages and in some cases preparing wage packets and paying wages, taking charge of cash transactions incidental to the business; obtaining, compiling and computing statistical or actuarial data; performing clerical tasks relating to the financial transactions of an insurance establishment, bank or similar establishment; recording produced, stocked, ordered

and dispatched goods; recording production materials received, put into stock or issued; computing quantities of the production materials required at specified dates and helping with preparation and checking of production operation schedules; keeping records of operational aspects and co-ordinating the timing of passenger and freight transport.

Occupations in this Sub Division are classified into the following Groups:

431	Numerical Clerks
432	Material Recording and Transport Clerks

Group 431 Numerical Clerks

Numerical Clerks obtain, compile and compute accounting, bookkeeping, statistical, financial, and other numerical data, and take charge of cash transactions incidental to business matters.

Occupations in this Group are classified into the following Families:

4311	Accounting and Bookkeeping Clerks
4312	Statistical Finance and Insurance Clerks
4313	Payroll Clerks

Family 4311 Accounting and Bookkeeping Clerks

Accounting and Bookkeeping Clerks compute, classify, and record numerical data to keep financial records complete. They perform any combination of routine calculating, posting, and verifying duties to obtain primary financial data for use in maintaining accounting records.

4311.0101 Book Keeper General/Accounts Executive (Recording and Reporting)

Book Keeper, General maintains up-to-date and systematic accounts of financial transactions of an institution in prescribed

records. Receives bills, vouchers and other papers concerning cash transactions from institutions, verifies correctness of documents and posts relevant entries in records and ledgers. Checks entries, makes necessary calculations and balance books at regular intervals. Complies periodical statements of extracts from ledgers to show total amount of receipts and expenditure of institution, profits earned or loss incurred, etc. Compiles list of outstanding dues for realization. Files various connected documents in proper order under appropriate heads. Assists Auditor in preparing balance sheets of company. Sends statement of accounts of customers periodically. Attends to related correspondence in office. May use calculating machines. May help Cashier, General in preparing pay rolls of staff and workers and assist in disbursing payments to them.

Qualification Pack Details:

QP NOS Reference	BSC/Q1001
QP NOS Name	Accounts Executive (Recording and Reporting)
NSQF Level	4

ISCO 08 Unit Group Details:

Code	4311
Title	Accounting and Bookkeeping Clerks

4311.0200 Bank Clerk

Bank Clerk maintains various account books and documents in banks and attends to banking business relating to current accounts, savings bank accounts, fixed deposits, etc. Posts necessary entries as and when transactions take place in account books, to keep account up-to-date. Receives applications for loans.

Advances, foreign exchange, etc., scrutinizes them for correctness and eligibility and forwards them to superiors for orders. Sorts out bills and cheques received, and sends them to concerned Ledger Clerks for posting necessary entries. Prepares demand drafts for amounts deposited with bank and forwards them to superiors for signatures. Renders periodical statement of accounts to parties or clients. Attends to related correspondence. Prepares daily statement at close of day's work showing different transactions attended to. May use calculating machine for totalling of figures.

ISCO 08 Unit Group Details:

Code 4311
Title Accounting and Bookkeeping Clerks

4311.0300 **Ledger Clerk**

Ledger Clerk; Ledger Keeper maintains record of financial transactions in ledgers of clients, by making necessary entries in respect of daily transactions. Receives checks, bills and drafts from customers at counter. Ascertains balance at credit from records. Makes relevant entries in ledger and submits them for payment order. Attends to customers' queries. Receives bills, cheques, vouchers, etc. from cash section for making necessary entries in clients' ledger account regarding credits or debits, balance at credit, etc. Prepares abstract statements from ledgers indicating day's transaction for tally by cash section. Calculates half yearly interest on customers' deposits and enters them in ledgers to make account up-to-date. Sends periodical statement of transactions made, opening and closing balances to customers for information.

May operate calculating machines. May attend to routine correspondence.

ISCO 08 Unit Group Details:

Code 4311
Title Accounting and Bookkeeping Clerks

4311.0401

Accounts Executive (Accounts Payable and Receivable)

Accounts Executive (Accounts Payable & Receivable) is a person responsible for maintaining the suppliers' accounts and makes authorized payments to them on behalf of the company, raises bills on its customers, receives and acknowledges collections on behalf of the company, keeps records, and enters the transactions into the books of accounts of the organization.

Qualification Pack Details:

QP NOS Reference	BSC/Q0901
QP NOS Name	Accounts Executive (Accounts Payable & Receivables)
NSQF Level	4

ISCO 08 Unit Group Details:

Code 4311
Title Accounting and Bookkeeping Clerks

4311.0500 **Audit, Clerk**

Audit Clerk assists Auditor in examining accounts and comparing vouchers, counterfoils, etc. with entries in cash book, ledger, pass-book, etc. concerning various financial or business transactions. Verifies entries of cash books, ledger accounts, stores register, etc. with supporting bill vouchers to ensure

accuracy. Ensures that prior sanction from competent authority exists for all financial transactions of company or office. Checks and ensures that required certificates are recorded in cash and accounts registers. Brings out discrepancies to the notice of superiors. May use calculating or adding machines.

ISCO 08 Unit Group Details:

Code 4311

Title Accounting and Bookkeeping
Clerks

4311.0600

Clerk, Cost Accounting

Clerk, Cost Accounting assists Cost Accountant in calculating production or operational cost for use in framing estimates and preparing profit and loss statement. Receives various records from various sections to study cost of material, labour charges, cost of equipment used, overhead charges, etc. Works out cost per unit and for whole operation giving total expenditure incurred, number of items produced, etc. to enable superior officers to fix selling price, and also to determine profit and loss position of concerns. Presents tabulated data in prescribed form or manner to superiors. May operate calculating machine.

ISCO 08 Unit Group Details:

Code 4311

Title Accounting and Bookkeeping
Clerks

4311.0700

Bill and Accounts Collector

Bill and Account Collector locates and notifies customers of delinquent accounts by mail, telephone, or personal visit to solicit payment. Duties include receiving

payment and posting amount to customer's account; preparing statements to credit department if customer fails to respond; initiating repossession proceedings or service disconnection; keeping records of collection and status of accounts. Receives payments and posts amounts paid to customer accounts. Locates and monitors overdue accounts, using computers and a variety of automated systems. Records information about financial status of customers and status of collection efforts. Confers with customers by telephone or in person to determine reasons for overdue payments and to review the terms of sales, service, or credit contracts. Advises customers of necessary actions and strategies for debt repayment. Persuades customers to pay amounts due on credit accounts, damage claims, or non-payable checks, or to return merchandise. Sorts and files correspondence, and performs miscellaneous clerical duties such as answering correspondence and writing reports. Performs various administrative functions for assigned accounts, such as recording address changes and purging the records of deceased customers. Arranges for debt repayment or establish repayment schedules, based on customers' financial situations.

ISCO 08 Unit Group Details:

Code 4311

Title Accounting and Bookkeeping
Clerks

4311.0801

Rubber Nursery Office Assistant

Nursery Office Assistant deals with all office work in connection with Rubber Nursery Management. Is assigned with all clerical work, maintenance of registers and files, preparation of statements,

letters, other documents for correspondence, maintenance of accounts, cash book etc.

Statistical Clerk tabulates data and computes statistics for use in statistical studies, using calculator and adding machine: Compiles statistics from source materials, such as production and sales records, quality control and test records, personnel records, timesheets, survey sheets, and questionnaires. Assembles and classifies statistics, following prescribed procedures. Computes statistical data according to formulas, using calculator. May compile and compute statistics, using computer. May verify authenticity of source material.

Qualification Pack Details:

QP NOS Reference	RSC/Q0934
QP NOS Name	Rubber Nursery Office Assistant
NSQF Level	4

ISCO 08 Unit Group Details:

Code	4311
Title	Accounting and Bookkeeping Clerks

4311.9900

Accounting and Bookkeeping Clerks, Others

Accounting and Bookkeeping Clerks, other include Clerks who help with accounting and bookkeeping records and computations not elsewhere classified.

ISCO 08 Unit Group Details:

Code	4311
Title	Accounting and Bookkeeping Clerks

Family 4312

Statistical Finance and Insurance Clerks

Statistical, Finance and Insurance Clerks obtain, compile and compute statistical or actuarial data or perform clerical tasks relating to the transactions of insurance establishments, banks and other financial establishments.

4312.0100

Statistical Clerks

ISCO 08 Unit Group Details:

Code	4312
Title	Statistical Finance and Insurance Clerks

4312.9900

Statistical Finance and Insurance Clerks, Others

Statistical and Financial Clerks, Other include workers who obtain, compile and compute statistical or actuarial data or perform clerical tasks relating to the transactions of a bank and other financial establishments not elsewhere classified.

ISCO 08 Unit Group Details:

Code	4312
Title	Statistical Finance and Insurance Clerks

Family 4313

Payroll Clerks

Payroll Clerks collect, verify and process payroll information and compute pay and benefit entitlements for employees within a department, company or other establishment.

4313.0101**Accounts Clerk/Accounts Executive (Payroll)**

Accounts Clerk keeps day to day accounts for financial transactions and maintains various book-registers and records relating to them. Receives bills, vouchers and other documents concerning purchases, sale or articles etc. and checks accuracy. Prepares pay and allowances bills of staff for encashment and other sundry statements for records. Calculates income tax, Sales-tax, provident fund deductions etc. and enters in bills or pay rolls. Checks whether financial transactions of institution conform to prescribed financial rules and regulations. Tabulates and prepares periodical expenditure statements. May maintain provident fund accounts of staff showing monthly contributions, withdrawals, etc. May prepare balance sheets and annual budget statements for office or institution. May operate calculating machine. May type letters, statements, etc. May handle cash in office or institution. May perform duties of Ledger Clerk or Bookkeeper.

Qualification Pack Details:

QP NOS Reference	BSC/Q1201
QP NOS Name	Accounts Executive (Payroll)
NSQF Level	4

ISCO 08 Unit Group Details:

Code	4313
Title	Payroll Clerks

4313.0201**Accounts Executive (Statutory Compliance)**

Accounts Executive (Statutory Compliance) is a person responsible for accumulating data required for computation of tax liabilities namely Service Tax, TDS and VAT. The responsibilities include ascertaining tax liabilities, making approved and authorized payment to the Government within the applicable time frame, filing of respective returns to the concerned authority by the due date and maintaining records of the same for future reference/audit purpose.

Qualification Pack Details:

QP NOS Reference	BSC/Q1101
QP NOS Name	Accounts Executive (Statutory Compliance)
NSQF Level	4

ISCO 08 Unit Group Details:

Code	4313
Title	Payroll Clerks

Group 432**Material Recording and Transport Clerks**

Material-Recording and Transport Clerks keep records of goods produced, purchased, stocked, dispatched, and of materials needed at specified production dates, or keep records of operational aspects and co-ordinate the timing of passenger and freight transport.

Occupations in this Group are classified into the following Families:

4321 Stock Clerks
4322 Production Clerks
4323 Transport Clerks

Family 4321

Stock Clerks

Stock Clerks maintain records of goods produced and production materials received, weighed, issued, dispatched or put into stock.

4321.0100 Store Keeper

Store Keeper; Store Clerk Godown Keeper; Warehouse-man receives stores and issues various types of goods, tools, equipment raw materials etc., and maintains record of each item. Checks incoming supplies against orders, bills or vouchers, identifies, weighs or measures and examines various items to ensure correct supply. Affixes or ties identity slips to items giving code numbers or marks. Enters details of goods received in stock registers. Maintains bin cards for each item indicating stock in hand. Ensures proper storing and preservation of goods. Issues stock on demand making necessary entries in registers and bin cards. Exercises physical check of stores periodically and tallies with stock registers. Renders to superiors periodical statements and reports showing position and condition of stocks. Makes requisition for replacement and further supply under advice of superiors. Supervises work of subordinates engaged in lifting goods.

ISCO 08 Unit Group Details:

Code	4321
Title	Stock Clerks

4321.0101 Spare Parts Operations Executive

Spare Parts Operations Executive Level 3: A Spare part operation executive Level 3 packs, stores and maintains proper

inventory of spare parts. The individual is responsible for proper labelling of spare parts to maintain easy retrieval.

Qualification Pack Details:

QP NOS Reference	ASC/Q1501
QP NOS Name	Spare Parts
Operations	Operations
NSQF Level	Executive Level 3 3

ISCO 08 Unit Group Details:

Code	4321
Title	Stock Clerks

4321.0102 Inventory Clerk

Inventory Clerk in the Logistics industry is also known as Inventory Executive. Individuals in this role need to collect the stored items list, perform physical counting of goods, cross checking the physical count with the system numbers. Their responsibilities include locating missing items for reconciliation and preparing detailed reports for the management

Qualification Pack Details:

QP NOS Reference	LSC/Q2108
QP NOS Name	Inventory Clerk
NSQF Level	3

ISCO 08 Unit Group Details:

Code	4321
Title	Stock Clerks

4321.0103 Inventory Manager

Inventory Manager is the person in charge of maintaining the stock of all inventory available in the jewellery retail store. Inventory Manager is also called as

'Inventory Controller', or 'Stock Manager'. The individual in the jewellery retailing store maintains record on all jewellery product including fresh incoming jewellery from factory, jewellery from customers for exchange sale, jewellery for repairs. The individual also places order for replenishment of jewellery products with vendor.

Qualification Pack Details:

QP NOS Reference	G&J/Q8402
QP NOS Name	Inventory Manager
NSQF Level	4

ISCO 08 Unit Group Details:

Code	4321
Title	Stock Clerks

4321.0104

Storage Assistant

Storage Assistant transports the batch from mixing area to a designated storage area.

Qualification Pack Details:

QP NOS Reference	RSC/Q0104
QP NOS Name	Storage Assistant
NSQF Level	3

ISCO 08 Unit Group Details:

Code	4321
Title	Stock Clerks

4321.0200

Store Distributor

Stores Distributor receives material from godown for delivery to indentors and receives returnable stores from consumers and return them to godown. Receives equipment, apparatus, tools, raw materials and other items of store, etc.

from godown for delivery to consumers and checks each item with voucher entries. Issues to consumers indented articles of stores after counting or weighing each item. Collects from sections or authorised workers, store items such as tools, plant or other equipment for reconditioning, replacement or deposit in stores. Makes out lists of items received and delivers them to Store Keeper against acknowledgement. Maintains prescribed records indicating nature of materials received and issued. Sends periodical reports to superiors.

ISCO 08 Unit Group Details:

Code	4321
Title	Stock Clerks

4321.0301

Stock Verifier

Stock Verifier; checks all items of stores tools, equipment, plants, etc. and verifies them with entries in records. Visits godowns, ware-houses situated in different places. Checks registers maintained at stores or godowns to find out balance of stock in hand on day of inspection. Counts physically various items of stores, tools, equipment, plants, etc. to tally with stock registers. Ensures that precautionary measures were observed in storing different items. Ensures that methods followed in receipt and issue of stores, indent of stores, maintenance of records, etc. are according to instructions. Prepares inspection reports and submits to superiors pointing out shortages and damages of items and suggesting precautionary measures.

Qualification Pack Details:

QP NOS Reference	ELE/Q3401
QP NOS Name	Material Inspector

NSQF Level 4

ISCO 08 Unit Group Details:

Code	4321
Title	Stock Clerks

4321.0302

Incoming Inspection Technician

Incoming Inspection Technician is also called, ‘Incoming Material Inspector’, the Incoming Inspection Technician checks quantity and specifications of components, parts and modules received from vendors. The individual at work receives components, modules and parts shipped by suppliers to the manufacturing facility. Once the incoming material has been received, the individual checks the quantities and lots delivered and their specification against the order.

Qualification Pack Details:

QP NOS Reference	ELE/Q6401
QP NOS Name	Incoming Inspection Technician
NSQF Level	3

ISCO 08 Unit Group Details:

Code	4321
Title	Stock Clerks

4321.0401

Manager-Stores Operation

Manager-Stores Operation: Individuals at this job need to manage all aspects of material viz. safe receipt, storage-stock, retrieval and issue/dispatch for the manufacturing or Logistics processes of an organization adhering to the laid down SOP and schedule requirements.

Qualification Pack Details:

QP NOS Reference	ASC/Q6104
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QP NOS Name

Manager-Stores
Operation Level 5

NSQF Level

5

ISCO 08 Unit Group Details:

Code	4321
Title	Stock Clerks

4321.0402

Spare Parts Operations In Charge

Spare Parts Operations In Charge is the overall in charge of the spare parts premises to ensure profitability and adherence to systems and processes across planning, procurement and supply of spares through co-ordination with both internal and external stakeholders. The individual also supervises and evaluates performance of the manpower engaged in the spare parts office.

Qualification Pack Details:

QP NOS Reference	ASC/Q1503
QP NOS Name	Spare Parts Operations In Charge
NSQF Level	7

ISCO 08 Unit Group Details:

Code	4321
Title	Stock Clerks

4321.0501

Store Ops Assistant

Store Ops Assistant: Individuals in this position receive, move, store and deliver products whilst working cordially within the team and retail organization.

Qualification Pack Details:

QP NOS Reference	RAS/Q0101
QP NOS Name	Store Ops, Assistant Store Ops

NSQF Level	1
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ISCO 08 Unit Group Details:

Code	4321
Title	Stock Clerks

4321.0601

Warehouse Picker

Warehouse Picker in the Logistics industry is also known as Picker, Floor Staff, Warehouse Associate. Individuals in this role need to pick items from storage. Individuals are responsible for picking items according to an inventory list. Additional responsibilities could at times include loading and unloading cargo, labelling, re-packaging items and documenting cargo that has been moved. The difference in tasks performed under the picker role thus varies according to the volume of operations, however the core function of the role is to pick items from storage and ensure they are ready to be sent out.

Qualification Pack Details:

QP NOS Reference	LSC/Q2102
QP NOS Name	Warehouse Picker
NSQF Level	3

ISCO 08 Unit Group Details:

Code	4321
Title	Stock Clerks

4321.0602

Warehouse Binner

Warehouse Binner in the Logistics industry is also known as Binner, Floor Staff, Warehouse Associate. Individuals in this role need to bin items to put away into storage. Individuals are responsible for binning items according to an inventory list. Additional responsibilities could at times include moving cargo, re-

packaging items and documenting cargo that has been moved. The difference in tasks performed under the Binner role thus varies according to the volume of operations, however the core function of the role is to bin items and put away into storage.

Qualification Pack Details:

QP NOS Reference	LSC/Q2105
QP NOS Name	Warehouse Binner
NSQF Level	3

ISCO 08 Unit Group Details:

Code	4321
Title	Stock Clerks

4321.0603

Warehouse Packer

Warehouse Packer in the Logistics industry is also known as Packer, Floor Staff, Warehouse Associate. Individuals in this role need to pack items that have been picked or require binning. Individuals are responsible for packing items that require additional pre-packing or outbound packaging. Additional responsibilities could at times include loading and unloading cargo, labelling, re-packaging items and documenting cargo that has been moved. The difference in tasks performed under the Packer role thus varies according to the volume of operations, however the core function of the role is to pack items according to the nature of the product either for storage or transportation.

