



# Jal Mitra

QP Code: PSC/Q0117

Version: 1.0

NSQF Level: 4

Water Management and Plumbing Skill Council || Water Management and Plumbing Skill Council,  
Unit- 606 & 609, Tower-C, DLF Prime Towers, Phase-1, Okhla, Delhi, 110020

# Contents

PSC/Q0117: Jal Mitra .....	3
<i>Brief Job Description</i> .....	3
Applicable National Occupational Standards (NOS) .....	3
<i>Compulsory NOS</i> .....	3
<i>Qualification Pack (QP) Parameters</i> .....	3
PSC/N0146: Construct and Maintain Water Conservation Structures for Village Dwellings, Farms and Small Communities .....	5
PSC/N0147: Construct and Repair Soak Pits and Kitchen Gardens for Re-use of Grey Water in a Household and Community .....	9
PSC/N0148: Assess Functionality of IoT Based Remote Monitoring Systems Used in Rural Water Supply Programs.....	13
PSC/N0149: Assist Village Water and Sanitation Committees (VWSCs) in scheme planning, social mobilisation and enhancing community ownership of schemes.....	17
PSC/N0150: Carry out Service Delivery and Management Activities for Rural Projects .....	23
PSC/N0136: Apply Health and Safety Practices at the Workplace .....	27
PSC/N0138: Implement Measures to Work Effectively .....	33
SGJ/N1702: Optimize resource utilization at workplace .....	39
Assessment Guidelines and Weightage.....	42
<i>Assessment Guidelines</i> .....	42
<i>Assessment Weightage</i> .....	43
Acronyms .....	45
Glossary .....	46

## PSC/Q0117: Jal Mitra

### Brief Job Description

Jal Mitra-Jal Jeevan Mission would act as a one stop solution provider who gives various services to communities under the Jal Jeevan Mission scheme such as plumbing installation, maintenance, repair and operations of various plumbing related structures and systems. The person will also mobilize community members and organize for required resources across a specified geographic area with support from Village Water & Sanitation Committee, Gram Panchayat and government bodies

### Personal Attributes

The individual must be able to do laborious work, be a good listener and a team player. The person must be willing to take ownership, be result oriented and have a positive attitude.

### Applicable National Occupational Standards (NOS)

#### Compulsory NOS:

1. [PSC/N0146: Construct and Maintain Water Conservation Structures for Village Dwellings, Farms and Small Communities](#)
2. [PSC/N0147: Construct and Repair Soak Pits and Kitchen Gardens for Re-use of Grey Water in a Household and Community](#)
3. [PSC/N0148: Assess Functionality of IoT Based Remote Monitoring Systems Used in Rural Water Supply Programs](#)
4. [PSC/N0149: Assist Village Water and Sanitation Committees \(VWSCs\) in scheme planning, social mobilisation and enhancing community ownership of schemes](#)
5. [PSC/N0150: Carry out Service Delivery and Management Activities for Rural Projects](#)
6. [PSC/N0136: Apply Health and Safety Practices at the Workplace](#)
7. [PSC/N0138: Implement Measures to Work Effectively](#)
8. [SGJ/N1702: Optimize resource utilization at workplace](#)

### Qualification Pack (QP) Parameters

Sector	Plumbing
Sub-Sector	Industrial / Non-Industrial Plumbing

Occupation	Plumbing Systems Installation and Maintenance
Country	India
NSQF Level	4
Aligned to NCO/ISCO/ISIC Code	2022/PLUM/WMP5/05464
Minimum Educational Qualification & Experience	10th + I.T.I with 3 years of relevant experience OR 12th + 3 years of relevant experience OR 10th + NSQF Level-4 Certification (Plumber - General) with 3 years of relevant experience OR 3 Years Diploma in Civil or Mechanical Engineering with 2 years of relevant experience
Minimum Level of Education for Training in School	Not Applicable
Pre-Requisite License or Training	NA
Minimum Job Entry Age	20 Years
Last Reviewed On	23-06-2021
Next Review Date	23-06-2026
NSQC Approval Date	
Version	1.0

## PSC/N0146: Construct and Maintain Water Conservation Structures for Village Dwellings, Farms and Small Communities

### Description

This unit deals in detail with the planning, construction and maintenance of simple water conservation structures for village dwellings, farms and communities.