Qualification Pack Details:

QP NOS Reference	LSC/Q2303
QP NOS Name	Warehouse Packer
NSQF Level	3

ISCO 08 Unit Group Details:

Code	4321
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Title	Stock Clerks	Title	Stock Clerks
4321.0604 Kitting and Labelling Executive		4321.9900 Stock Clerks, Other	

Kitting and Labelling Executive in the Logistics industry is also known as Kitter, Labeller, Warehouse Associate and Kitting Executive. Individuals in this role need to collect components required to make one complete product, verify this with the bill of materials and pack them. Their responsibilities include labelling the packed kit for easy identification.

Qualification Pack Details:

QP NOS Reference	LSC/Q2304
QP NOS Name	Kitting and Labelling Executive
NSQF Level	2

ISCO 08 Unit Group Details:

Code	4321
Title	Stock Clerks

4321.0701 **Warranty Processor**

Warranty Processor co-ordinates warranty claims and parts/aggregates replaced under warranty under supervision. The individual also keeps track of storage and retrieval of the failed parts/aggregates (in case of any quality checks/audits) along with disposal to be done. The individual is also responsible for uploading the claims on the system.

Qualification Pack Details:

QP NOS Reference	ASC/Q1603
QP NOS Name	Warranty Processor
NSQF Level	4

ISCO 08 Unit Group Details:

Code	4321
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4321.9900 **Stock Clerks, Other**

Stock Clerks, other include clerks who maintain records of goods produced and production materials received, weighed, issued, dispatched or put in to stock not elsewhere classified.

Qualification Pack Details:

QP NOS Reference	
QP NOS Name	
NSQF Level	

ISCO 08 Unit Group Details:

Code	4321
Title	Stock Clerks

Family 4322

Production Clerks

Production Clerks compute quantities of materials required at specified dates for manufacturing, construction and similar production programmes, and prepare and check production operation schedules.

4322.0101 **Inventory Manager (Wholesale)**

Also known as the Storekeeper, the Wholesale Inventory Manager maintains records of gemstone inventory of the organization at any given point of time. The individual at work maintains stocks of gemstones at a designated place and records its movement within the organization, up to dispatch.

Qualification Pack Details:

QP NOS Reference	G&J/Q7102
QP NOS Name	Inventory Manager (Wholesale)

NSQF Level 4

ISCO 08 Unit Group Details:

Code	4322
Title	Production Clerks

4322.0201
Junior Rubber Technician/Technical Assistant

Junior Rubber Technician/Technical Assistant is required to co-ordinate with team members and assist the operators/supervisors to carry out activities as per the production processes of the company. They should understand the importance of the activity/task undertaken by them in the manufacturing processes and support the operators/supervisors to ensure that set standards are achieved within the work area.

Qualification Pack Details:

QP NOS Reference	RSC/Q0831
QP NOS Name	Junior Rubber Technician/Technica I Assistant
NSQF Level	3

ISCO 08 Unit Group Details:

Code	4322
Title	Production Clerks

Family 4323
Transport Clerks

Transport Clerks keep records of operational aspects and co-ordinate the timing of train, road and air passenger and freight transport, and prepare reports for management.

4323.0100**Yard Master, Railway**

Yard Master, Railway supervises breakup of incoming goods trains in railway yard, marshalling of new trains from relocated waggons, and expeditious movement out of yard of newly formed trains. Makes arrangements for reception and despatch of goods train into and from goods yard, after ensuring that points are correctly set and locked and line is clear. Checks incoming waggons so that they are properly labelled, seals are intact, and identification numbers are correctly recorded by clerk. Directs placement and removal of damaged stock and waggons from sick line. Sorts out waggons according to destination and ensures that Shunter forms goods trains as per marshalling order. Ensures that waggons containing fresh fruits and livestock are moved quickly. Keeps record of arrival and departure times of goods trains, detention of waggons, time taken for shunting and movement of rolling stock. Supervises weighing of wagon loads on weigh bridge. Informs Section Controller position of waggons in yard and readiness of goods train. May substitute for any of his subordinates when necessary. May perform duties of Station Master when required.

ISCO 08 Unit Group Details:

Code	4323
Title	Transport Clerks

4323.0200**Head Train Recorder**

Head Train Recorder; Head Number Taker; Head Trains Clerk supervises work of Trains Clerk engaged in recording movement of incoming and outgoing passenger coaches, empty or loaded

goods waggons and stationary stock in yard. Ensures that Trains Clerk attends to incoming or outgoing trains and records time of arrival and departure of trains, and numbers of coaches to Section Controller and checks each loaded wagon to ensure that they are properly levelled and riveted. Checks statement of movement of rolling stock to find out detention and cause thereof. Suggests remedial measures for quick movement of waggons.

ISCO 08 Unit Group Details:

Code	4323
Title	Transport Clerks

4323.0300

Traffic Regulator, Tram

Traffic Regulator, Tram regulates tram traffic at important junctions by adding short trips and delaying or speeding up services. Marks time of arrival, and departure of tramcars and records name or number of Driver and Conductor. Records destination, trip mileage, or irregular running, etc. on mileage card and writes opening ticket number of first ticket sold (to indicate number of tickets sold on previous trip) and time of arrival, departure and destination of trip on conductor's ticket memo. Compensates for irregular running of tram cars by arranging short-trips and delaying or speeding up services. Keeps change for distribution to Conductors to facilitate sale of tickets. Takes charge of lost items handed over by Conductors and Drivers and forwards them to Depot Starter. Maintains record of tickets. May keep relief register of Drivers and Conductors.

ISCO 08 Unit Group Details:

Code	4323
Title	Transport Clerks

4323.0400

Controller, Tram

Controller, Tram controls and supervises operation of tram services. Visits depot at beginning and end of duty to supervise turn out and stabling of trams. Checks attendance of supervisory and line staff, arranges substitutes for absentees and forwards statement of attendance to time-keeping department. Ensures running of tram cars according to schedule. Receives information on road traffic and takes measures to ensure smooth service. Rushes to break-down points and clears line with help of break down vans, if necessary. Visits heavy loading points during peak hours and arranges to clear traffic by adding additional tram cars or diverting service from one route to another. Makes suggestions to Divisional Heads for improvement and extension of tram services. May drive tram car in emergency.

ISCO 08 Unit Group Details:

Code	4323
Title	Transport Clerks

4323.0500

Traffic Time Table Inspector, Tram

Traffic Time Table Inspector, Tram prepares schedules for running of trams, allocation of duties to staff and ensures their implementation. Examines old schedules, complaints or suggestions received for deficiencies in working, need for introducing more trams or curtailing service on to less important routes. Recommends changes in schedules indicating changes in routes and number of trams plied on them. Prepares revised duty charts for running staff and compiles mileage and fare tables. Attends to

enquiries from public in connection with timings, fares, etc.

ISCO 08 Unit Group Details:

Code	323
Title	Transport Clerks

4323.9900

Transport Clerks, Other

Transport Clerks, other include clerks who keep records and operational aspects and co-ordinate the timing of train, road and air passenger and freight transport not elsewhere classified.

ISCO 08 Unit Group Details:

Code	4323
Title	Transport Clerks

Sub Division 44

Other Clerical Support Workers

Other clerks perform clerical duties in newspapers, courts, libraries and post offices, file documents, prepare information for processing, maintain personnel records, check material for consistency with original source material and write on behalf of illiterate persons. Performed by workers in this sub-major group usually include: recording information regarding acquisition, issue and return of library books; maintaining personnel records; classifying and filing various documents and other records; sorting, recording and delivering mail from post offices, as well as from or within an enterprise; coding; correcting proofs; performing a number of miscellaneous clerical duties; writing on behalf of persons who are unable to read and write.

Occupations in this Sub Division are classified into the following Groups:

441 Other Clerical Support Workers
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Group 441

Other Clerical Support Workers

Other Clerks perform clerical duties in newspapers, courts, libraries and post offices, file documents, prepare information for processing, check material for consistency with original source material, maintain personnel records and write on behalf of persons who are unable to read or write.

Occupations in this Group are classified into the following Families:

4411 Library Clerks
4412 Mail Carriers and Sorting Clerks
4413 Coding, Proof-Reading and Related Clerks
4414 Scribes and Related Clerks
4415 Filing and Copying Clerks
4416 Personnel Clerks
4419 Clerical Support Workers, Not Elsewhere Classified

Family 4411

Library Clerks

Library Clerks issue and receive library materials, sort and shelve books, sound and vision recordings, periodicals, journals, magazines and newspapers and provide general library information to library users.

4411.0100

Library Clerk

Library Clerk; Library Assistant complies records, sorts and shelves books, and issues and receives library materials, such as books, periodicals, films, newspapers, etc., Records identifying data and due date on cards by hand or stamping machine to issue books to patrons. Inspects returned books for damage, verifies due date, and computes and receives overdue fines. Reviews records to compile list of overdue books and issues notices to borrowers. Sorts books, publications, and other items according to classification code and returns them to shelves, files or other designated storage area. Locates books and publications for patrons. Issues borrower's identification card according to established procedures. Files cards in catalogue drawers according to prescribed system. Repairs books, using mending tape and paste and brush. Answers inquiries of non-professional nature on telephone or in person and refers persons requiring professional assistance to Librarian. May type material cards, issue cards and duty schedules. May be designated according to type and branch of library in which worked or tasks performed.

ISCO 08 Unit Group Details:

Code	4411
Title	Library Clerks

4411.0200

Braille and Talking Books Clerk

Braille-and-Talking Books Clerk prepares braille and talking books for mailing to library patrons with visual impairment and receives books returned by patrons: Stamps issue date on book card to maintain record of location of borrowed books. Stamps due date on issue card and inserts card and returns mailing label in book pocket. Places books in mailing

container and affixes address label to container, securing container with straps for mailing. Receives and examines returned books for damage, such as torn paper and scratched record surfaces. Stamps return date on book card. Shelves returned books alphabetically by author's name or by title.

ISCO 08 Unit Group Details:

Code	4411
Title	Library Clerks

4411.0300

Preservation Assistant, Archives

Preservation Assistant, Archives; maintains archival records in good and usable condition by air-cleaning, fumigating and repairing of damaged records. Collects books and records for arranging them in special racks. Coats racks with chemical solution such as creosot, cresol, etc. to keep away insets, pests and moth. Sorts out books and records according to subject. Arranges records horizontally on shelves or specially built racks to prevent sagging and to eliminate strain on backings. Ties files or loose records between boards. Dusts shelves regularly by hand or by vacuum cleaner. Keeps place airy by opening windows frequently. Examines records periodically and removes damaged records for mending. Fumigates damaged records by placing them in loose form in special airtight boxes containing chemical crystals (dichlor benzene) to destroy insects, pests and larvae. May issue records. May mend damaged records and apply leather preservative mixture to leather bound volumes.

ISCO 08 Unit Group Details:

Code	4411
Title	Library Clerks

4411.9900**Library Clerks, Other**

Library and Filing Clerks, other maintain library services or perform duties related to the filing and classification of records not elsewhere classified.

ISCO 08 Unit Group Details:

Code 4411
 Title Library Clerks
Family 4412

Mail Carriers and Sorting Clerks

Mail Carriers and Sorting Clerks perform sorting, recording, delivery and other duties in connection with mail services from post offices or related organizations, as well as from or within an establishment.

4412.0100**Mail Guard**

Mail Guard, R.M.S. Mail Agent R.M.S. takes custody of mail bags, parcels, etc. from local mail vans and in-coming trains carrying mail at Railway Station and delivers them for onward despatch. Checks seals, labels for any tampering, prepares mail list of bags, parcels etc. to be transferred and obtains signatures of recipient. Reports irregularities concerning mail to superior officers. May perform other duties such as receipt, sorting and despatch of mailed articles in RMS office at Railway Stations. May travel in train to collect and deliver mail bags at intermediate station.

ISCO 08 Unit Group Details:

Code 4412
 Title Mail Carriers and Sorting Clerks

4412.0200**Postman**

Postman collects dak, parcels, registered and insured covers, V.P. articles, money orders etc., from post office and delivers them to addressees residing in his allocated area. Collects letters, registered covers, money orders, registered and unregistered parcels, V.P. articles, etc., from post office against receipt to deliver them to addressees. Keeps record of important letters, articles in register maintained by him. Sorts them according to street and house numbers. Plans route and arranges dak and articles accordingly. Delivers ordinary dak at respective addressees and registered letters, money orders, V.P. articles to addressee are doubtful. Receives and records payment of bearing or under paid letters and V. P. articles. Deposits acknowledgement receipts, money collected and undelivered articles in post office. May collect mail from letterboxes. May sort out incoming mail for distribution to postmen. May supply money order and acknowledgement forms to public on request.

ISCO 08 Unit Group Details:

Code 4412
 Title Mail Carriers and Sorting Clerks

4412.0300**Village Postman**

Village Postman collects letters, parcels, registered and insured covers, telegraphic and ordinary money orders, V. P. articles, etc., from post office and delivers them to addressees in villages. Collects dak such as letters, money orders, parcels, registered and insured letters etc. of his beat from post office against receipt. Checks and sorts them according to villages and

enters them in his book. Arranges dak according to route for delivery. Delivers ordinary mail at addressees given and important dak such as registered letters, money orders, parcels, etc. to addressees, after obtaining acknowledgements or receipts from them. Takes signatures of witnesses for payment of money order when identity of addressee is not known or doubtful. Receives postal charges and maintains records of payment received for bearing or underpaid letters and V.P. articles. Deposits acknowledgement receipts, money collected and undelivered articles in post office. Collects mail from letter boxes and delivers them to post office. Carries postage stamps of limited value and sells them in villages authorised by postal authorities. Deposits sale proceeds in post office on return. Supplies money order forms, acknowledgement slips and other postal forms to villagers on visit. May accept registered letters for posting and issue receipts.

ISCO 08 Unit Group Details:

Code 4412

Title Mail Carriers and Sorting Clerks

4412.9900

Mail Carriers and Sorting Clerks, Other

Mail Carriers and Sorting Clerks, other include those clerks who perform sorting, recording, delivery and other duties in connection with mail services from post offices or related organizations not elsewhere classified.

ISCO 08 Unit Group Details:

Code 4412

Title Mail Carriers and Sorting Clerks

Family 4413

Coding, Proof-Reading and Related Clerks

Coding, Proof-Reading, and Related Clerks convert information into codes, verify and correct proofs, and perform a number of miscellaneous clerical duties.

4413.0100

Coding Clerk

Coding Clerk converts routine items of information obtained from records into codes for processing by data typing or key punch units, using predetermined coding systems. Records alphabetic, alphanumeric, or numeric codes in prescribed sequence manually on work sheet or margin on source document for transfer to punch cards or machine input tape. May classify material when classification is not readily discernible. May be designated according to trade name of computer system such as Coder, I.B.M; Coder, Census, etc.

ISCO 08 Unit Group Details:

Code 4413

Title Coding, Proof-Reading and Related Clerks

4413.0200

Proof-Reader

Proof Reader compares proof with manuscript as read out by Copy Holder, makes correction of errors, omissions, etc. in composing of proof, using standard symbols. May also mark or even correct mistakes in spelling, grammar etc. in manuscript.

ISCO 08 Unit Group Details:

Code 4413
 Title Coding,
 Proof-Reading and Related Clerks

4413.9900
Coding, Proof-Reading and Related Clerks, Others

Coding, Proof-Reading, and Related Clerks, other include clerks who convert information in to codes, verify and correct proofs, and perform a number of miscellaneous clerical duties not elsewhere classified.

ISCO 08 Unit Group Details:

Code 4413
 Title Coding, Proof-Reading and Related Clerks

Family 4414

Scribes and Related Clerks

Scribes and Related Workers write letters and complete forms on behalf of illiterate persons.

4414.0100
Braille Transcriber, Hand

Braille Transcriber, Hand braille coder transcribes reading matter into braille for people with visual impairment using hand stylus: Reads copy and manipulates hand stylus to emboss special paper with various combinations of dots that characterize braille alphabet, using braille code form.

ISCO 08 Unit Group Details:

Code 4414
 Title Scribes and Related Clerks

4414.9900
Scribes and Related Clerks, Other

Scribes and Related Clerks, other write letters and complete forms on behalf of literate and illiterate persons not elsewhere classified.

ISCO 08 Unit Group Details:

Code 4414
 Title Scribes and Related Clerks

Family 4415

Filing and Copying Clerks

Filing and Copying Clerks file correspondence, cards, invoices, receipts, and other records in alphabetical or numerical order or according to the filing system used. They locate and remove material from file when requested and photocopy, scan or fax documents.

Family 4416
Personnel Clerks

Personnel Clerks maintain and update personnel records such as information on transfers and promotions, performance evaluations, employee leave taken and accumulated, salaries, qualifications and training.

4416.0101
Associate-HRO

Associate-HRO is responsible for performing transactional activities pertaining to various areas within HR such as personnel policies, practices, and procedures; employee benefits planning, communication, and administration; compensation systems planning; and

wage and salary administration etc. They are also responsible for managing any day-to-day issues and queries related to their respective areas.

Qualification Pack Details:

QP NOS Reference	SSC/Q2502
QP NOS Name	Associate-HRO
NSQF Level	7

ISCO 08 Unit Group Details:

Code	4416
Title	Personnel Clerks

Family 4419

Clerical Support Workers, Not Elsewhere Classified

This family Covers Clerical Support Workers not classified elsewhere in division 4, Clerical support workers. For instance, the group includes, Correspondence Clerks, Press Clippers and Publication Clerks.

4419.0100

Publicity Assistant

Publicity Assistant prepares publicity materials for Government, business or other institutions and conducts visitors in information centre to popularise their products or achievements. Scrutinises newspapers and magazines and collects news and views relating to his employers' institution. Prepares press releases, feature articles, pamphlets, folders leaflet etc. for distribution to press and public. Sends pre-pared materials to Publicity Officer for approval. Arranges display of publicity posters or erection of hoardings at important public places. Receives visitors at information centre or exhibition and explains to them charts, models and

other exhibits displayed. May attend to clerical work.

ISCO 08 Unit Group Details:

Code	4419
Title	Clerical
Support Workers Not Elsewhere Classified	

4419.0102

Business Correspondent

Business Correspondents are representatives of a bank, responsible for building awareness, sourcing customers. Business Correspondents are also responsible for carrying out banking transactions for existing customers.

Qualification Pack Details:

QP NOS Reference	BSC/Q0301
QP NOS Name	Business Correspondent
NSQF Level	3

ISCO 08 Unit Group Details:

Code	4419
Title	Clerical Support Workers Not Elsewhere Classified

4419.0200

Patwari

Patwari Lekhpal; Adhikari; Talathi maintains maps, records and registers of fields and crops of cultivators. Obtains survey maps, area by area, from land revenue department and maintains records and registers of owner-ship lease, area, taxes and other details of each plot. Prepares reports regarding crop conditions and financial circumstances of cultivators for loans, remissions, etc. Keeps record of important events in daily life of villagers in his range. May prepare electoral rolls and perform any other duty

assigned to him such as collecting of land revenues, arranging seed and fertilizer distribution etc.

ISCO 08 Unit Group Details:

Code 4419
Title Clerical Support Workers Not Elsewhere Classified

4419.0300

Patrol, Irrigation

Patrol, Irrigation assesses canal dues and prevents unauthorised use of canal water within his beat. Collects details of irrigation facilities to be accorded to cultivators and opens lock gate to allow canal water to flow into plots of lands according to schedules or payments made. Cuts off water supply after authorised flow and assesses canal dues to be paid. Patrols canal area within his beat to check unauthorised use of canal waters and reports such cases to appropriate authority. Maintains registers of water supplied and other details.

ISCO 08 Unit Group Details:

Code 4419
Title Clerical
Support Workers Not Elsewhere Classified

4419.0400

Bailiff

Bailiff attaches properties under orders of court of law. Receives attachment from court. Visits site of property to be attached. Arranges for publicity by beat of drum or otherwise, collects responsible witnesses of locality in whose presence attachment proceedings are conducted or inventory of attached property made. Accepts cash in lieu of attachment of moveable and immovable property if such provision is made in court's order. Executes decrees, realises fines and dues

passed by court and auctions property. Deposits realised amount in court and submits report detailing cases of defaults.

ISCO 08 Unit Group Details:

Code 4419
Title Clerical
Support Workers Not Elsewhere Classified

4419.0500

Office Boy/Peon

Office Boy/Peon performs variety of unskilled miscellaneous tasks in office or establishment such as carrying of papers and files from one section to another, delivering of local dak, going out for local purchases, depositing bills in treasury, bank, etc., running errands. Attends to superiors and carries out assigned duties. Delivers local dak to addressees. Assists Despatch Clerk in fastening envelops, affixing postage stamps and posting of mail. May operate simple office machines like photocopying machines, envelope stamping machine, etc. and execute orders such as printing, duplicating, etc. Keep record of stock and machineries. Supervises the staff posted under him.

ISCO 08 Unit Group Details:

Code 4419
Title Clerical Support Workers Not Elsewhere Classified

4419.0600

Daftry

Daftry; Attender supplies stationery articles to officials, prepares envelopes, weighs and affixes postage stamps on outgoing dak, binds registers, loose files, books etc. and performs other miscellaneous work. Sorts out files according to number or other distinguished marks. Helps Record Clerk in stitching papers or typing bundles and

marking them. Arranges files in racks or other special receptacles in prescribed order or as instructed by Record Clerk. Takes inventory of stationery items received from central stores and helps Record Clerk in getting them entered in registers. Collects indent from Record Clerk and supplies stationery articles or files to indentors against acknowledgement. Weighs covers of outgoing dak, affixes correct stamps on them and fastens them for posting. May prepare new envelopes from rough paper and paste economy slips. May operate duplicating machine and cyclostyle required number of copies. May supervise work of peons. May attend to any other duties allotted.

ISCO 08 Unit Group Details:

Code 4419

Title Clerical Support Workers Not Elsewhere Classified

4419.0800

Process Server

Process Server serves summons or other processes of law issued by court, on parties concerned for appearance in courts or for realization of dues etc. Receives list of summons and processes to be served on parties from Reader, Court or from other competent authority. Serves summons or process on parties by delivering one copy of summons after taking acknowledgement on second copy. Affixes copy of summons or processes at prominent public places, doors or houses of concerned parties, if parties refuse to accept summons or processes. Deposits copies of summons served together with unserved summons with reasons for non-service to competent authority. May attend to court duties and call parties or

litigants into court by calling their names. May perform duties of peon

ISCO 08 Unit Group Details:

Code 4419

Title Clerical Support Workers Not Elsewhere Classified

4419.9900

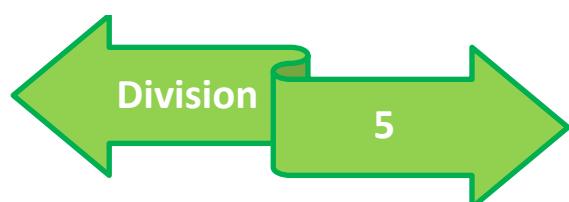
Clerical Support Workers, Other

Clerical Support Workers, Other includes other institutional based personal care workers who provide child care and help in looking after school children, perform various tasks in order to assist medical and nursing professionals and associate professionals in their duties at hospitals and other institutions not elsewhere classified.

ISCO 08 Unit Group Details:

Code 4419

Title Clerical Support Workers Not Elsewhere Classified



Service and Sales Workers

Service and Sales Workers provide personal and protective services related to travel, housekeeping, catering, personal care, or protection against fire and unlawful acts, or demonstrate and sell goods in wholesale or retail shops and similar establishments, as well as at stalls and on markets.

Tasks performed by service and sales workers usually include: organizing and providing services during travel; housekeeping; preparing and serving of

food and beverages; caring for children; providing personal and basic health care at homes or in institutions, as well as hairdressing, beauty treatment and companionship; telling fortunes; embalming and arranging funerals; providing security services and protecting individuals and property against fire and unlawful acts; enforcing of law and order; posing as models for advertising, artistic creation and display of goods; selling goods in wholesale or retail establishments, as well as at stalls and on markets; demonstrating goods to potential customers. Supervision of other workers may be included.

Occupations in this Division are classified into the following Sub Divisions:

51	Personal Service Workers
52	Sales Workers
53	Personal Care Workers
54	Protective Service Workers

Sub Division 51 Personal Service Workers

Personal Service Workers provide personal services related to travel, housekeeping, catering, child and personal care.

Tasks performed by workers in this sub-major group usually include: organizing and providing of services during travel; housekeeping; preparing and serving food and beverages; providing personal and basic health care at homes or in institutions, as well as hairdressing, beauty treatment and companionship; telling fortunes; embalming and arranging funerals; Supervision of other workers may be included.

Occupations in this Sub Division are classified into the following Groups:

511	Travel Attendants, Conductors and Guides
512	Cooks
513	Waiters and Bartenders
514	Hairdressers, Beauticians and Related Workers
515	Building and Housekeeping Supervisors
516	Other Personal Services Workers

Group 511 Travel Attendants, Conductors and Guides

Travel Attendants, Conductors and Guides provide various personal services in connection with travelling by aircraft, train, ship, bus or other vehicle, and escorting individuals and groups on travel tours, sightseeing visits and excursions.

Occupations in this Group are classified into the following Families:

5111	Travel Attendants and Travel Stewards
5112	Transport Conductors
5113	Travel Guides

Family 5111 Travel Attendants and Travel Stewards

Travel Attendants and Travel Stewards ensure the comfort and safety of passengers, serve meals and beverages and render personal services, usually on aircraft and on-board ships. They may plan and co-ordinate housekeeping and social activities on ships.

5111.0100**Chief Steward, Ship/Chief Cook**

Chief Steward, Ship supervises and co-ordinates activities in stewards department aboard passenger or cargo vessel to ensure comfort of passengers aboard ship. Supervises workers engaged in housekeeping and meal serving. Arranges space for shipboard recreation activities. Inspects passenger areas for cleanliness and observes services rendered by steward personnel for conformance to company standards. Collaborates with Chief Cook and Chief Passenger, vessel to plan menus. Requisitions stores such as food, sundries and furniture. Orders replacements for personnel leaving ship and authorises overtime work. Estimates food costs, maintains necessary accounts and compiles supply, overtime and cost control records.

ISCO 08 Unit Group Details:

Code 5111

Title Travel Attendants and Travel
Stewards**5111.0200****Steward, Ship/Mess Man**

Steward, Ship attends to general needs and comforts of passengers on board ship. Keeps cabins clean and in order, makes beds and changes used or soiled linen. Arranges material required by passengers in lounge or on deck such as chairs, rugs, etc. Serves meals, beverages in rooms when requested by passengers.

ISCO 08 Unit Group Details:

Code 5111

Title Travel Attendants and Travel
Stewards**5111.0300****Air Hostess**

Air Hostess attends to comforts, convenience and general needs of passengers in aircraft. Ensures cleanliness of cabin, greets passengers boarding plane and guides them to their assigned seats. Helps passengers in fastening or fastens herself their seat belts before take-off and landing of aircrafts. Attends to requirements of passengers during flight such as reading material, cigarettes, etc., answers enquiries of passengers about schedule or route of plane and points out places of interests over which flight passes. Observes uneasy passengers and helps them in removing their discomfort. Serves beverages, breakfast or meals during flight, administers medicine in minor ailments of passengers and consoles passengers when plane is in distress. Greets passengers when they leave plane at destination. May perform routine clerical duties.

ISCO 08 Unit Group Details:

Code 5111

Title Travel Attendants and Travel
Stewards**5111.0400****Flight Steward**

Flight Steward, Flight Purser attends to physical comforts of passengers and takes care of cargo on international airplane flights. Checks cabin service items, sells liquor, beverage, cigarettes etc. to passengers; keeps account of seats and makes sleeper berths. May perform duties of Air Hostess if required.

ISCO 08 Unit Group Details:

Code 5111

Title Travel Attendants and Travel Stewards

5111.0500

Aircraft Cargo Handling Supervisor

Aircraft Cargo Handling Supervisor directs ground crew in the loading, unloading, securing, and staging of aircraft cargo or baggage. Determines the quantity and orientation of cargo and computes aircraft centre of gravity. Calculates load weights for different aircraft compartments, using charts and computers. Distributes cargo in such a manner that space use is maximised. Accompanies aircraft as a member of the flight crew in order to monitor and handle cargo in flight. Brief aircraft passengers on safety and emergency procedures.

ISCO 08 Unit Group Details:

Code 5111

Title Travel Attendants and Travel Stewards

5111.0600

Air Crew Member

Air Crew Member performs in-flight duties to ensure the successful completion of combat, reconnaissance, transport, and search and rescue missions. Performs operating of aircraft communications and detection equipment, including establishing satellite linkages; conducting pre-flight, in-flight, and post-flight inspections of on-board equipment; operating and maintaining aircraft in-flight refuelling systems; executing aircraft safety and emergency procedures; computing and verifying passenger, cargo, fuel, and emergency and special equipment weight and balance data; and conducting cargo and personnel drops.

ISCO 08 Unit Group Details:

Code 5111

Title Travel Attendants and Travel Stewards

5111.9900

Travel Attendants and Travel Stewards, Other

Flight Attendants and Travel Stewards, other include attendants on board of aircraft or ship who render personal services to ensure the comfort and safety of passengers, serve meals and beverages, or plan and co-ordinate housekeeping and social activities in the aircrafts and ships not elsewhere classified.

ISCO 08 Unit Group Details:

Code 5111

Title Travel Attendants and Travel Stewards

Family 5112

Transport Conductors

Transport Conductors check and issue tickets and ensure the safety and comfort of passengers on trains, trams, buses and other public transport vehicles.

5112.0100

Guard, Passenger Train

Guard, Passenger Train takes charge of express, mail, passenger or special train and is responsible for its movement and safety. Receives instructions and checks particulars and marshalling order of train. Examines signalling and lighting equipment such as side lights, tail lamp, tail disc, etc. Supervises loading of goods of mail before beginning trip, and maintains prescribed records. Directs

movement of train by signalling Engine Driver with appropriate flag and light signals. Submits report at termination of each run and hands over charge to relieving Guard or Station Master. Ensures appropriate measures during accidents and emergencies to obtain medical and other aids. May work as Conductor Guard Railway and assist upper class passengers in obtaining berths and seats and attend to passengers' amenities. May issue certificates to passengers when necessary for issue or extension of tickets.

ISCO 08 Unit Group Details:

Code 5112
Title Transport Conductors

5112.0200 Guard, Goods Train

Guard, Goods Train conducts goods train on scheduled route, ensuring safety of booked goods en route. Inspects waggons for effective sealing, locking arrangements, and proper marshalling order. Checks particulars about destination of train and takes charge. Reports any discrepancies to proper authorities for rectification. Informs Engine Driver of routes to be followed and stoppages involved. Signals for movement of train after obtaining clearance from Station Master. Supervises coupling and detachment of waggons and conducts loading and unloading of freight en route at various stops. Maintains prescribed records describing journeys undertaken, important incidents and difficulties involved. Hands over charge of train on completion of journey to proper officials.

ISCO 08 Unit Group Details:

Code 5112
Title Transport Conductors

5112.0300 Brakes Man, Railway

Breaks Man, Railway; Luggage Guard segregates inflammable materials and if experienced in passenger or goods train to receive and deliver parcels, luggage and goods. Receives instruction from Guard, Passenger Train or Guard, Goods Train and checks train formation, couplings, lights and other safety devices. Receives parcels, goods, luggage etc. from Parcel Clerks or Goods Clerk and groups items in car by station of discharge to facilitate quick unloading. Exchanges signals with Guards and Drivers while operating in Ghat section trains. Maintains record of items loaded and unloaded at each station. Informs Guard at rear of train when transfer of goods is completed. Assists Guard, Passenger Train in his duties. May assist sick, aged or lady passenger in entraining and detraining while on duty in mail, express or passenger train.

ISCO 08 Unit Group Details:

Code 5112
Title Transport Conductors

5112.0400 Conductor Guard, Railway

Conductor Guard, Railway maintains reservation chart of passengers and looks after their general comforts such as finding their accommodation, arranging for their meals, cleanliness of compartments, etc.; in train. Receives copy of reservation chart of passengers from Reservation Clerk before start of journey. Directs passengers having reservation to their reserved seats or berths and prevents unauthorized passengers from entering compartment. Maintains list of vacant berths and allots

them to passengers entertaining at way side stations. Assists passengers in arranging their meals or lodging in rest-rooms at important stations where such facilities are provided by railways. Hands over reservation charts and papers to relieving Conductor at his destination station. May look after invalid, sick and lady passengers travelling singly during night. May take steps to avoid overcrowding in compartments. May arrange supply of linen and bedding to upper class passengers. May awake or remind passengers to alight at their destination station during night. May assist Guard, Passenger Train in issuing certificate to passengers for issue or extension of tickets. May report to appropriate authority any complaint which he is unable to remedy immediately.

ISCO 08 Unit Group Details:

Code	5112
Title	Transport Conductors

5112.0500

Ticket Collector, Railway

Ticket Collector, Railway examines and collects tickets of passengers and checks excess luggage or unauthorized articles. Collects duty chart from Station Master and reports for duty in prescribed uniform displaying identification badge and takes position at gate or platform as required. Checks tickets from persons entering or leaving platform. Clips tickets of incoming passengers boarding trains and collects tickets from outgoing passengers as appropriate. Checks excess luggage and unauthorized article carried by passengers. Collects ticket fares or excess luggage charges adding amount of penalty as per rules and issues fare receipts. Prepares statement of money collected

and deposits cash with Booking Clerk. Prepares charge sheet and hands over to Railway Police for prosecution of passengers refusing to pay railway dues. Checks and verifies badly dated or undated and blank paper tickets and maintains their records. Hands over luggage, horse, carriage and dog tickets if any to Parcel Clerk. Remains acquainted with traffic rules and regulation. Prepares necessary reports and returns, submits them as prescribed and performs other duties as detailed. May get reservation labels fixed on air conditioned, I and II class sleeping compartments and reserved seats and also guide passengers. May attend to public enquiries, reserve seats before departure of trains and indicate running of trains on notice board. May check and turn out beggars and unauthorized hawkers from platform.

ISCO 08 Unit Group Details:

Code	5112
Title	Transport Conductors

5112.0600

Travelling Ticket Examiner, Railway

Travelling Ticket Examiner, Railway checks and examines tickets of passengers in running trains. Collects duty chart from supervisor in charge and works according to programme. Reports for duty at scheduled time in prescribed uniform displaying identification badge. Checks and signs tickets of passengers from compartment to compartment, keeps eye on excess luggage, contraband and unauthorized goods carried, if any and collects ticket fares or luggage charges with or without penalty as per rules. Deposits money collected at stations of his beat as prescribed. Hands over passengers who refuse to pay railway dues, to Station Master or Ticket Collector

for prosecution etc. Checks and confiscates badly dated or undated tickets and prepares their statement. Maintains daily trip report showing details of trains and carriages checked, passengers charged irregularities noticed and names of stations where cash is deposited. Extends help and protection to passengers when sought. May carry light weighing apparatus through Scale Porter to weight luggage in the running train. May travel in sleeper class and look after reservation of berths and seats. May attend to public enquiries.

ISCO 08 Unit Group Details:

Code 5112
Title Transport Conductors

5112.0700 **Ticket Examiner, Motor Transport**

Ticket Examiner; Ticket Checker; Assistant Traffic Inspector (Motor Transport) checks and examines tickets of passengers on buses and supervises work of Bus Conductors, Checking Inspector and Drivers. Selects route and boards any bus on route or within allotted area. Checks way bill and tally it with tickets. Prevents overloading and checks tickets of passengers to ensure that nobody is travelling without ticket or exceeding his journey. Checks excess luggage gets it charged as per rules and ensures proper recording of trip sheets, invoice and other records of vehicle. Supervises and guides Conductors in discharge of their duties. Checks over-speeding and driving habits of Drivers and ensures that buses are running to schedule and traffic rules are observed. Notes irregularities or malpractices and also useful information about line staff or passengers or others in connection with transport and reports them to the authorities. Maintains

necessary records, attends to investigation of accidents and submits daily trip report. May check cash with Conductor to prevent excess charging and malpractices.

ISCO 08 Unit Group Details:

Code 5112
Title Transport Conductors

5112.0800 **Passenger Guide, Railway**

Passengers Guide, Railway guides and assists passengers travelling in lower class compartments in finding accommodation, purchasing tickets, boarding and changing correct trains and availing of passenger amenities provided at railway stations. Selects vantage position at railway station and follows movement of passenger traffic to locate individuals in difficulties and provides them information and guidance about movements, timings of trains booking counter, etc. Ensures that waiting halls, platforms, and carriages in trains are kept neat and tidy. Reports defects in carriage fitting such as electrical, watering sanitary, safety devices, etc. to train examining staff for rectification. Intervenes in disputes between porters and passengers when necessary. Reports cases requiring assistance of police to Station Master, Railway. May arrange supply of invalid chairs to sick passengers on requisition. May also investigate complaints of excess charging by Booking Clerks.

ISCO 08 Unit Group Details:

Code 5112
Title Transport Conductors

5112.0900 **Conductor, Tram**

Conductor Tram collects fares, issues tickets, conducts running of tram cars on scheduled routes by signalling to Tram Car Driver to start or stop as necessary. Receives instructions from Time Keeper at depot. Collects bill and tickets from Cashier and displays destination board in car. Co-operates with Tram Driver in maintaining time schedule. Checks interior of tram car, seats, electric lights, fans, first aid box, etc. and ensures cleanliness inside car. Signals Driver to start tram. Regulates boarding of passengers ensuring that tram is not over-loaded. Collects fares and issues tickets. Signals to Driver to stop Tram Car to permit passengers to alight or board tram at scheduled stoppages. Assists passengers and maintains order in tram car. Renders first-aid to passengers in case of accident. Checks car after each trip and deposits left articles if any with Depot Starter. Verifies entries made by Starter on ticket memo and mileage card at end of each trip. May maintain simple records.