### Scope

The scope covers the following :

- Plan for construction
- Carry out construction and maintenance

### Elements and Performance Criteria

#### *Plan for construction*

To be competent, the user/individual on the job must be able to:

- PC1. estimate the rain water harvesting potential based on annual rainfall for a catchment area including a rooftop, farm or small community.
- PC2. select a simple water conservation structure suitable for a village dwelling, farm or small community based on type of terrain, area and amount of water harvested
- PC3. identify site for construction of water harvesting structure
- PC4. estimate and source materials, tools and labours required for construction of water harvesting structure

#### *Carry out construction and maintenance*

To be competent, the user/individual on the job must be able to:

- PC5. perform construction of water harvesting structures
- PC6. perform regular cleaning and maintenance of the water harvesting structures
- PC7. repair faulty water harvesting structure
- PC8. lay bricks, mortar, concrete for construction of water conservation structures

### Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1. standards relevant to the plumbing industry
- KU2. importance of accuracy in measurements and calculations
- KU3. mathematical formulas needed to calculate area, length, perimeter, diameter, circumference, volume, mass, force, pressure, scales, ratios etc.
- KU4. global, national and regional water crises scenario
- KU5. need for conservation of water quantity and quality and ensuring sustainability of the structure
- KU6. role of community and organizations in water conservation

- KU7. water conservation plans for villages and introduction to water budgeting
- KU8. various natural sources of water
- KU9. procedures and precautions for conservation of rainwater in water conservation structures
- KU10. various water conservation structures and their application such as contour trenches, ponds, watersheds, water basins, stop dams, etc.
- KU11. materials, tools, equipment and labours required for construction of water conservation structures for village dwelling, farms and small communities
- KU12. construction, operation and maintenance procedures for water conservation structures
- KU13. measures to avoid air and water contamination, erosion and sedimentation while collecting and storing water in water conservation structures
- KU14. health and safety measures to be taken during construction and maintenance of water conservation structures

### Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1. read and write common plumbing symbols
- GS2. fill in relevant forms for material requisitioning, reporting, employment and other purposes
- GS3. comprehend required quantities, names of materials, equipment and supplies and related forms and formats
- GS4. provide verbal instructions and information about work related matters in local language or Hindi or English
- GS5. state information, doubts and concerns about work related matters with clarity and in a professional manner
- GS6. evaluate adequacy of information available for sound decision making
- GS7. co-ordinate with a range of team members and activities
- GS8. plan work activities and communicate to others whose work plans and timelines may be affected
- GS9. identify the objectives, concerns and priorities of the client
- GS10. identify array of solutions that addresses needs of the client
- GS11. apply problem solving skills
- GS12. communicate and discuss work flow related difficulties and problems in order to find out solution from official authorities that can't be solved at one's level of authority
- GS13. identify how the shortcoming or defects in materials, supplies, tools and equipment can impact work quality and performance

## Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Plan for construction</i>	17	25	-	18
PC1. estimate the rain water harvesting potential based on annual rainfall for a catchment area including a rooftop, farm or small community.	4	6	-	4
PC2. select a simple water conservation structure suitable for a village dwelling, farm or small community based on type of terrain, area and amount of water harvested	4	6	-	4
PC3. identify site for construction of water harvesting structure	4	6	-	4
PC4. estimate and source materials, tools and labours required for construction of water harvesting structure	5	7	-	6
<i>Carry out construction and maintenance</i>	13	15	-	12
PC5. perform construction of water harvesting structures	5	7	-	4
PC6. perform regular cleaning and maintenance of the water harvesting structures	4	4	-	4
PC7. repair faulty water harvesting structure	4	4	-	4
PC8. lay bricks, mortar, concrete for construction of water conservation structures	-	-	-	-
<b>NOS Total</b>	<b>30</b>	<b>40</b>	<b>-</b>	<b>30</b>

## National Occupational Standards (NOS) Parameters

NOS Code	PSC/N0146
NOS Name	Construct and Maintain Water Conservation Structures for Village Dwellings, Farms and Small Communities
Sector	Plumbing
Sub-Sector	Industrial / Non-Industrial Plumbing
Occupation	Plumbing Systems Installation and Maintenance
NSQF Level	5
Credits	TBD
Version	1.0
Last Reviewed Date	NA
Next Review Date	NA
NSQC Clearance Date	



## PSC/N0147: Construct and Repair Soak Pits and Kitchen Gardens for Re-use of Grey Water in a Household and Community

### Description

This unit deals in detail with the re-use of grey water generated in a household or community by the construction of soak pits and kitchen gardens and repairing them, if found faulty.