ISCO 08 Unit Group Details:

Code	5112
Title	Transport Conductors

5112.1000

Bus Conductor

Bus Conductor conducts bus on scheduled route, either long distance or in urban area, picking up and dropping passengers at recognised stops and collects fares. Checks interior equipment of bus, seats, board, first-aid box, etc. Examines and tallies way bills with ticket packets before commencing run. Adjusts destination board of bus before commencement of each trip. Regulates boarding of bus and assists passengers in handling luggage. Answers queries of passengers regarding timing, route and fares. Collects fares and

issues tickets to passengers and checks ticketless and over travelling. Signals Bus Driver by bell or whistle to start or stop and to allow passage for other overtaking vehicles. Co-operates with him in maintaining time schedule. Announces names of stages or stops as they are approached. Hands over lost property found in bus at end of each journey to Time Keeper or other superior officer. Guides Driver while reversing bus by whistle or bell signal when necessary. Gives first-aid to passengers in case of accident. Verifies entries made by Starter on ticket memo and mileage card at end of each trip and renders account of cash and unsold tickets to Cashier or employer. May note names and addresses of witnesses and passengers, etc. and submit report to employer or Senior Officer as required.

ISCO 08 Unit Group Details:

Code	5112
Title	Transport Conductors

5112.9900

Transport Conductors, Other

Transport Conductors and Guards, Other include all other Transport Conductors and Guards engaged in railway or road transport services, not elsewhere classified.

ISCO 08 Unit Group Details:

Code	5112
Title	Transport Conductors

Family 5113

Travel Guides

Travel Guides accompany individuals or groups on trips, sightseeing tours and

excursions and on tours of places of interest such as historical sites, industrial establishments and theme parks. They describe points of interest and provide background information on interesting features.

5113.0100 Travel Agent

Travel Agent plans travels, provides related information and arranges accommodation, itinerary and other facilities for tourists, officials, businessmen and educational or other parties. Receives information from persons, seeking help and necessary facilities. Answers inquiries, offers suggestions and provides descriptive literature road maps etc., pertaining to trips, excursions, shopping and entertainment features. Discusses routes, time schedules, baggage limits, rates and types of accommodation with patrons to determine their arrival and departure times and assists personnel to complete travel forms, visas and other official and business transaction pertaining to travel. Plans itinerary and makes travel, baggage handling, passage reservations, accommodation and other arrangements as sought within available funds. Delivers travel and reservation tickets and connected papers to party or authorized person, informs him of the arrangements made and collects, expenses incurred and service charges either through bank or in cash. May arrange for road transport camping and other facilities if desired. May arrange study travel for students going abroad.

ISCO 08 Unit Group Details:

Code	5113
Title	Travel Guides

5113.0200 Tourist Guide

Tourist Guide guides tourists and visitors to places of interest and explains historical background and importance of site. Accompanies tourists on their excursions to and around places of tourist interest and explains historical, cultural, social, religious and architectural significance of monuments. Answers questions of tourists relating to various economic and social aspects of life or people. May assist tourists in shopping. May act as interpreter to tourists to converse with people and or shopkeepers, hoteliers, etc.

ISCO 08 Unit Group Details:

Code	5113
Title	Travel Guides

5113.9900 Guides, Other

Travel Guides and Ground Hosts, other include all other worker, engaged in guiding, ground hosting and assisting tourists and excursion parties in their travels and visits not elsewhere classified.

ISCO 08 Unit Group Details:

Code	5113
Title	Travel Guides

Group 512

Cooks

Cooks plan, organize, prepare and cook meals in hotels, restaurants and other eating places, on board ships, on passenger trains and in private households

Occupations in this Group are classified into the following Families:

5120 Cooks

Family 5120
Cooks

Cooks plan, organize, prepare and cook meals in hotels, restaurants and other eating places, on board ships, on passenger trains and in private households.

5120.0200
Cook, Institutional

Cook, Institutional prepares, seasons and cooks soups, meats, vegetables, desserts and other foodstuffs for consumption in hotels, restaurants and other establishments. Fries, boils, broils, roasts or steams vegetables, meats, fish and other food to prepare dishes listed on menu and prepares salads, sandwiches, cakes, fruit juices and other cold foods. Supervises dish washing and preparing of vegetables and other foodstuffs for cooking. May specialize in preparing a particular type of food, such as meat, salad, pastry or vegetables, and be designated accordingly.

ISCO 08 Unit Group Details:

Code 5122
Title Cooks

5120.0300
Cook, Domestic

Cook, Domestic prepares and cooks meals in private households. Plans menu according to own judgement or employers instructions and prepares vegetables and

meats. Cooks food stuffs according to recipes or own judgement. Cleans or supervises cleaning of kitchen and cooking utensils. May serve meals, perform duties of valet and be designated as COOK-BEARER.

ISCO 08 Unit Group Details:

Code 5122
Title Cooks

5120.0400
Cook, Ship

Cook, Ship on board ship. Plans menu taking account of foods in season and local availability. Cooks food stuffs in quantities according to menu and number of persons to be served. Cleans, cuts and cooks meat, fish and poultry and bakes breads and pastry. Washes dishes and cleans galley and galley equipment. May order supplies and maintain record and accounts. May supervise activities of one or more workers who assist in preparing and serving, meals.

ISCO 08 Unit Group Details:

Code 5122
Title Cooks

5120.0500
Kitchen Porter/Steward

Kitchen Porter, Masalchi carries, meat, vegetable water etc. for kitchen in hotels. Cleans crockery, cutlery, dishes, plates, cooking utensils; lights and maintains fire; washes, cuts and peels vegetable. May use kitchen machines e.g. electric washers, knife cleaners, potato-peeler.

ISCO 08 Unit Group Details:

Code 5122
Title Cooks

5120.0600**Pantry Man**

Pantry Man prepares snacks and beverages in large hotels, clubs or similar establishments and maintains account of sales. Prepares and mixes various ingredients to be used in salads, fruit cocktails, beverages and sandwiches. Serves preparations to Waiters as requested and supplies sugar, cream, pepper, milk, coffee and tea to waiters as ordered and keeps account of sales or issues. Maintains pantry in clean and orderly condition. May work in ships' dining rooms.

ISCO 08 Unit Group Details:

Code	5122
Title	Cooks

5120.9900**Cooks, Other**

Cooks, Other prepare special food or dishes in private households or public eating places and include cooks not elsewhere classified, such as SWEET MASTER plans and prepares general and special sweet dishes, in hotels, restaurants and other such establishments. DIET COOK prepares special diets for invalids. TEA AND COFFEE MAKER brews and prepares beverages like coffee and tea in hotels, clubs or similar establishments and ensures proper cleanliness of stall.

ISCO 08 Unit Group Details:

Code	5122
Title	Cooks

Group 513**Waiters and Bartenders**

Waiters and Bartenders serve food and beverages in commercial dining and drinking places, clubs, institutions and canteens, on board ships and on passenger trains.

Occupations in this Group are classified into the following Families:

5131 Waiters

5132 Bartenders

Family 5131
Waiters

Waiters serve food and beverages at tables in dining and drinking places, clubs, institutions and canteens, on board ships and on passenger trains.

5131.0100**Butler**

Butler serves or supervises serving of foods and beverages and performs additional services in private households. Sets or supervises setting of table for meals and for special occasions, by bearers. Serves or supervises serving of meals and wines and removes or directs removal of dishes between courses. Prepares or supervises preparation of fancy uncooked dishes such as fruit cocktails and salad. Prepares and serves tea, coffee, liquors and accompanying foods and performs additional services such as receiving guests. May supervise cleaning of dining room.

ISCO 08 Unit Group Details:

Code	5131
Title	Waiters

5131.0200
Steward, Hotel

Steward, Hotel supervises work of Dining Room Waiters Pantry Man and Room Service Waiter and ensures that guests are served promptly and courteously in dining room. Receives customers in dining hall and escorts them to tables and obtains orders from customers and ensures that food is served promptly by Waiters. Visits rooms, halls and other areas to ensure that they are kept clean and tidy. Ensures that glass, china and silver wares are in good order. Prepares dining halls for banquets and special occasions by decorating them with flower vases and arranging tables and chairs in pleasing fashions. Keeps record of any breakage of crockery or loss of cutlery. May keep kitchen equipment, crockery, cutlery etc., under his charge and issue them as needed. May purchase food supplies and kitchen equipment and check them for quality and quantity. May supervise storage and issue of supplies.

ISCO 08 Unit Group Details:

Code	5131
Title	Waiters

5131.0300

Bearer, Domestic/Household Workers

Bearer; Waiter (Domestic) lays tables and serves meals and beverages in private house, Prepares tables for meals by spreading clean linen or plastic cover and placing glasses, condiment-holders, flower-vases, plates and cutlery over it. Places dishes on table in front of persons and serves food and supplies additional food and water when required. Removes soiled dishes from table. Performs other domestic work such as keeping of wardrobes, dressing persons, cleaning clothes, polishing shoes, making beds. May prepare food and clean utensils.

ISCO 08 Unit Group Details:

Code	5131
Title	Waiters

5131.0401

Waiter, Institutional/Food and Beverage Service-Steward

Waiter; Bearer (Institutional) serves food, snacks, beverages to customers, guests in hotels, bars, and restaurants. Prepares table with clean linen, condiments-containers, glasses, menu-card and obtains orders from customers. Collects food, beverages, snacks etc., from kitchen according to customers' orders from Pantry Man and serves them. Waits on customers periodically for additional requirements, of food etc. Removes used plates, cups, saucers from table and presents bill to customers and collects cash and hands it to Cashier. Is designated as WAITER (dining room) if employed in serving food in dining rooms and LOUNGE WAITER if engaged for serving beverages and snacks in lounge.

Qualification Pack Details:

QP NOS Reference	THC/Q0301
QP NOS Name	Food & Beverage Service-Steward
NSQF Level	3

ISCO 08 Unit Group Details:

Code	5131
Title	Waiters

5131.0500

Wine Waiter

Wine Waiter; Abdar receives orders for drinks, obtains them from Barman and serves to customers. Attends to customers and patrons visiting bar, club, dining room, hotel and other institutions

and answers enquiries about availability of drinks. Takes order for drinks, obtains them from Barman and serves customers and waits on customers and serves additional requirement of drinks. Presents bill for payment and deposits amount with Barman. Removes empty glasses and cleans table. May serve snacks if required.

ISCO 08 Unit Group Details:

Code	5131
Title	Waiters

5131.9900

Waiters, Other

Waiters and Bartenders, Other include all other waiters and bartenders who serve food and beverages in commercially-operated dining and drinking places, clubs, institutions and canteens and on board ships not elsewhere classified.

ISCO 08 Unit Group Details:

Code	5131
Title	Waiters

Family 5132

Bartenders

Bartenders prepare, mix and serve alcoholic and non-alcoholic drinks directly to customers over a bar or counter, or through waiters.

5132.0100

Barman

Barman measures, mixes and serves alcoholic and non-alcoholic drinks at bar, in clubs, and other institutions and answers inquiries. Receives orders for drinks from Wine Waiter or directly from customers and measures drinks by pegs in

glasses and serves to customer or supplies them to Wine Waiter to be served. Supplies other beverages if required. Prepares bill for payment and maintains account and keeps records of stock. May mix various drinks to make cocktails.

ISCO 08 Unit Group Details:

Code	5132
Title	Bartenders

5132.9900

Bartenders, Other

Bartenders, Other include bartenders who prepare, mix and serve alcoholic and non-alcoholic drinks not elsewhere classified.

ISCO 08 Unit Group Details:

Code	5132
Title	Bartenders

Group 514

Hairdressers, Beauticians and Related Workers

Hairdressers, Beauticians and Related Workers cut and dress hair, shave and trim beards, give beauty treatment, apply cosmetics and make-up and give other kinds of treatment to individuals in order to improve their appearance.

Occupations in this Group are classified into the following Families:

5141 Hairdressers
5142 Beauticians and Related Workers

Family 5141

Hairdressers

Hairdressers cut, style, colour, straighten and permanently wave hair, shave or trim facial hair and treat scalp conditions.

5141.0100

Hair Dresser (Ladies)

Hair Dresser; Hair Stylist (Ladies) cuts, washes, dyes and waves hair and performs other personal services incidental to hair dressing of women. Covers clothing of clients with towel or apron to avoid sticking of cut hair. Cuts hair according to instructions of client or according to a particular style using clippers, scissors, razors and combs. Washes, rinses and dries hair, using shampoos and solutions as necessary and bleaches, dyes or tints hair. Waves hair by wrapping it with round curlers, adding wave solutions and performing other tasks to obtain required effect. Sets hair in desired style by combing. May clean, shape and polish finger nails. May give scalp treatment to clients.

ISCO 08 Unit Group Details:

Code	5141
Title	Hairdressers

5141.0202

Hair Stylist

Hair Stylist specializes in dressing hair according to latest style, period, or character portrayal, following instructions of patron MAKE-UP ARTIST, or script: Questions patron or reads instructions of MAKE-UP ARTIST or script to determine hairdressing requirements. Studies facial features of patron or performing artist and arranges, shapes, and trims hair to achieve desired effect, using fingers, combs, barber scissors, hair-waving solutions, hairpins, and other accessories. Dyes, tints, bleaches, or curls or waves hair as required. May create new style

especially for patron. May clean and style wigs. May style hairpieces.

ISCO 08 Unit Group Details:

Code	5141
Title	Hairdressers

5141.0201

Assistant Hair Stylist

Assistant Hair Stylist shampoos and conditions hair, blow dries hair, provides basic haircuts as well as assists the hair stylist in providing other advanced hair services. The person also assists in salon ambience maintenance and also does various other odd jobs in the salon including sell salon retail products after obtaining knowledge on them

Qualification Pack Details:

QP NOS Reference	BWS/Q0201
QP NOS Name	Assistant Hair Stylist
NSQF Level	3

ISCO 08 Unit Group Details:

Code	5141
Title	Hairdressers

5141.0300

Barber

Barber; Hair Cutter; Hair Dresser cuts hair, shaves and trims beards, moustaches and performs other personal services to customers incidental to barbing. Covers neck and clothing of customers with towel or apron to avoid cut hair fall on them. Cuts hair, shaves or trims beards or moustaches according to instructions of customers or according to particular style using clippers, scissors, razors and combs. Trims or files raised nails of hands, removes superfluous hair from eye brows, nostrils and ears. Brushes off cut hair from head and neck and washes and cleans face using hand spray and towel and

applies antiseptics, cream on face. Performs other personal services such as shampooing, massaging of head by hand and re-combs hair. May do massaging of body and arrange hot or cold bath in hair cutting salon. May do massaging of head and face by electric treatment. May dye and wave hair. May cut corns.

ISCO 08 Unit Group Details:

Code	5141
Title	Hairdressers

5141.9900

Hairdressers, Other

Hairdressers, Other include hairdressers who cut, style, colour and straighten hair not elsewhere classified.

ISCO 08 Unit Group Details:

Code	5141
Title	Hairdressers

Family 5142

Beauticians and Related Workers

Beauticians and Related Workers, give facial and body beauty treatments, apply cosmetics and make-up and give other kinds of treatment to individuals in order to improve their appearance.

5142.0100

Beautician

Beautician gives various forms of beauty treatment to clients. Examines clients' skin and suggests suitable treatment. Applies lotions, creams and packs to stimulate circulation, lubricate tissues and remove wrinkles and lines. Massages face, neck, arms, legs or other parts of body and gives treatment for superficial skin blemishes. Removes superfluous hair by

wax treatment or other method. Shapes, colours and otherwise treats eyebrows and eyelashes and applies cosmetics and advises on suitable make-up. May cut, comb and wave hair according to clients' instructions or according to particular style, tint or dye hair, and give scalp treatment. May clean, shape and polish finger nails.

ISCO 08 Unit Group Details:

Code	5141
Title	Beauticians and Related Workers

5142.0101

Assistant Beautician

Assistant Beautician needs to be aware of the basics of beauty therapy, health and hygiene, safety and needs to be knowledgeable about various beauty products. Assistant Beautician is expected to perform basic epilation, manicure, pedicure and basic face care services and also assist the beautician in providing advanced services. The person also assists in salon ambience maintenance and also does various other odd jobs in the salon including sell salon retail products after obtaining knowledge on them

Qualification Pack Details:

QP NOS Reference	BWS/Q0101
QP NOS Name	Assistant Beautician
NSQF Level	3

ISCO 08 Unit Group Details:

Code	5141
Title	Beauticians and Related Workers

5142.0200

Manicurist

Manicurist cleans, shapes and polishes finger nails. Applies liquid polish-remover or lotion to take off old nail polish or to clean nails. Moistens nails with water before cutting with scissors or nipper and files edges of nails to shape., Applies nail paint with small brush. Cleans and sterilizes equipment. May advise customers on massage and use of creams to improve appearance of hands and arms. Is known as PEDICURIST if performs similar operations on feet, cuts or treats corns.

ISCO 08 Unit Group Details:

Code 5141

Title Beauticians and Related Workers

5142.0201

Pedicurist and Manicurist

Pedicurist and Manicurist needs to be aware of the basics of pedicure and manicure, health and safety, hygiene and needs to be knowledgeable about various beauty products. The role-holder is expected to independently provide services of pedicure and manicure while performing some other assisting services.

Qualification Pack Details:

QP NOS Reference BWS/Q0102

QP NOS Name Pedicurist and
Manicurist

NSQF Level 2

ISCO 08 Unit Group Details:

Code 5141

Title Beauticians and Related Workers

5142.0300

Skin Care Specialist

Skin Care Specialist provides skin care treatments to face and body to enhance an individual's appearance. Advises clients

about colours and types of make-up, and instruct them in make-up application techniques. Applies chemical peels in order to reduce fine lines and age spots. Cleanses clients' skin with water, creams and/or lotions. Demonstrates how to clean and care for skin properly, and recommend skin-care regimens. Determines which products or colours will improve clients' skin quality and appearance. Examines clients' skin, using magnifying lamps or visors when necessary, in order to evaluate skin condition and appearance. Keeps records of client needs and preferences, and the services provided. Performs simple extractions to remove blackheads. Removes body and facial hair by applying wax. Selects and applies cosmetic products such as creams, lotions, and tonics.

ISCO 08 Unit Group Details:

Code 5141

Title Beauticians and Related Workers

5142.0400

Make-Up-Man

Make-up Man applies make-up to faces of actors and other performers to improve or alter their appearance for studio or stage productions. Examines casting list and requisitions wigs, beards and other materials needed. Applies make-up, such as grease paint, rouge, lipstick, face powder, wigs and beards to impart desired facial characteristic or expression to Actor or Actress. Issues instructions to Hair Dresser as to style of hair dressing required.

ISCO 08 Unit Group Details:

Code 5141

Title Beauticians and Related Workers

5142.0500**Dresser, Stage and Studio**

Dresser, Stage and Studio designs, maintains, selects costumes and dresses Actors and Actresses for stage and studio performance. Determines type of dresses required for dressing Actors and Actresses in playing various roles, in consultation with Art Director. Designs dresses for tailoring and ensures that completed dresses fulfil requirement of character to be depicted. Dresses Actors and Actresses or assists them in dressing appropriately for stage or studio. May keep dresses and cloths, and maintain accounts. May alter or repair dresses. May get cloths washed and pressed after use.

ISCO 08 Unit Group Details:

Code 5141

Title Beauticians and Related Workers

5142.0600**Wig Man**

Wig Man designs wigs, beards, moustaches etc. as per requirement and fits them on Actors of stage and studio. Selects wig, beard or moustache appropriate to character or role. Attaches wig or hair pieces on to wig block, model using hammer and tack or pins. Combs and sets hair according to specification by water-waving or with paper spills. Sprays hair with lacquer to keep hair in place. Places wig on electric heater for drying and ensures that wig has acquired required shape and pattern. Removes wig from wig block, model after pulling out tacks or pins and applies spirit gum on them. Fixes them on face, head, etc. of Actor or Actress as required. Inserts hair clips where necessary and adjusts wig to convenience of Actor or Actress. May apply make-up such as paints, lipstick, powder, etc. to Actor or. Actresses.

ISCO 08 Unit Group Details:

Code 5141

Title Beauticians and Related Workers

5142.0700**Bath Attendant**

Bath Attendant, attends to clients taking bath and administers elementary massage to improve their sense of well-being. Prepares water or steam-bath and attends clients during bathing. Rubs body of client with soap and sponge to clean pores of skin and gives client a shower or pours water to wash off soap from body. May help client in drying body with towel and in dressing after bath.

ISCO 08 Unit Group Details:

Code 5141

Title Beauticians and Related Workers

5142.9900**Beauticians and Related Workers, Others**

Hairdressers, Barbers, Beauticians and Related Workers, other include all other hairdressers, barbers, beauticians and related workers not elsewhere classified.

ISCO 08 Unit Group Details:

Code 5141

Title Beauticians and Related Workers

Group 515**Building and Housekeeping Supervisors**

Building and housekeeping supervisors co-ordinate, schedule, and supervise the work of cleaners and other housekeeping staff in commercial, industrial and residential premises. They take responsibility for housekeeping and

caretaking functions in hotels, offices, apartments, houses and private dwellings.

Occupations in this Group are classified into the following Families:

5151	Cleaning and Housekeeping Supervisors in Offices, Hotels and Other Establishments
5152	Domestic Housekeepers
5153	Building Caretakers

Family 5151

Cleaning and Housekeeping Supervisors in Offices, Hotels and Other Establishments

Cleaning and Housekeeping Supervisors in Offices, Hotels and Other Establishments organize, supervise and carry out housekeeping functions in order to keep clean and tidy the interiors, fixtures and facilities in these establishments.

5151.0101 House Keeper (Institutional)/Housekeeping Supervisor

House Keeper (Institutional) supervises work of staff engaged in cleaning rooms, lounges and dining halls of hotel. Assigns duties to staff and visits periodically all portions of hotel to assure that areas are clean and tidy. Reports any defects in electrical and water systems. Arranges to have rooms and public places periodically white-washed or painted. Indents for fresh supply of linen, and discards worn out items and greets guests in their rooms and enquires about their comfort. Keeps custody of luggage left temporarily by residents. Supervises work of Lascars

Porter (Hotel, Sweepers, Room Boys, Lift Boys and Linen Keeper).

Qualification Pack Details:

QP NOS Reference	THC/Q 0201
QP NOS Name	Housekeeping Supervisor
NSQF Level	5

ISCO 08 Unit Group Details:

Code	5151
Title	Cleaning and Housekeeping Supervisors in Offices, Hotels and Other Establishments

5151.0201

Janitor/Housekeeping Attendant

Janitor keeps hotel, office building, apartment house, or similar building in clean and orderly condition and tends furnace, air-conditioner, and boiler to provide heat, cool air, and hot water for tenants, performing any combination of following duties: Sweeps, mops, scrubs, and vacuums hallways, stairs and office space. Regulates flow of fuel into automatic furnace or shovels coal into hand-fired furnace. Empties tenants' trash and garbage containers. Maintains building, performing minor and routine painting, plumbing, electrical wiring, and other related maintenance activities, using hand tools. Replaces air-conditioner filters. Cautions tenants regarding complaints about excessive noise, disorderly conduct, or misuse of property. Notifies management concerning need for major repairs or additions to lighting, heating, and ventilating equipment. Cleans snow and debris from sidewalk. Mows lawn, trims shrubbery, and cultivates flowers, using hand tools and power tools.

Qualification Pack Details:

QP NOS Reference	THC/Q 0203
QP NOS Name	Housekeeping Attendant (Manual Cleaning)
NSQF Level	2

ISCO 08 Unit Group Details:

Code	5151
Title	Cleaning and Housekeeping Supervisors in Offices, Hotels and Other Establishments

5151.0202

Room Attendant

Room Attendant keeps the guest rooms and defined areas in clean and orderly condition. The core responsibility includes 'systematic' cleaning of the rooms and other defined area, providing linen, performing periodic and deep cleaning to maintain cleanliness and tidiness.

Qualification Pack Details:

QP NOS Reference	THC/Q 0202
QP NOS Name	Room Attendant
NSQF Level	3

ISCO 08 Unit Group Details:

Code	5151
Title	Cleaning and Housekeeping Supervisors in Offices, Hotels and Other Establishments

5151.0300

House Stewards/Domestic Help

House Steward supervises and co-ordinates activities of pantry, storeroom and non-cooking kitchen workers, and purchases or requisitions foodstuffs, kitchen supplies and equipment. Inspects kitchens and storerooms to ensure that premises and equipment are clean and in order and that sufficient food stuffs and supplies are on hand to ensure efficient

service. Examines incoming purchases for quality and to ensure that purchases are as specified in order. Approves invoices or bills for payment. Co-ordinates work of non-cooking kitchen and storeroom workers engaged in activities such as dishwashing, silver cleaning and storage and distribution of foodstuffs and supplies. Establishes controls to guard against theft and wastages. Confers with House Keeper concerning banquet arrangements for food service equipment and extra employees. May plan and price menus, keep cost records and establish budget controls to ensure profitable food service operation

ISCO 08 Unit Group Details:

Code	5151
Title	Cleaning and Housekeeping Supervisors in Offices, Hotels and Other Establishments

5151.0400

Matron, House Keeping

Matron, House Keeping; Controller of Household supervises work of staff in hostels, boarding houses, orphanages and other residential institutions and looks after welfare of residents and cleanliness of premises. Allots duties to domestic staff engaged in cleaning rooms. Ensures that Ayahs, Waiters etc., attend to comfort of residents and maintains cleanliness of place. Meets women residents, enquires about their comfort and arranges for their requirements.

ISCO 08 Unit Group Details:

Code	5151
Title	Cleaning and Housekeeping Supervisors in Offices, Hotels and Other Establishments

5151.0500

Linen Keeper

Linen Keeper supplies linen needs of rooms, lounges and dining halls of hotel. Maintains linen register indicating stock position of various types of linen. Issues clean linen (bedcovers, table-cloth, napkins, towels) to rooms and dining halls in place of dirty or soiled ones. Sends soiled linen to laundry, and collects washed and pressed articles. Sorts out linen that requires repair or replacement and recommends purchase of fresh linen. May mend or sew linen.

ISCO 08 Unit Group Details:

Code 5151

Title Cleaning and Housekeeping
Supervisors in Offices, Hotels and
Other Establishments

5151.0600 **Hotel and Restaurant Keeper/Hotel and Restaurant Owner**

Hotel and Restaurant Keeper runs hotels, restaurants, tea stalls, snack bars etc., on his own account and serves food and beverages to customers. Arranges business accommodation in suitable locality and furnishes it within available means. Appoints cooks, servants, dishwashers, etc., to serve food to the customers as required and obtains business license. Purchases saleable food stuff and other raw materials, economically, according to nature and extent of business. Gets food prepared to suit taste of likely customers under his direct supervision. Serves food and beverages to customers on demand or at fixed hours and collects money from them. Ensures safety of boarders' property if also catering for lodging services. Maintains necessary cleanliness and abides by respective municipal rules. Maintains daily accounts and other registers as enforced by law and to ensure

business profit. May cook food, serve them to customers and also perform other tasks if working on very small scale. May supply food and beverages at customers' residence or any other place within easy reach. May take catering contract at customers' residence on special occasions.

ISCO 08 Unit Group Details:

Code 5151

Title Cleaning and Housekeeping
Supervisors in Offices, Hotels and
Other Establishments

5151.0701

Supervisor, Front Office/Customer Service Executive (Meet and Greet)

Supervisor, Front Office co-ordinates front-office activities of hotel or motel and resolves problems arising from guests' complaints, reservation and room assignment activities, and unusual requests and inquiries. Assigns duties and shifts to workers and observes performances to ensure adherence to hotel policies and established operating procedures. Confers and co-operates with other department heads to ensure co-ordination of hotel activities. Answers inquiries pertaining to hotel policies and services. Greets important guests. Arranges for private telephone line and other special services. May patrol public rooms, investigate disturbances, and warn troublemakers. May interview and hire applicants. May receive and process advance registration payments. May send out letters of confirmation or return cheques when registration cannot be accepted.

Qualification Pack Details:

QP NOS Reference THC/Q0101

QP NOS Name	Customer Service Executive (Meet and Greet)
NSQF Level	3

supervise and carryout housekeeping functions in hotels, clubs, boarding schools and other enterprises and institutions and in private households not elsewhere classified.

ISCO 08 Unit Group Details:

Code	5151
Title	Cleaning and Housekeeping Supervisors in Offices, Hotels and Other Establishments

5151.0800

Room Bearer/Bell Boys/Bell Hop/Hotel Porters

Room Bearer assists guests arriving at hotel entrance by opening doors of vehicle, helping them alight, and guiding them to Reception Clerk and sees that luggage is unloaded and carried to guest's room by Lascars. Assists residents in getting taxis or coaches. Answers telephone calls. Allots rooms to unexpected guests etc./in absence of enquiry and reception clerk at night. Maintains night report register indicating happenings, work of night duty staff etc. Maintains keys of resident rooms and arranges for delivery of mail, letters and telegrams. May make beds, clean dress and polish shoes.

ISCO 08 Unit Group Details:

Code	5151
Title	Cleaning and Housekeeping Supervisors in Offices, Hotels and Other Establishments

5151.9900

Cleaning and Housekeeping Supervisors in Offices, Hotels and Other Establishments, Other

Housekeepers and Related Workers, other include other workers who organize,

ISCO 08 Unit Group Details:

Code	5151
Title	Cleaning and Housekeeping Supervisors in Offices, Hotels and Other Establishments

Family 5152

Domestic Housekeepers

Domestic Housekeepers organize, supervise and carry out housekeeping functions in private households with or without the support of subordinate staff.

5152.0100

House Keeper (Domestic)

House Keeper (Domestic) organizes and supervises work of Domestic Servants for maintaining house in clean and orderly manner. Allots work to various staff under control and supervises their work. Ensures proper maintenance and cleanliness of house. Purchases provisions and other necessities as advised and maintains accounts. Looks after needs and comforts of guests and visitors. May also look after children. May assist in shopping.

ISCO 08 Unit Group Details:

Code	5152
Title	Domestic Housekeepers

5152.9900

Domestic Housekeepers, Others

Domestic Housekeepers, Others include housekeepers who organize, supervise and carry out housekeeping functions in

private households not elsewhere classified.

ISCO 08 Unit Group Details:

Code	5152
Title	Domestic Housekeepers

Family 5153

Building Caretakers

Building Caretakers take care of apartment houses, hotels, offices, churches and other buildings and maintain them and associated grounds in a clean and orderly condition. They may supervise other workers and contractors depending on the size and nature of the building concerned.

5153.0100

Caretaker, Building

Caretaker, Building takes care of houses, offices, institutions, public and other buildings and maintains them in orderly and clean condition. Looks after buildings and furnishings of clubs, schools, offices, flats and private houses and arranges cleaning, repairs of building and its equipment. Keeps keys of vacant houses and flats and delivers possession to tenants or to the people allotted. Attends to enquiries and complaints of tenants and provides services such as arrangement for additional lighting, heating or ventilating equipment and sanitary services and takes safety measures against fires, thefts in building by providing fire-fighting equipment e.g. water buckets, sand, fire extinguishers and providing iron bars, at unsafe places. Keeps record of labour and material costs for maintenance of building, and reports to owner or agent. May maintain garden, lawns, and hedges of building. May rent

out residential building. May collect fruits from the garden and rent and pay taxes.

ISCO 08 Unit Group Details:

Code	5153
Title	Building Caretakers

5153.0200

Caretaker, Monument

Caretaker, Monument looks after maintenance, cleanliness and safety of historical monuments and ancient structures of archaeological importance. Visits premises under charge at regular intervals and sees that monument is cleaned by subordinate staff, safety measures are carried out, visitors are allowed within prescribed time limits, and monument is not spoilt or damaged by them. Supervises work of subordinate staff such as Gardener, Chowkidar and sweepers (dry and wet) and reports to authorities of damage or loss to monument. May guide and explain background of monument to visitors. May arrange sale of tickets for entry into monument.

ISCO 08 Unit Group Details:

Code	5153
Title	Building Caretakers

5153.0300

Caretaker, Burial Places and Cremation Grounds

Caretaker Burial Places and Cremation Ground looks after maintenance of graveyard, crematorium or tower of silence and arranges requisite material and keeps record of dead bodies buried or disposed. Receives and records particulars of deceased, allocates or marks place for burial or cremation, arranges supply of necessary implements for digging of grave, firewood for cremation, and other

assistance where required. Keeps premises clean and tidy and arranges removal of remains of cremated body not collected. May undertake responsibility for disposal of unclaimed bodies of destitute.

ISCO 08 Unit Group Details:

Code	5153
Title	Building Caretakers

5153.9900

Building Caretakers, Other

Building Caretakers, Other include all other Building Caretakers engaged in taking care of public and private building, not elsewhere classified.

ISCO 08 Unit Group Details:

Code	5153
Title	Building Caretakers

Group 516

Other Personal Services Workers

Other Personal Services Workers recount past and predict future events in persons' lives, provide companionship and other personal services, groom, train and care for animals, provide embalming and funeral services train people to drive vehicles.

Occupations in this Group are classified into the following Families:

5161 Astrologers, Fortune Tellers and Related Workers
5162 Companions and Valets
5163 Undertakers and Embalmers
5164 Pet Groomers and Animal Care Workers
5165 Driving Instructors

5169 Personal Service Workers, Not Elsewhere Classified

Family 5161

Astrologers, Fortune Tellers and Related Workers

Astrologers, Fortune-Tellers and Related Workers recount past and predict future events in persons' lives by practicing astrology, on the basis of characteristics of the clients' palms, samples of playing cards drawn or other techniques.

5161.0100

Astrologer

Astrologer casts horoscope of persons, showing position and influence of stars and planets at time of birth and interprets horoscope to relate past and to forecast future events in their lives. Casts and interprets horoscope of persons, showing position and influence of stars and planets on individuals regarding their health, longevity, prosperity, family and social life etc. Determines auspicious time for various human activities such as marriages, journeys, religious ceremonies etc. Advises individuals about precautions to be taken and religious rites to be performed to avoid evil influences of stars and planets. May prescribe to wear specific stones (jewels), metals or roots of trees or plants to reduce adverse planetary effects and for promoting of better prospects.

ISCO 08 Unit Group Details:

Code 5161
Title Astrologers, Fortune Tellers and Related Workers

5161.0200**Palmist**

Palmist interprets lines and other symbols on palms, feet or forehead of persons to relate to their past and forecast future events in their lives. Examines palms, feet or fore head of individuals and studies lines and other symbols noting their position and if necessary by taking impression on paper. Makes scientific study by measuring lines, examining mounts, colour of nails, shape of hand, fingers etc. using magnifying glass if required. May prescribe to wear specific stones (jewels), metals or roots of trees or plants for better prospects.

ISCO 08 Unit Group Details:

Code 5161

Title Astrologers, Fortune Tellers and Related Workers

5161.9900**Astrologers, Fortune Tellers and Related Workers, Other**

Fortune-Tellers, Palmists and Related Workers, other practice art of fortunetelling and treat physical and mental ailments by spiritual powers and include those predicting future events or preparing talismans not elsewhere classified such as: Card Reader if relates past and forecasts future events of individuals by reading and interpreting playing cards picked by Customer or by reading content of hand-written card picked by trained birds from pack of cards scripted with variety of predictions of past and future events. Nadi Jyotishi measures shadows of individuals and reads out past and forecasts future on the basis of measurements from book known as Chhaya Shastra. Numerologist explains occult significance of numbers and their

influence and relation of human life. Calculates ones lucky or important number and number value of one's name and suggests auspicious time for effecting important transactions and decisions. Faith Healer if engaged in treatment of physical and mental ailments and discomforts of individuals by giving talisman and performing special rites and charms.

ISCO 08 Unit Group Details:

Code 5161

Title Astrologers, Fortune Tellers and Related Workers

Family 5162**Companions and Valets**

Companions and Valets provide companionship and attend to various needs of the employer.

Family 5163**Undertakers and Embalmers**

Undertakers and Embalmers perform various tasks in the disposal of dead human bodies.

5163.0100**Undertaker**

Undertaker supervises arrangements for funeral including provision of coffin, burial clothes, flowers, etc., according to requirements. Obtains data from family for supply of coffin of suitable size and arrange for digging of grave of required dimensions, and type. Provides burial clothes of kind required for draping coffin and covering body and arranges for hearse (vehicle for conveying coffin) to transport body to graveyard; wreaths and flowers required for the occasion.

Supervises lowering of coffin into grave by bearers. Suggests kinds of tomb-stone available and makes arrangements for its preparation and installation on grave. May make arrangements for band for occasion. May arrange for examination of corpses after getting necessary permission from authorities and transfer remains in hermetically sealed coffin and arrange for transport of remains to clients.

ISCO 08 Unit Group Details:

Code 5163

Title Undertakers and Embalmers

5163.0200

Embalmer

Embalmer preserves dead human bodies by injecting and applying preserving medicines to retard or arrest process of decay or decomposition. Washes body with germicidal soap; sews lips shut, and packs orifices with cotton to prevent leakage; drains blood from body by cutting artery and injects preservative or embalming fluid into body under gravitational pressure. Moves parts of dead body manually for injected fluid to spread thoroughly. Punctures internal organs through abdomen to remove fluids and gases. Closes incisions and restores disfigured bodies to their normal appearance by affixing pieces of moulded wax or other material to injured portions of body. Dresses body and places it in coffin for preservation till specified period.

ISCO 08 Unit Group Details:

Code 5163

Title Undertakers and Embalmers

5163.0300

Grave Digger

Grave Digger digs graves with pick and shovel in grave-yards, cemeteries and church-yards. Marks out dimensions of grave on ground, digs earth with pick and shovel to excavate soil to required depth. Braces sides of excavation with wooden props when necessary to prevent carvings during or after burial of body. Refills grave with earth after burial of dead body or lowering coffin in grave and covering it with planks or stone slabs to protect body being exhumed by carnivorous animals such as jackals, stray dogs. May assist in lowering coffin into grave using ropes or cloth, etc.

ISCO 08 Unit Group Details:

Code 5163

Title Undertakers and Embalmers

5163.9900

Undertakers and Embalmers, Other

Under Takers and Embalmers, other include all other workers engaged in preparing of dead bodies for burial, cremation, preservation or other purposes, not elsewhere classified.

ISCO 08 Unit Group Details:

Code 5163

Title Undertakers and Embalmers

Family 5164

Pet Groomers and Animal Care Workers

Pet Groomers and Animal Care Workers feed, handle, train and groom animals and assist Veterinarians, Animal Health Technologists and Technicians in maintaining veterinary facilities, animal shelters, breeding and boarding kennels, zoos, laboratories, retail pet shops, riding

schools, dog training schools pet grooming and similar establishments.

Family 5165

Driving Instructors

Driving Instructors teach people how to drive motor vehicles.

5165.0101

Commercial Vehicle Driver Trainer

Commercial Vehicle Driver Trainer: Individuals at this job need to impart training for those programmes that provide practical (behind-the-wheel) instruction with a focus on the development of competencies associated with the operation and control of a commercial vehicle.

Qualification Pack Details:

QP NOS Reference	ASC/Q9708
QP NOS Name	Commercial Vehicle Driver Trainer
NSQF Level	5

ISCO 08 Unit Group Details:

Code	5165
Title	Driving Instructors

Family 5169

Personal Service Workers, Not Elsewhere Classified

This family covers Personal Service Workers not classified elsewhere in Sub-Division 51, Personal Service Workers. For instance, those who provide services and companionship as dancing partners, social escorts, and night-club hostesses or hosts are classified here.

Sub Division 52

Sales Workers

Sales Workers sell and demonstrate goods in wholesale or retail shops, at stalls and markets, door-to-door, via telephone or customer contact centres. They may record and accept payment for goods and services purchased, and may operate small retail outlets.

Tasks performed by workers in this sub-major group may include the following: selling goods in wholesale or retail establishments or at street or market stalls, door-to-door, via telephone or customer contact centres; demonstrating and displaying goods to potential customers; selling and serving food for immediate consumption at counters and in the street; buying or contracting a regular supply of products to be sold; stacking and displaying goods for sale, and wrapping and packing goods sold; determining product mix, stock and price levels for goods to be sold; operating cash registers, optical price scanners, computers or other equipment to record and accept payment for the purchase of goods and services. Supervision of other workers may be required in some occupations classified here

Occupations in this Sub Division are classified into the following Groups:

521	Street and Market Salespersons
522	Shop Salespersons
523	Cashiers and Ticket Clerks
524	Other Sales Workers

Group 521

Street and Market Salespersons

Street and market salesperson sell goods from stalls on markets or in streets and prepare and sell hot or cold foods and beverages ready for immediate consumption in streets and public places.

Occupations in this Group are classified into the following Families:

5211 Stall and Market Salespersons

5212 Street Food Salespersons

Family 5211
Stall and Market Salespersons

Stall and market salespersons sell various goods from stalls on open-air or covered markets or from stalls in streets or other open spaces.

5211.0100
Advertising Sales
Agent/Advertising Executive

Advertising Sales Agent sells or solicits advertising, including graphic art, advertising space in publications, custom made signs, or TV and radio advertising time. May obtain leases for outdoor advertising sites or persuade retailer to use sales promotion display items. Consults with company officials, sales departments, and advertising agencies in order to develop promotional plans. Delivers advertising or illustration proofs to customers for approval. Draws up contracts for advertising work, and collect payments due. Explains to customers how specific types of advertising will help promote their products or services in the most effective way possible. Identifies new advertising markets, and propose products to serve them. Locates and contact potential clients in order to offer advertising services. Maintains assigned

account bases while developing new accounts. Obtains and studies information about clients' products, needs, problems, advertising history, and business practices in order to offer effective sales presentations and appropriate product assistance. Prepares and delivers sales presentations to new and existing customers in order to sell new advertising programmes, and to protect and increase existing advertising.

ISCO 08 Unit Group Details:

Code 5211

Title Stall and Market Salespersons

5211.0200
Shop Attendant/Sales Assistant

Shop Attendant performs number of low skilled tasks in wholesale or retail business establishment such as opening and closing of shop; keeping premises neat and clean; bringing articles from stock or show cases to counter or from manufacturers, dealers or railway stations to establishment premises; opening packages and storing articles at proper places and assisting Shop Assistant in measuring, weighing and packing of articles. May attend to local dak, bank transactions and run other errands.

ISCO 08 Unit Group Details:

Code 5211

Title Stall and Market Salespersons

5211.0300
Telemarketing Sales
Person/Telemarketing Sales
Operator

Telemarketing Salesperson solicits business for an establishment or clients

via the telephone or e-mail, advises clients and processes financial and other queries and procedures. Gives details of various goods or services and of the firm's terms of sale by contacting clients via telephone or email; identifies requirements, following up on deliveries and entering events into a computer system; dispatches tasks to other units, when relevant; invoices or handles payments, when necessary; sends letters, information sheets and other documents to clients; performs related tasks; supervises other workers.

ISCO 08 Unit Group Details:

Code 5211

Title Stall and Market Salespersons

5211.0301

Sales Executive-Dealership

Sales Executive is responsible for supporting sales to generate sales leads (telemarketing activities) and also support overall sales process to support both sales and service activities.

Qualification Pack Details:

QP NOS Reference ASC/Q1010

QP NOS Name Sales Executive-Dealership

NSQF Level 3

ISCO 08 Unit Group Details:

Code 5211

Title Stall and Market Salespersons

5211.0302

Telecaller

Telecaller is responsible for making cold calls to the

customer and supporting sales to generate sales leads (telemarketing activities)

and also support follow-up calls to support both sales and service activities

Qualification Pack Details:

QP NOS Reference ASC/Q1105

QP NOS Name Telecaller

NSQF Level 4

ISCO 08 Unit Group Details:

Code 5211

Title Stall and Market Salespersons

5211.9900

Stall and Market Salespersons, Other

Stall and Market Salespersons, other include those who sell various goods such as leather or textile craft products, wood carvings, embroidery, lace, or newspapers, periodicals, postcards, cigarettes, chocolates and ice-creams, at stalls which are usually placed, by license, at particular places in streets or other open spaces, or they sell fruit, vegetables and other, mostly perishable, foodstuffs in markets not elsewhere classified. SKILLED AGRICULTURAL AND FISHERY WORKERS Skilled agricultural and fishery workers grow and harvest field or tree and shrub crops, gather wild fruits and plants, breed, tend or haunt animals, produce a variety of animal husbandry products, cultivate, conserve and exploit forests, breed or catch fish and cultivate or gather other forms of aquatic life in order to provide food, shelter and income for themselves and their households. Most occupations in this division require skills at the second skill level.

ISCO 08 Unit Group Details:

Code 5211

Title Stall and Market Salespersons

Family 5212**Street Food Salespersons**

Street Food Salespersons prepare and sell, or sell previously prepared, hot or cold foods and beverages ready for immediate consumption in streets and public places such as stations, cinemas, or theatres.

5212.0100**Milkman**

Milkman; Dhudhwala; Gawala (Seller) delivers milk from door to door to his regular customers and sells milk, curd, etc. to customers at his shop or fixed place. Estimates his requirements and purchases milk from Wholesale Dealers. Ensures that milk-cans are washed properly and fills necessary quantity of milk in them. Goes to regular customers on foot or on cycle and delivers milk as required. Keeps day-to-day record of milk delivered and collects money from customers monthly. May sell milk and other dairy products to customers at his shop or place. May own buffalo or cow and may take it to customer's place for milking.

ISCO 08 Unit Group Details:

Code 5212

Title Street Food Salespersons

5212.9900**Street Food Vendors,
Other/Khomchawala, Dhabawala,
Chat Thelawala,**

Street Food Vendors, other include workers who prepare and sell previously prepared, hot or cold foods, vegetables, fruit, ice cream and various drinks, in streets and public places such as stations,

cinemas or theatres not elsewhere classified.

ISCO 08 Unit Group Details:

Code 5212

Title Street Food Salespersons

Group 522**Shop Salespersons**

Shop Salespersons sell a range of goods and services directly to the public or on behalf of retail and wholesale establishments. They explain functions and qualities of these goods and services, and may operate small shops or supervise the activities of Shop Sales Assistants and cashiers.

Occupations in this Group are classified into the following Families:

5221 Shopkeepers
5222 Shop Supervisors
5223 Shop Sales Assistants

Family 5221**Shopkeepers**

Shopkeepers operate small retail shops either independently or with support from a small number of others.

Family 5222**Shop Supervisors**

Shop Supervisors supervise and co-ordinate the activities of shop Sales Assistants, Checkout Operators and other Workers in retail and wholesale shops such as supermarkets and department stores.

5222.0100**Sales Supervisor, Wholesale Trade**

Sales Supervisor, Wholesale Trade supervises wholesale business of any commodity in particular area of specified zone to effect better sale and improve supply and demand position. Contacts businessmen and takes stock of available business in his area. Directs Representatives or area Salesmen to contact prospective retail businessmen. Advises Stockists and Distributors to supply goods as required and maintains registers of sales effected. Supervises work of Representatives or area Salesmen to popularise and promote business by undertaking advertisement and publicity drives and looks into complaints of service and defective or poor quality of goods for improvement. Informs head office of market trends and of defects or complaints noticed in products, suggesting improvements to avoid adverse effects on business. Submits prescribed returns and reports performance of juniors and sub-ordinates to head office for service benefits or otherwise. May accompany Representatives on sale drives and to train them.

ISCO 08 Unit Group Details:

Code	5222
Title	Shop Supervisors

5222.0101**Area Parts Manager (APM)**

Area Parts Manager is responsible for managing and ensuring spare parts movement for the assigned area. The individual should drive parts sales through planning and developing targets for particular area.

Qualification Pack Details:

QP NOS Reference	ASC/Q0605
QP NOS Name	Area Parts Manager(APM)
NSQF Level	5

ISCO 08 Unit Group Details:

Code	5222
Title	Shop Supervisors

5222.0201**Sales Supervisor, Retail Trade/CRM Manager**

Sales Supervisor, Retail Trade supervises performance of Sales girls and Salesmen in department stores, emporia, etc. to co-ordinate their functions and ensure smooth selling activities. Gets merchandise properly arranged by Shop Attendants according to quality, demand, price range, etc. and labels them for display to prospective Buyers. Ensures that Salesmen, Retail and Shop Assistants attend to customers promptly and politely and effects sales in regular manner by creating purchasing interest in customers. Watches measuring or weighing, collection of money, packing and other selling activities and ensures cordial and renewed interest of customers for future purchases. Maintains stock of goods in demand and replenishes them as necessary. May personally attend to customers during rush hours. May take special interest in attending, introducing new items and selling articles to patrons, foreigners and important persons. May handle cash and maintain stock and sales accounts. May work as Field Supervisor, co-ordinate function of Sales Representatives and publicise marketing activities.

Qualification Pack Details:

QP NOS Reference	ASC/Q0202
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QP NOS Name	CRM Manager
NSQF Level	6
ISCO 08 Unit Group Details:	
Code	5222
Title	Shop Supervisors

Family **5223**

Shop Sales Assistants

Shop Sales Assistants sell a range of goods and services directly to the public or on behalf of retail and wholesale establishments, and explain the functions and qualities of these goods and services.

5223.0100 **Shop Assistant**

Shop Assistant; Counterhand assists Salesman, Retail in effecting sales of goods to customers and keeping goods neat and tidy in retail shop or departmental store. Attends shop or establishment before its opening time, supervises its cleaning and dusting and ensures that all goods are kept neat and tidy. Brings required types of goods from stock by measuring or weighing and packs them in paper, carton etc. Delivers them to customer on premises or at place specified. Informs Salesman or Dealer items of goods which are in short supply and which need to be replenished. Takes delivery of goods purchased from manufacturer agents, dealers, Railway stations etc. Assists Dealers in stock-taking and performs all other duties as assigned to him by Dealer or Salesman. May prepare bills, receive payment, check stock and maintain stock register. May be designated according to commodity sold.

ISCO 08 Unit Group Details:

Code	5223
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Title Shop Sales Assistants

5223.0101

Order Processor

Order Processor is also known as ‘Order Taker’ or “Order Preparer”, the Order Processor is among the first set of individuals working in the jewellery manufacturing chain. Order Processor prepares the job sheet or order form based on customer order.

Qualification Pack Details:

QP NOS Reference	G&J/Q0202
QP NOS Name	Order Processor
NSQF Level	3

ISCO 08 Unit Group Details:

Code

Title

5223.0102 **Jewellery Retail Sales Associate (Basic)**

Jewellery Retail Sales Associate (Basic) engages with the customers, understands their buying requirements, explains store offerings, assists them in selecting jewellery and completes the sales transaction.

Qualification Pack Details:

QP NOS Reference	G&J/Q8302
QP NOS Name	Jewellery Retail Sales Associate (Basic)
NSQF Level	4

ISCO 08 Unit Group Details:

Code	5223
Title	Shop Sales Assistants

5223.0103

Jewellery Retail Sales Associate (Advanced)

Jewellery Retail Sales Associate (Advanced) engages with the customers, understands the buying requirement of the customers, explains the offerings of the store, assists them in choosing jewellery and completes the sales transaction. The individual manages multiple sales counters of diverse product categories and also take customized jewellery orders from the customers.

Qualification Pack Details:

QP NOS Reference	G&J/Q8303
QP NOS Name	Jewellery Retail Sales Associate (Advanced)
NSQF Level	5

ISCO 08 Unit Group Details:

Code	5223
Title	Shop Sales Assistants

5223.0104 Plumbing Products Sales Assistant

Plumbing Products Sales Assistant is responsible for assistance in management of sales of plumbing products manufactured by the Company in within a defined geographic area, province or country.

Qualification Pack Details:

QP NOS Reference	PSC/Q0301
QP NOS Name	Plumbing Products Sales Assistant
NSQF Level	2

ISCO 08 Unit Group Details:

Code	5223
Title	Shop Sales Assistants

5223.0105 Trainee Associate

Trainee Associate: Individuals in this position interact with customers to understand customer needs and service them by effecting sales of relevant products. Individuals in this position display merchandise and interact with customers to understand their needs to service them with sales of relevant product offerings whilst working cordially within the team and retail organization.

Qualification Pack Details:

QP NOS Reference	RAS/Q0103
QP NOS Name	Trainee Associate
NSQF Level	3

ISCO 08 Unit Group Details:

Code	5223
Title	Shop Sales Assistants

Group 523

Cashiers and Ticket Clerks

Cashiers and Ticket Clerks operate cash registers, optical price scanners, computers or other equipment to record and accept payment for the purchase of goods, services and admissions in settings such as stores, restaurants and ticket offices.

Occupations in this Group are classified into the following Families:

5230 Cashiers and Ticket Clerks

Family 5230

Cashiers and Ticket Clerks

Cashiers and Ticket Clerks operate cash registers, optical price scanners, computers or other equipment to record and accept payment for the purchase of goods, services and admissions in settings such as stores, restaurants and ticket offices.

Group 524 Other Sales Workers

Other Sales Workers display, demonstrate, display and sell goods, food and services, usually to the general public, in contexts other than sales in markets, streets and shops. It includes Sales Workers not classified in groups 521 Street and market salespersons, 522 Shop salespersons and 523 Cashiers and Ticket Clerks

Occupations in this Group are classified into the following Families:

5241	Fashion and Other Models
5242	Sales Demonstrators
5243	Door-to-Door Salespersons
5244	Contact Centre Salespersons
5245	Service Station Attendants
5246	Food Service Counter Attendants
5249	Sales Workers Not Elsewhere Classified

Family 5241 Fashion and Other Models

Fashion and Other Models wear and display clothing and accessories and pose for photographs, film and video, advertising, still photography or for artistic creations.

5241.0100 Model, Fashion

Model, Fashion models garments and accessories, such as jewellery, foot wear, cosmetics, hand bags, etc. for display to respective designers, and customers. Dresses in sample or completed garment, matching jewellery, etc. and stands, turns and walks to demonstrate features such as quality, style and design to observers at fashion shows, private showings and retail establishments. May be designated as MANNEQUIN, if models for garments only. May participate in entertainment shows. May inform prospective purchasers as to model, number and price and where they can be purchased. May select own accessories.

ISCO 08 Unit Group Details:

Code 5241
Title Fashion and Other Models

5241.0200 Model

Model poses draped or nude for painting, drawing or clay modelling according to directions of artists, modeller, sculptor or photographer. Poses according to instructions of Artist, Modeller or Sculptor in sitting standing, reclining position or in act of doing work like pouring, lifting, carrying etc.; changes pose when required by artist or model and rests at intervals.

ISCO 08 Unit Group Details:

Code 5241
Title Fashion and Other Models

5241.9900 Fashion and Models, Other

Fashion and Other Models, Other include those who wear and display clothing and other items for sale or pose as models for advertising or for artistic creation not elsewhere classified.

ISCO 08 Unit Group Details:

Code	5241
Title	Fashion and
Other Models	

Family 5242

Sales Demonstrators

Sales Demonstrators demonstrate goods at commercial premises, exhibitions and private homes.

5242.0101

Technical Demonstrator (Sale)/Area Technical Lead

Technical Demonstrator (Sales); Representative (Sales) demonstrates correct method of using products, machinery, plants, etc. for achieving best results and assists Technical Representative in computing costs, preparing estimates and blue-prints erecting and servicing machinery, plant, etc. Visits prospective clients and demonstrates correct and efficient method of using products, machinery, plants, etc. Assists Technical Representative in computing cost, working out estimates, preparing blue-prints, etc. Attends to erection of machinery or plants and ensures that work is completed according to specifications. May attend to servicing of machinery or plants after sale. May also train clients or his representative in correct handling and maintenance of products, machinery, plants, etc.

Qualification Pack Details:

QP NOS Reference	ASC/Q0601
QP NOS Name	Area Technical Lead
NSQF Level	6

ISCO 08 Unit Group Details:

Code	5242
Title	Sales
Demonstrators	

5242.0102

Sales Associate

Sales Associate: Individuals in this position interact with customers to understand and service customer needs with specialization leading to maximization of business in a retail environment. Individuals in this position interact with customers by giving specialized service and product demonstrations to maximise business in a retail environment whilst striving for continuous improvements in levels of services rendered.

Qualification Pack Details:

QP NOS Reference	RAS/Q0104
QP NOS Name	Sales Associate
NSQF Level	4

ISCO 08 Unit Group Details:

Code	5242
Title	Sales Demonstrators

5242.0201

Customer Care Executive (Relationship Centre)

Customer Care Executive (Relationship Centre) provide customer service by handling, following and resolving walk-in customer's queries, requests and complaints and proactively

recommends/sells products and services of the organization.

Qualification Pack Details:

QP NOS Reference	TEL/Q0101
QP NOS Name	Customer Care Executive (Relationship Centre)
NSQF Level	4

ISCO 08 Unit Group Details:

Code	5242
Title	Sales Demonstrators

5242.0301

Customer Care Executive (Repair Centre)

Customer Care Executive (Repair Centre) provides customer service by interacting with walk-in customers. They also handle, follow-up and resolve customer's queries, requests and complaints, in a timely manner.

Qualification Pack Details:

QP NOS Reference	TEL/Q2200
QP NOS Name	Customer Care Executive (Repair Centre)
NSQF Level	4

ISCO 08 Unit Group Details:

Code	5242
Title	Sales Demonstrators

5242.0401

In-Store Promoter

In-Store Promoter demonstrates and highlights the product FAB (Features, Advantages and Benefits) to walk-in customers; offers them the opportunity to touch and feel

the product (s) on display; respond to queries on product and services.

Qualification Pack Details:

QP NOS Reference	TEL/Q2101
QP NOS Name	In-Store Promoter
NSQF Level	4

ISCO 08 Unit Group Details:

Code	5242
Title	Sales Demonstrators

5242.0501

Associate Network Engineer

Supervisor, Customer Technical Services co-ordinates technical liaison services between management, production department, sales department, and customers with newly developed techniques or practices in processing company products, and to inform customers of new types, specifications, and end-uses of products. Confers with Production Department Managers to assist in specific classification of products from quality assurance position, report on new product or process technology of competitors, and to discuss new specifications required by customers. Directs investigation of customer complaints regarding quality, tolerances, specifications, and delivered condition of products. Records, analyses, and informs concerned personnel of production quality assurance, and sales departments of status and disposition of customer complaints and claims. Negotiates settlement of claims, for which company is responsible, within limits prescribed by management. May survey potential markets for increasing sales.

Qualification Pack Details:

QP NOS Reference	SSC/Q5102
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QP NOS Name	Associate Network Engineer
NSQF Level	5

ISCO 08 Unit Group Details:

Code	5242
Title	Sales Demonstrators

5242.0502**Associate Operations Engineer**

Associate Operations Engineer in the IT-ITeS Industry is also known a Systems Engineer. Individuals in this role assist customers on all product/service related queries. They receive calls and log in complaints from customers as per specified standards. Individuals in this role also provide technical and developer support for products/solutions via email, chat etc.

Qualification Pack Details:

QP NOS Reference	SSC/Q5101
QP NOS Name	Associate Operations Engineer
NSQF Level	5

ISCO 08 Unit Group Details:

Code	5242
Title	Sales Demonstrators

5242.9900**Sales Demonstrators, Other**

Salesmen, Shop Assistants and Related Workers, other includes all other Salesmen, Shop Assistants and Demonstrators engaged in sales services, not elsewhere classified.

ISCO 08 Unit Group Details:

Code	
Title	

Family 5243**Door-to-Door Salespersons**

Door to Door Salespersons sell goods and services and solicit business for an establishment, by approaching or visiting potential customers, usually residents in private homes, by going from door to door.

5243.0100**News Paper Boy**

News Paper Boy; Paper Wala delivers newspapers, periodicals etc. from door to door to regular customers and sells them to casual customers on footpaths, railway platform, bus stand, etc. Estimates his requirements of different types of newspapers and periodicals. Purchases required number of copies on cash payment or on credit from agencies or printers. Goes from door to door either on foot or on bicycle. Announces important and sensational news to boost up sales and delivers newspapers and periodicals to his regular customers and ensures timely delivery. Keeps day-to-day record of copies delivered and collects money from customers weekly or monthly. Returns unsold copies to agents or printers. May sit on footpaths in busy localities and sell to casual customers on payment of cash. May work on commission or salary basis or both.

ISCO 08 Unit Group Details:

Code	5243
Title	Door-to-Door Salespersons

5243.0200**Order Supplier/Supplier**

Order Supplier books orders by going from door to door or on shop counter by

telephone or otherwise and arranges supply of required goods at stipulated time and place. Chalks out programme of visits. Interviews prospective buyers, explains features of goods and shows samples, if available. Quotes prices and business terms. Prepares order forms and books orders. Forwards orders to head office for supply. Arranges delivery of ordered goods to customers according to contract. May receive payment on behalf of producer or supplier.

ISCO 08 Unit Group Details:

Code	5243
Title	Door-to-Door Salespersons

5243.0300

Home Delivery Man

Home-Delivery Man; Deliveryman delivers goods such as provisions, bakery products, laundry etc. at customer's residence or other places as directed. Places indents with stores for supply of goods according to orders to be executed. Arranges orders according to areas or localities. Ensures that all articles are properly packed and loaded in delivery van, push-cart, trolley or tricycle. Goes from door to door along with vehicle and delivers goods to customers according to their instructions. Collects money from customers and issues receipt for same. Ascertains further requirements of customers and books orders if necessary. Maintains accounts of deliveries made, cash and cheques, etc. collected. Returns undelivered packages to stores. May take additional goods usually in demand and sell them to customers in area or localities visited.

ISCO 08 Unit Group Details:

Code	5243
Title	Door-to-Door Salespersons

5243.0401

Distributor Sales Representative

Distributor Sales Representative needs to generate sales for mobile handset and related accessories, steer sales as per the organization's target matrix, increase width and depth of distribution and work in a specified area as per the Beat Plan and Route Plan. An individual is also responsible for handling/escalating retailer's complaints and queries as per the organizational policies and must be able to handle cash related transactions.

Qualification Pack Details:

QP NOS Reference	TEL/Q2100
QP NOS Name	Distributor Sales Representative
NSQF Level	4

ISCO 08 Unit Group Details:

Code	5243
Title	Door-to-Door Salespersons

5243.0501

Field Sales Executive (FSE)

Field Sales Executive (FSE) visits retail outlets to deliver prepaid telecom products/services to retailers, as per daily Route/Beat Plan. Individual is also responsible to achieve monthly revenue target, increase width and depth of distribution, adhere to process compliance for new customer enrolment and increase customer base.

Qualification Pack Details:

QP NOS Reference	TEL/Q0200
QP NOS Name	Field Sales Executive (FSE)
NSQF Level	4

ISCO 08 Unit Group Details:

Code 5243
 Title Door-to-Door Salespersons

5243.0502**Sales Executive (Broadband)**

Sales Executive (Broadband) in the telecom industry is also known as Territory

Sales Executive/Territory Sales Representative/Field Sales Executive/Field Sales Representative/Feet on Street (FOS)/Business Development Executive.

Qualification Pack Details:

QP NOS Reference TEL/Q0201
 QP NOS Name Sales Executive (Broadband)
 NSQF Level 4

ISCO 08 Unit Group Details:

Code 5243
 Title Door-to-Door Salespersons

5243.9900**Door to Door and Telephone Sales Persons, Other**

Door to Door and Telephone Sales Persons, Other include workers who solicit business for an establishment, particularly from households, by going from door to door or by telephoning, not elsewhere classified.

ISCO 08 Unit Group Details:

Code 5243
 Title Door-to-Door Salespersons

Family 5244

Contact Centre Salespersons

Contact Centre Salespersons contact existing and prospective customers, using the telephone or other electronic communications media, to promote goods and services, obtain sales and arrange sales visits. They may work from a customer contact centre or from non-centralised premises.

5244.0100**Operator, Call Centre**

Call Centre Operators, Call Centre Operator receives telephone calls from potential clients and existing customers regarding the products and services offered by an organization. They answer incoming telephone calls from existing or prospective customers; interviews caller to establish the nature of any complaint or the requirements of the client; informs customers on any immediate action to be taken, advises on services available and sells additional products or services; maintains details of calls received, the action taken as a result of a call and updates customer records as required; arrange for field staff to visit the caller if further assistance is required. May also be called Call Centre Information Clerk

ISCO 08 Unit Group Details:

Code 5244
 Title Contact Centre Sales Person

5244.0101**CRM Domestic Voice**

CRM Domestic Voice receives and make telephone calls which are primarily scripted, basic and routine with the assistance of a computerised system. They answer inquiries, resolve problems, record complaints and/or receive feedback.

Qualification Pack Details:

QP NOS Reference	SSC/Q2210
QP NOS Name	CRM Domestic Voice
NSQF Level	4

NSQF Level	4
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ISCO 08 Unit Group Details:

Code 5244
Title Contact Centre Sales Person

5244.0201**CRM Domestic Non Voice**

CRM Domestic Non Voice is responsible for resolving queries and customer cases over web-chat or email. They form the primary layer of contact with the customer and responses may be made on either pre-existing email templates or customized mails to the query requirement.

ISCO 08 Unit Group Details:

Code 5244
Title Contact Centre Sales Person

5244.0102**Associate-CRM**

Associate-CRM receives and make telephone calls which are primarily scripted, basic and routine with the assistance of a computerised system. They answer inquiries, resolve problems, record complaints and/or receive feedback.

Qualification Pack Details:

QP NOS Reference	SSC/Q2202
QP NOS Name	Associate-CRM
NSQF Level	5

ISCO 08 Unit Group Details:

Code 5244
Title Contact Centre Sales Person

5244.0103**Customer Relation Executive**

Customer Relationship Executive is responsible for assisting and supporting sales function through telemarketing, activities such as generating sales prospects or leads through telemarketing, customer experience at the dealership showroom and supporting in their follow-ups. The CRE is also responsible for supporting the service function through follow-up calls for after-sales service.

Qualification Pack Details:

QP NOS Reference	ASC/Q1106
QP NOS Name	Customer Relation Executive

Qualification Pack Details:

QP NOS Reference	SSC/Q2211
QP NOS Name	CRM Domestic Non Voice
NSQF Level	4

ISCO 08 Unit Group Details:

Code 5244
Title Contact Centre Sales Person

5244.0202**Associate Customer Care (Non Voice)**

Associate Customer Care (Non Voice) is responsible for resolving queries and customer cases over web-chat or email. They form the primary layer of contact with the customer and responses may be made on either pre-existing email templates or customized mails to the query requirement.

Qualification Pack Details:

QP NOS Reference	SSC/Q2201
QP NOS Name	Associate Customer Care (Non Voice)

NSQF Level 5

ISCO 08 Unit Group Details:

Code 5244

Title Contact Centre Sales Person

5244.0203

Collections Executive

Collections Executive is responsible for reconciliation of customer accounts through payment follow ups, sending payment reminders, investigating and solving customers' problems, which may lead to delay in payments, communicate the right information to the customers

Qualification Pack Details:

QP NOS Reference SSC/Q2214

QP NOS Name Collections
 Executive

NSQF Level 4

ISCO 08 Unit Group Details:

Code 5244

Title Contact Centre Sales Person

5244.0301

Customer Care Executive

Remote Helpdesk Technician is also called 'Customer Service Executive', the Customer Care Executive is the first point of contact in providing after-sales support services and assists customers in registering complaints. The individual at work is responsible for receiving, understanding and responding to customer queries through telephone or e-mail. The individual records the complaints for follow up, co-ordinates with other departments to resolve problems and closes non-technical issues raised by customers on the call itself.

Qualification Pack Details:

QP NOS Reference	ELE/Q4603
QP NOS Name	Customer Care Executive
NSQF Level	3

ISCO 08 Unit Group Details:

Code 5244

Title Contact Centre Sales Person

5244.0302

Remote Helpdesk Technician

Remote Helpdesk Technician is also called Remote Resolution Executive, the Remote Helpdesk Technician provides customer support via telephone by identifying, trouble shooting and resolving the technical queries. The individual at work is responsible for receiving, understanding and resolving customers' technical queries through telephone. The individual receives the customer query from the customer-care centre and then interacts with the customer to identify the problem, understand the cause, and to trouble shoot and resolve the queries.

Qualification Pack Details:

QP NOS Reference	ELE/Q4604
QP NOS Name	Remote Helpdesk Technician
NSQF Level	3

ISCO 08 Unit Group Details:

Code 5244

Title Contact Centre Sales Person

5244.0303

Customer Care Executive (Call Centre)

Customer Care Executive (Call Centre) provide customer service support to

an organization by interacting with their customers over the phone. They also handle, follow and resolve customer's queries, requests and complaints in a timely manner.

Qualification Pack Details:

QP NOS Reference	TEL/Q0100
QP NOS Name	Customer Care Executive (Call Centre)
NSQF Level	4

ISCO 08 Unit Group Details:

Code	5244
Title	Contact Centre Sales Person

Family 5245

Service Station Attendants

Service Station Attendants sell fuel, lubricants and other automotive products and provide services such as fuelling, cleaning, lubricating and performing minor repairs to motor vehicles.

5245.0101

Petrol Pump Salesman/Fuel Service Man/Fuel Dispensing Attendant

Fuel Service Man/Fuel Dispensing needs to work at fuel station and fill gas in the vehicles driven in the fuel station following safety procedures while filling gas.

Qualification Pack Details:

QP NOS Reference	ASC/Q9604
QP NOS Name	Fuel Service Man/Fuel Dispensing

NSQF Level	2
Attendant	

ISCO 08 Unit Group Details:

Code	5245
Title	Service Station Attendants

Family 5246

Food Service Counter Attendants

Food Service Counter Attendants serve customers at food counters and finish preparation of simple food items in restaurants, cafes, hotels, fast food outlets, cafeterias, hospitals and other settings.

Family 5249

Sales Workers Not Elsewhere Classified

This family includes sales workers not classified elsewhere in sub-division 52, Sales workers.

5249.0101

Key Account Service Manager

Key Account Service Manager is responsible for the proper co-ordination of management and development of key accounts within the region, to maintain and ensure customer satisfaction, drive business growth and achieve sales targets. The individual is responsible for managing availability of spare parts and their proper maintenance.

Qualification Pack Details:

QP NOS Reference	ASC/Q0604
QP NOS Name	Key Account Service Manager

NSQF Level 6

Title Sales Workers Not Elsewhere Classified

ISCO 08 Unit Group Details:

Code 5249
Title Sales
Workers Not Elsewhere Classified

5249.0200

Salesman, Wholesale Trade

Salesman, Wholesale; Sales Assistant, Wholesale sells goods in wholesale establishment to retailers and large scale consumers. Attends to customers visiting establishment and ascertains their requirements. Instructs Shop Assistant to bring samples of required goods and shows them to customers, explaining their use, mechanical complications, merits, durability and other distinguishing features. Arranges demonstration of goods if considered necessary. Quotes prices and discusses other terms of sale. Negotiates for credit facilities, date of delivery, etc. and books orders. Arranges for delivery of goods to customers within stipulated time. Studies market trends and keeps customers informed of market conditions and fluctuations in prices. Introduces new items of goods, if any, and induces customers to purchase and stock them. Assists Wholesale Dealer in Stock-taking and other matters connected with running of Wholesale establishment. May book orders on telephone and arrange to deliver goods at given address. May grant credit facilities to customers in consultation with Wholesale Dealer. May prepare bills, receive payment for goods sold and maintain account. May work on salary or commission or on both and may be designated according to goods sold.

ISCO 08 Unit Group Details:

Code 5249

5249.0201
Commercial Manager
(Zonal/Regional)

Commercial Manager (Zonal/Regional) is responsible for supervising commercial operations at OEM offices of the defined region, and planning annual budgets for sales.

Qualification Pack Details:

QP NOS Reference	ASC/Q0204
QP NOS Name	Commercial Manager (Zonal/Regional)
NSQF Level	6

ISCO 08 Unit Group Details:

Code 5249
Title Sales Workers Not Elsewhere Classified

5249.0202
Commercial Executive/Officer

A Commercial Executive/Officer is responsible for facilitating the commercial operations at various OEM offices in the assigned areas, and facilitating audits through external and internal agents. They help in liaising with various financial banks/NBFCs for funding related issues both for primary sales (billing to the channel partner) and secondary sales (sorting the pending cases for vehicle loans)

Qualification Pack Details:

QP NOS Reference	ASC/Q0203
QP NOS Name	Commercial Executive/Officer
NSQF Level	5

ISCO 08 Unit Group Details:

Code 5249
 Title Sales Workers Not Elsewhere
 Classified

5249.0301

Salesman, Retail Trade

Salesman, Retail Sales/Assistant, Retail Counter Salesman; sells goods to customers in retail establishment. Arranges display of goods in shop. Attends to customer visiting shop. Ascertains his requirements. Shows him different varieties of required goods or articles, explaining their use, merits, durability and other distinguishing features, quotes prices and helps customers in selecting goods. Measures and weights goods ordered and packs them in paper bag, carton etc. Hands over packet to customer and collects money from him. May prepare cash-memos, collect money and hand it over to cashier of Retail Dealers. Ensures that goods are kept in neat and tidy manner. May be designated according to type of goods sold.

Qualification Pack Details:

QP NOS Reference	ELE/Q3202
QP NOS Name	In-Store Demonstrator
NSQF Level	3

ISCO 08 Unit Group Details:

Code 5249
 Title Sales Workers Not Elsewhere
 Classified

5249.0400

Wholesale Dealer

Wholesale Dealer; Whole Seller; Merchant and Shopkeeper, Wholesale Trade purchases goods in bulk direct from

manufacturers, producers or importers and runs wholesale business, working on own account, by selling them for profit to Retailers industrial, commercial and other large consumers. Studies market trends and estimates requirements of goods in which he deals. Ascertains prevailing rates and examines them for making purchases at competitive rates. Contacts producers, manufacturers or other agents, settles terms and conditions of purchase and places orders for goods required. Ensures that goods supplied conform to required standards. Displays and shows samples of goods to customers. Books orders and arranges supply of goods to customers within stipulated time. Extends credit facilities to customers and advises them on supply and demand position of goods and prevailing market prices. Keeps in touch with Government rules and regulations such as sales-tax, income-tax, shop and commercial establishment act, etc. Maintains records of purchases and sales effected. Attends to correspondence relating to business. May publicise goods to stimulate sales. May act as Commission Agent, Selling Agent, Stockist etc. for goods in which he deals.

ISCO 08 Unit Group Details:

Code 5249
 Title Sales Workers Not Elsewhere
 Classified

5249.0500

Retail Dealer

Retail Dealer; Retailer; Merchant and Shopkeeper, Retail Trade purchases goods in small quantities and runs retail business, working on own account, by selling them to customers. Estimates requirements of goods. Contacts Wholesale Dealers, Selling Agent, Stockists etc. and purchases goods at competitive

rates. Ensures neatness and cleanliness of premises and proper display and storage of goods. Checks stock and sales registers every morning. Prepares bills or cash memos for goods sold and collects money from customers. Extend credit facilities to regular and reliable customers. Studies market fluctuations intelligently to decide selling prices of goods in stock. Maintains day-to-day account of transactions made. Performs all tasks usually assigned to Salesmen or Shop Assistants in big establishments such as attending and showing goods to customers, weighing, measuring and packing goods etc. May attend to correspondence and perform clerical tasks.

ISCO 08 Unit Group Details:

Code 5249

Title Sales Workers Not Elsewhere
Classified

5249.0600 Selling Agent

Selling Agent sells goods in allotted area on behalf of one or more producers, or manufactures according to their instructions on salary or commission basis. Introduces his products in allotted area by displaying samples, distributing catalogues, contacts by Commercial Traveller and other publicity media. Keeps stock of goods as necessary. Discusses and finalises terms regarding sales, commission, credit facilities, etc. Books orders and supplies products either from stock in hand or arranges expeditious supply through his principals. Keeps record of transactions made and charges commission on sales effected. Attends to all correspondence, enquiries relating to sale and servicing of goods sold or supplied. Keeps producer or manufacturer informed of market conditions,

competitive products, etc. and devises means to promote sales in consultation with him. May appoint sub-agents, if necessary. May undertake servicing and repairing of goods supplied. May be known as Sole Selling Agent if producer or manufacturer has no other agent in area. May be designated according to products sold.

ISCO 08 Unit Group Details:

Code 5249

Title Sales Workers Not Elsewhere
Classified

5249.0700

Stockist

Stockist stocks goods of one or more producers or manufacturers and sells them to dealers or large consumers at prescribed rates. Contacts producers, manufacturers or their agents to discuss and settle terms and conditions of sales, rate of commission, credit facilities etc. Estimates requirements and places orders with producers, manufacturers or their agents for supplying goods. Ensures that goods supplied conform to agreed standards. Arranges for proper storage of goods and sells them to dealers or large consumers at prescribed rates. Extends credit facilities to customers if effected. Collects his commission from producers, manufacturers or agents. Keeps in touch with Government rules and regulations on sales-tax, income-tax, shop and commercial establishment Act, etc. and maintains necessary records. May supply goods against orders booked by authorised employees of producers and manufacturers. May also work as Purchasing Agent, Selling Agent, etc. on behalf of Government or other agencies.

ISCO 08 Unit Group Details:

Code 5249
 Title Sales Workers Not Elsewhere Classified

Sub Division 53

Personal Care Workers

Personal care workers provide care, supervision and assistance for children, patients and elderly, convalescent or disabled persons in institutional and residential settings.

Tasks performed by workers in this sub-major group usually include: assisting with mobility, washing and other personal needs; assisting children individually to learn social skills; supervising and participating in activities that enhance the child's physical, social, emotional and intellectual development in schools and preschool; observing and reporting concerns to appropriate medical or social service worker.

Occupations in this Sub Division are classified into the following Groups:

531 Child Care Workers and Teachers' Aides
532 Personal Care Workers in Health Services

Group 531

Child Care Workers and Teachers' Aides

Child Care Workers and Teachers' Aides provide care and supervision for children in schools, residential homes and child care facilities.

Occupations in this Group are classified into the following Families:

5311 Child Care Workers
5312 Teachers' Aides

Family 5311

Child Care Workers

Child-care workers provide care and supervision for children in residential homes and in before-school, after-school, vacation and day care centres.

5311.0100

Ayah, Institutional

Ayah; Maid (Institutional) attends to comfort of women residents in hotels, waiting rooms, clubs, and other institutions and looks after their children. Prepares beds for women residents and their children. Bathes children and dresses them and dusts and cleans rooms. Washes clothes of children and women residents. Takes out children to public parks for playing and other recreation. Feeds children. May escort children to and from school and look after their comfort and be called 'AYAH SCHOOL'. May be known as 'AYAH, WAITING ROOM', when looking after lady passengers in waiting room at Railway or bus stations.

ISCO 08 Unit Group Details:

Code	5311
Title	Child Care Workers

5311.0200

Child Care Worker

Child Care Worker attends to children at schools, businesses, private households, and child care institutions. Performs a variety of tasks, such as dressing, feeding, bathing, and overseeing play. Supports children's emotional and social development, encouraging understanding

of others and positive self-concepts. Cares for children in institutional setting, such as group homes, nursery schools, private businesses, or schools for the differently-abled. Sanitises toys and play equipment. Disciplines children and recommend or initiate other measures to control behaviour, such as caring for own clothing and picking up toys and books. Identifies signs of emotional or developmental problems in children and bring them to parents' or guardians' attention. Observes and monitors children's play activities. Keeps records on individual children, including daily observations and information about activities, meals served, and medications administered. Instructs children in health and personal habits such as eating, resting, and toilet habits. Reads to children, and teaches them simple painting, drawing, handicrafts, and songs. Organizes and participates in recreational activities, such as games.

ISCO 08 Unit Group Details:

Code	5311
Title	Child Care Workers

5311.0300 Governess

Governess cares for children in private home and looks after their recreation, diet, health and development. Teaches children good health and personal habits and assists them in their studies. Arranges parties, outings and picnics for children. Takes disciplinary measures to control children's behaviour. Ascertains cause of behaviour problems of children and devises means for solving them. May teach foreign language to children cared for. May be designated as NURSERY GOVERNESS if engaged to care for young children.

ISCO 08 Unit Group Details:

Code	5311
Title	Child Care Workers

5311.0400

Ayah, Domestic

Ayah; Nurse Maid (Domestic) takes care of children in private households. Attends to the requirements of the children and watches over their activities. Assists children in bathing, dressing and feeding. Takes them out for walks and recreation and plays and exercises with children. Washes their garments. Takes infants out in hand-cart or perambulator. May perform other house-hold work, not connected with child care. May be known as WET NURSE if she feeds infant with her own milk.

ISCO 08 Unit Group Details:

Code	5311
Title	Child Care Workers

5311.9900

Child Care Workers, Other

Childcare Workers, other include all other workers engaged in taking care of employers' children and oversee their daily activities, or engage in helping teachers to look after school children.

ISCO 08 Unit Group Details:

Code	5311
Title	Child Care Workers

Family 5312

Teachers' Aides

Teachers' aides perform non-teaching duties to assist teaching staff, and provide

care and supervision for children in schools and pre-schools.

Group 532 Personal Care Workers in Health Services

Personal care workers in health services provide personal care and assistance with mobility and activities of daily living to patients, and elderly, convalescent and disabled people in health care and residential settings.

Occupations in this Group are classified into the following Families:

5321 Health Care Assistants
5322 Home-Based Personal Care Workers
5329 Personal Care Workers in Health Services, Not Elsewhere Classified

Family 5321 Health Care Assistants

Health Care Assistants provide direct personal care and assistance with activities of daily living to patients and residents in a variety of health care settings such as hospitals, clinics, and residential nursing care facilities. They generally work in implementation of established care plans and practices, and under the direct supervision of medical, nursing or other health professionals or associate professionals.

Family 5322 Home-Based Personal Care Workers

Home-based personal care workers provide routine personal care and assistance with activities of daily living to persons who are in need of such care due to effects of ageing, illness, injury, or other physical or mental condition in private homes and other independent residential settings.

5322.0101 Home Health Aide

Home Health Aide (HHA) is also known as Home Health Provider and Unlicensed Assistive Personnel (UAP). Provide routine individualised healthcare to the elderly, convalescents, or persons with disabilities at the patient's home. Monitor or report changes in health status. Provide personal care such as bathing, dressing, and grooming of patient.

Qualification Pack Details:

QP NOS Reference	HSS/Q5102
QP NOS Name	Home Health Aide
NSQF Level	3

ISCO 08 Unit Group Details:

Code	5322
Title	Home Based Personal Care Workers

5322.9900 Home Based Personal Care Workers, Other

Home-Based Personal Care Workers, other include personal care workers who attend to various personal needs and in general provide personal care for persons in need of such care at their own homes because of physical or mental illness or disability or because of impairment due to old age not elsewhere classified.

ISCO 08 Unit Group Details:

Code 5322

Title Home Based Personal Care Workers

Family 5329**Personal Care Workers in Health Services, Not Elsewhere Classified**

T family covers personal care workers in health services not classified elsewhere in. For instance the group includes occupations such as Dental aid, Sterilization aid, Hospital orderly, Medical Imaging Assistant and Pharmacy aid.

**5329.0101
General Duty Assistant**

General Duty Assistant Healthcare (GDA) is also known as “Nursing Care Assistants”, “Nursing Assistant”, “Nursing Aides”, “Bedside Assistants” or “Orderlies” when working in a hospital environment. Individual on the job provides patient care and help maintain a suitable environment. Some of the key responsibilities of the General Duty Assistant are to provide patient’s daily care, patient’s comfort, patient’s safety and patient’s health needs.

Qualification Pack Details:

QP NOS Reference HSS/Q5101

QP NOS Name General Duty Assistant

NSQF Level 3

ISCO 08 Unit Group Details:

Code 5329

Title Personal Care Workers in Health Services Not Elsewhere Classified

Sub Division 54**Protective Service Workers**

Protective services workers protect individuals and property against fire and other hazards, maintain law and order and enforce laws and regulations

Tasks performed by workers in this sub-major group usually include: preventing, fighting and extinguishing fires; rescuing people from burning buildings and accident sites and those trapped in dangerous situations; maintaining law and order, enforcing laws and regulations, patrolling public areas and arresting suspected offenders; directing traffic and assuming authority in the event of accidents; watching over and maintaining order among inmates of prisons, reformatories or penitentiaries; patrolling or monitoring premises to guard property against theft and vandalism, controlling access to establishments and maintaining order and enforcing regulations at public events and within establishments. Supervision of other workers may be included.

Occupations in this Sub Division are classified into the following Groups:

541 Protective Service Workers**Group 541
Protective Service Workers**

Protective services workers protect individuals and property against fire and other hazards, maintain law and order and enforce laws and regulations.

Occupations in this Group are classified into the following Families:

5411 Fire-fighters**5412 Police Officers**

5413	Prison Guards
5414	Security Guards
5419	Protective Services Workers, Not Elsewhere Classified

Family 5411**Fire-fighters**

Fire-fighters prevent, fight and extinguish fires and assist in other emergencies, protect life and property and conduct rescue efforts.

5411.0100**Fire Fighter**

Fire Fighter; Fireman (Fire Service), fights fires as member of firefighting force using firefighting equipment to extinguish fire, rescue people and property from fire and performs sentry duty. Visits scene of fire on motor vehicle equipped with firefighting material, water pumps etc. on receipt of fire information. Connects and mans hose to spray water or chemicals on fire, or uses portable fire extinguisher in places not accessible with hose. Demolishes parts of buildings or other structure as necessary, to clear passage and to prevent further spread of fire. Rescues trapped persons and administers artificial respiration to those overcome by heat or fire. Maintains firefighting equipment in perfect condition and performs sentry duty at fire station according to roster. May perform other services during emergencies or natural calamities such as flood, storm by rescuing people in danger, manning hoses to assist police to control rioters, extricating persons or animals from places not easily accessible etc. May drive fire

truck. May undertake minor repairs to equipment.

ISCO 08 Unit Group Details:

Code	5411
Title	Fire-fighters

5411.9900**Fire Fighters, Other**

Fire Fighters, other include all other Fire Fighters engaged in extinguishing or controlling fire not elsewhere classified.

ISCO 08 Unit Group Details:

Code	5411
Title	Fire-fighters

Family 5412**Police Officers**

Police officers maintain law and order, patrolling public areas, enforcing laws and regulations and arresting suspected offenders.

5412.0100**Police Constable**

Police Constable; Constable maintains law and order in his beat, serves summons and warrants, arrests criminals, controls traffic and guards treasures and important Government establishments and property. Receives instructions about his duty and special assignments. Gets familiarised with the area and people living in the beat and watches suspicious characters and disreputable establishments and reports to superior officers any unusual or unexplained events. Performs services such as serving summons and warrants, Directs traffic, assuming authority in case of accident, rendering first aid to injured.

Conducts investigation of petty cases and arrests criminals under warrant and keep them into custody, escorts criminals to jail, court or in journey. Guards Government securities, and prohibited areas and establishments. Keeps records, and makes report of activities to his superior officers. May perform duties of armed guard, criminal investigation, traffic control and be designated as CONSTABLE, ARMED POLICE; CONSTABLE, C.I.D.; CONSTABLE, TRAFFIC.

ISCO 08 Unit Group Details:

Code	5412
Title	Police Officers

5412.0200

Sepoy, Customs

Sepoy, Customs; protects national borders, ports, aerodromes, etc. by preventing smuggling of goods. Guards vital points in Docks, Bunders and airports. Keeps watch over suspected vessels and assists Searcher, Customs in carrying out searches when ordered. Escorts uncleared packages to godowns for deposit. May be required to work as peon.

ISCO 08 Unit Group Details:

Code	5412
Title	Police Officers

5412.0300

Constable, Excise

Constable, Excise examines baggage's, houses, shops, etc. for preventing smuggling or manufacture, storage and sale of illicit goods. Examines luggage of passengers in railway trains, or platform, bus stations to detect illegal possession. Searches shops, godowns, houses for illegal storage of excisable goods. Guards

exits of factory and reports cases of unauthorized or illegal traffic of goods to Excise Inspector. Checks consignments physically with relevant clearance documents when excisable goods are being removed from factories, godowns, etc. May perform unskilled office duties e.g. Carrying of dak.

ISCO 08 Unit Group Details:

Code	5412
Title	Police Officers
5412.9900	
Police Officers, Other	

Police Officers, other include all other protective services officers involved in maintaining law and order and enforcing laws and regulations not elsewhere classified.

ISCO 08 Unit Group Details:

Code	5412
Title	Police Officers

Family 5413

Prison Guards

Prison guards watch over and maintain order among inmates of prisons, reformatories or penitentiaries.

5413.0100

Warder, Jail

Warder, Jail, guards inmates of jails, reformatory or penitentiary, sees to their needs and maintains discipline. Searches arriving prisoners, and puts their valuables in safe custody. Escorts prisoners to cell and locks them in and makes periodic inspection of cells. Supervises prisoners at work and patrols prison areas and walls to

prevent escape of prisoners. Counts prisoners at odd hours and reports missing or shortage to Head Warder or Jailer. Supervises serving of meals to prisoners and reports illness of convicts to Jailor. May serve meals to prisoners. May teach prisoners in any craft or vocation.

ISCO 08 Unit Group Details:

Code	5413
Title	Prison Guards

5413.9900

Prison Guards, Other

Prison Guards, other include those who watch over and maintain discipline among inmates of prisons, reformatories or penitentiaries not elsewhere classified.

ISCO 08 Unit Group Details:

Code	5413
Title	Prison Guards

Family 5414

Security Guards

Security guards patrol or monitor premises to guard property against theft and vandalism. They control access to establishments and maintain order and enforce regulations at public events and within establishments.

5414.0101

Security Officer

Security Officer makes arrangements to guard industrial plants, establishments, buildings and other property from fire, thefts, pilferage and unauthorized entry, and enforces such preventive measures as necessary to eliminate them. Plans, controls and supervises security arrangements of industrial plants,

establishments, buildings, men, material and other moveable and immovable property against fire, thefts; pilferage, unauthorized entry and personal hazards. Allots duties to security personnel at the gates of workshops, stores, ware-houses, water works and administrative buildings to check unauthorized entry of men and passage of material. Issues gate passes to visitors desiring entry into restricted premises and checks security personnel on duty. Enquires in to complaints of unauthorized entry of men and material and cases of theft etc. and reports the matter to police for further action. Maintains discipline amongst security personnel. Looks after welfare of security personnel such as housing, messing, arranges their transfers from one department to another; assists firefighting personnel in case of fires.

Qualification Pack Details:

QP NOS Reference	SKS/Q0601
QP NOS Name	Security Officer
NSQF Level	6

ISCO 08 Unit Group Details:

Code	5414
Title	Security Guards

5414.0102

Assignment Manager

Assignment Managers carry out site-specific threats and risks assessment, plan and organize security; help clients in developing Standard Operating Procedures (SOP) and site instructions. They are responsible for development of a security plan and deployment of manpower and equipment for executing a security plan. Assignment Managers assess the efficacy of security unit's guarding operations, training standards and preparedness to deal with

emergencies through security officers. Planning, training, deployment, administration, documentation, reporting and liaison are some of the important tasks of Assistant Managers.

Qualification Pack Details:

QP NOS Reference	SKS/Q0701
QP NOS Name	Assignment Manager
NSQF Level	6

ISCO 08 Unit Group Details:

Code	5414
Title	Security Guards

5414.0111

Security Supervisor

Security Supervisors take over a shift and organizes guarding duties as per organizational procedure and instructions from superiors. They are responsible for deployment of manpower and resources optimally. They allot duties to individuals and supervise their work. Supervisors also carry out security documentation, report security incidents to designated superior and agencies like police, fire and medical, as the case may be.

Qualification Pack Details:

QP NOS Reference	SKS/Q0301
QP NOS Name	Security Supervisor
NSQF Level	5

ISCO 08 Unit Group Details:

Code	5414
Title	Security Guards

5414.0121

CCTV Supervisor

CCTV Supervisor needs to know the basics of private security, supervision of security

unit operations and spectrum of threats and risks to security and safety. CCTV Supervisors observe designated premises through CCTV systems; pick up early indications of problems pertaining to security and safety and respond appropriately by alerting various agencies.

Qualification Pack Details:

QP NOS Reference	SKS/Q0501
QP NOS Name	CCTV Supervisor
NSQF Level	5

ISCO 08 Unit Group Details:

Code	5414
Title	Security Guards

5414.0151

Armed Security Guard

Armed Security Guard entails guarding designated premises and people. The core responsibility of an Armed Security Guard includes guarding life, property and premises against threats and risks. The role requires initiative and effective communication

Qualification Pack Details:

QP NOS Reference	SKS/Q0201
QP NOS Name	Armed Security Guard
NSQF Level	4

ISCO 08 Unit Group Details:

Code	5414
Title	Security Guards

5414.0171

Personal Security Officer

Personal Security Officer protects the principal against possible threats. A PSO is required to operate within the confines of the assigned tasks and are required to

operate alone or as part of a team both in armed and unarmed roles.

Qualification Pack Details:

QP NOS Reference	SKS/Q0401
QP NOS Name	Personal Security Officer
NSQF Level	5

ISCO 08 Unit Group Details:

Code	5414
Title	Security Guards

5414.0200

Home Guard

Home Guard assists police in maintaining law and order and serves as second line of defence in cases of emergencies. Reports to respective police station or area headquarter as scheduled, according to duty roster or standing orders and receives instructions on tasks assigned. Visits allotted area and assists police in maintaining law and order, regulating traffic, preventing crimes and other civic duties as may be assigned. Instructs people on air raid precautions, fire-fighting, first aids etc., and keeps up their morale during emergencies. Performs security and civil defence services, when required. May assist in guarding Govt. buildings, important places, railway stations, etc.

ISCO 08 Unit Group Details:

Code	5414
Title	Security Guards

5414.0400

Watchman

Watchman; Chowkidar guard buildings, premises, industrial plants, ware-houses, railway goods-sheds and yards etc. against fire, theft, illegal entry and other such contingencies. Receives instructions about

his duty, patrols around buildings and premises frequently, examining doors, windows and gates and ensures that they are properly secured and have not been tampered with. Watches for fire hazards, broken water pipes, presence of unauthorized persons. Reports irregularities or anything, found tampered to authorities. Informs police, fire brigade in emergency. May use tell-tale watches to record inspection rounds at specified time. May attend to telephone calls, cleaning of floors, furniture and switching off lights and fans when not in use.

ISCO 08 Unit Group Details:

Code	5414
Title	Security Guards

5414.0501

Gateman/Unarmed Security Guard

Gateman; Darban; Security Guard checks entrance and exit of unauthorized persons and goods to and from residential and commercial buildings, industrial premises etc. Attends entrance or exit of premises at specified hours. Checks gate passes, where provided, for authorized entry or exit of persons and goods to and from premises. Ascertains purpose of visit from outside caller and guides bonafide visitor to appropriate persons or place or directs visitor to enquiry or other proper authority for grant of pass or permission where entry without pass is restricted. Searches persons, vehicles and checks goods at exit for contraband articles, where required. Collects passes or tokens issued to visitor and forwards them to concerned authority at end of his duty. Reports unauthorized entry and suspicious occurrences to superior officers. May detain unauthorized persons and inform his superior or police. May maintain visitors book at entrance and

allow visitors to enter premises after recording relevant particulars.

Qualification Pack Details:

QP NOS Reference	SKS/Q0101
QP NOS Name	Unarmed Security Guard
NSQF Level	4

ISCO 08 Unit Group Details:

Code	5414
Title	Security Guards

Family 5419**Protective Services Workers, Not Elsewhere Classified**

This family covers protective services workers not classified elsewhere in the group 541, Protective services workers. For instance, this family includes lifeguards, crossing guards and animal control officers.

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