### Scope

The scope covers the following :

- Construction of soak pits and kitchen gardens for re-use of grey water
- Repair of soak pits and kitchen gardens

### Elements and Performance Criteria

#### *Construction of soak pits and kitchen gardens for re-use of grey water*

To be competent, the user/individual on the job must be able to:

- PC1. estimate average grey water generation for a household per day
- PC2. estimate size of soak pit required to treat the grey water generated
- PC3. estimate and source materials and tools required for construction of soak-pit and kitchen garden
- PC4. construct soak pit for treatment of the grey water and ground water re-charge
- PC5. construct a kitchen garden for the re-use of grey water

#### *Repair of soak pits and kitchen gardens*

To be competent, the user/individual on the job must be able to:

- PC6. inspect the constructed soak pit and kitchen garden for faults
- PC7. rectify the fault(s) in soak pit and kitchen garden

### Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1. differentiation of grey water from other types of water in households
- KU2. various grey water sources in households
- KU3. grey water estimation process
- KU4. quality of grey water and its risk assessment
- KU5. benefits of grey water management at household and community level
- KU6. role of community and organizations in grey water management
- KU7. village action plan for grey water management
- KU8. technological options for grey water management at household and community level such as soak pit, kitchen garden, filtration chambers, etc.
- KU9. materials, tools, equipment and labour required for construction of soak pit and kitchen garden

- KU10. construction and maintenance of community soak pit (Reference- Swachh Bharat Mission guidelines)
- KU11. measures to avoid air and water contamination, erosion and sedimentation during construction and maintenance of soak pit and kitchen garden
- KU12. health and safety measures to be taken during construction and maintenance of soak pit and kitchen garden

## Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1. read and write common plumbing symbols
- GS2. fill in relevant forms for material requisitioning, reporting, employment and other purposes
- GS3. comprehend required quantities, names of materials, equipment and supplies and related forms and formats
- GS4. provide verbal instructions and information about work related matters in local language or Hindi or English
- GS5. state information, doubts and concerns about work related matters with clarity and in a professional manner
- GS6. evaluate adequacy of information available for sound decision making
- GS7. co-ordinate with a range of team members and activities
- GS8. plan work activities and communicate to others whose work plans and timelines may be affected
- GS9. identify the objectives, concerns and priorities of the client
- GS10. identify array of solutions that addresses needs of the client
- GS11. apply problem solving skills
- GS12. communicate and discuss work flow related difficulties and problems in order to find out solution from official authorities that can't be solved at one's level of authority
- GS13. identify how the shortcoming or defects in materials, supplies, tools and equipment can impact work quality and performance

## Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Construction of soak pits and kitchen gardens for re-use of grey water</i>	22	32	-	22
PC1. estimate average grey water generation for a household per day	4	6	-	4
PC2. estimate size of soak pit required to treat the grey water generated	4	6	-	4
PC3. estimate and source materials and tools required for construction of soak-pit and kitchen garden	4	6	-	4
PC4. construct soak pit for treatment of the grey water and ground water re-charge	5	7	-	6
PC5. construct a kitchen garden for the re-use of grey water	5	7	-	4
<i>Repair of soak pits and kitchen gardens</i>	8	8	-	8
PC6. inspect the constructed soak pit and kitchen garden for faults	4	4	-	4
PC7. rectify the fault(s) in soak pit and kitchen garden	4	4	-	4
<b>NOS Total</b>	<b>30</b>	<b>40</b>	<b>-</b>	<b>30</b>

## National Occupational Standards (NOS) Parameters

NOS Code	PSC/N0147
NOS Name	Construct and Repair Soak Pits and Kitchen Gardens for Re-use of Grey Water in a Household and Community
Sector	Plumbing
Sub-Sector	Industrial / Non-Industrial Plumbing
Occupation	Plumbing Systems Installation and Maintenance
NSQF Level	5
Credits	TBD
Version	1.0
Last Reviewed Date	NA
Next Review Date	NA
NSQC Clearance Date	

## PSC/N0148: Assess Functionality of IoT Based Remote Monitoring Systems Used in Rural Water Supply Programs

### Description

This unit deals in detail with the basic understanding of remote monitoring, usage of IoT and sensors used in rural water supply programs.

### Scope

The scope covers the following :

- Assess functionality of IoT devices

### Elements and Performance Criteria

#### *Assess functionality of IoT devices*

To be competent, the user/individual on the job must be able to:

- PC1. read the dashboard of the IoT based remote water monitoring system
- PC2. check if appropriate supply of water and current is available to the equipment
- PC3. check the cables for any damage or improper usage
- PC4. check if appropriate analog/digital signal is received from the sensor at the equipment terminal
- PC5. perform basic troubleshooting of the remote monitoring system

### Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1. various types of sensors and their application
- KU2. types and applications of IoT based equipment used in remote water monitoring and management
- KU3. components of IoT based Piped Water Monitoring System including pump controller, smart stand post and remote monitoring dashboard
- KU4. information available from the dashboards of remote water monitoring systems
- KU5. importance of maintenance of IoT based remote water monitoring systems
- KU6. basic troubleshooting of faults that could occur in an IoT based remote water monitoring system
- KU7. health, safety and security guidelines to be adhered to while dealing with IoT based remote water monitoring systems

### Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1. read and write common information from dashboard indicators

- GS2. fill in relevant forms for reporting, troubleshooting action, etc.
- GS3. co-ordinate with clients and team members for timely completion of work
- GS4. plan the work activities in a flow to minimize the inconvenience of others i.e. co-workers, users.
- GS5. plan work activities and communicate to others whose work plans and timelines may be affected
- GS6. identify the objectives, concerns and priorities of the user and client
- GS7. apply problem solving skills
- GS8. work in a disciplined and focused manner
- GS9. communicate and discuss work flow related difficulties and problems in order to find out solution from official authorities that can't be solved at one's level of authority

## Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Assess functionality of IoT devices</i>	30	50	-	20
PC1. read the dashboard of the IoT based remote water monitoring system	6	10	-	4
PC2. check if appropriate supply of water and current is available to the equipment	6	10	-	4
PC3. check the cables for any damage or improper usage	6	10	-	4
PC4. check if appropriate analog/digital signal is received from the sensor at the equipment terminal	6	10	-	4
PC5. perform basic troubleshooting of the remote monitoring system	6	10	-	4
<b>NOS Total</b>	<b>30</b>	<b>50</b>	<b>-</b>	<b>20</b>

## National Occupational Standards (NOS) Parameters

NOS Code	PSC/N0148
NOS Name	Assess Functionality of IoT Based Remote Monitoring Systems Used in Rural Water Supply Programs
Sector	Plumbing
Sub-Sector	Industrial / Non-Industrial Plumbing
Occupation	Plumbing Systems Installation and Maintenance
NSQF Level	4
Credits	TBD
Version	1.0
Last Reviewed Date	NA
Next Review Date	NA
NSQC Clearance Date	



## PSC/N0149: Assist Village Water and Sanitation Committees (VWSCs) in scheme planning, social mobilisation and enhancing community ownership of schemes

### Description

This unit deals in detail with certain tasks performed by the Jal Mitra in co-ordination with village community members, committees and gram panchayat. The tasks relate to scheme planning, social mobilization and enhancing community ownership for the adoption and implementation of Jal Jeevan Mission and its associated elements like water conservation, efficient water usage practices and sustainability of Piped water schemes.

### Scope

The scope covers the following :

- Gather data and provide inputs required for planning of the scheme
- Mobilize participation of communities and enhance their ownership

### Elements and Performance Criteria

#### *Gather data and provide inputs required for planning of the scheme*

To be competent, the user/individual on the job must be able to:

- PC1. conduct survey to estimate the water requirements in consultation with the Village Water and Sanitation Committee (VWSC)
- PC2. undertake drinking water quality tests for the geographic area
- PC3. collate information for water budgeting and water quality mapping
- PC4. identify location in the community where water quality boards can be put up
- PC5. collate community related data and suggestions for water conservation, grey water re-use and water usage efficiency potential
- PC6. verify data and information collected before handover to the relevant authorities
- PC7. provide suggestions for creating tools and techniques that will engage the community members

#### *Mobilize participation of communities and enhance their ownership*

To be competent, the user/individual on the job must be able to:

- PC8. conduct stakeholder analysis
- PC9. enroll communities to participate in various schemes for water conservation and water usage efficiency practices.
- PC10. co-ordinate with the village committees and gram panchayat for implementation of schemes for water conservation and efficient water usage
- PC11. setup water quality board at gram panchayat
- PC12. facilitate the creation of a roadmap for Participatory Rural Appraisal (PRA) activities
- PC13. engage communities through various tools of Participatory Rural Appraisal (PRA) in co-ordination with village committees and gram panchayat

- PC14. ensure participation of diverse social groups of the village from different religions, castes and age groups for triangulation
- PC15. initiate dialogue and discussion between community members to find solutions on critical issues like health, sanitation, hygiene, etc.
- PC16. promote campaigns by conducting workshops, distributing flyers, organising rallies and other awareness building activities
- PC17. impart training to various local level stakeholders for use and care of the systems and structures installed

## Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1. various water conservation and efficient water usage solutions and schemes
- KU2. data and information required for planning various water conservation and efficient water usage solutions and schemes and how to obtain that data
- KU3. importance of data verification and data triangulation
- KU4. basic water quality mapping and water budgeting concepts and practices
- KU5. role of community and importance of mobilizing community members for successful implementation of water conservation and efficient water usage practices and schemes
- KU6. stakeholders involved in selection and implementation of water conservation and efficient water usage solutions and schemes
- KU7. how to conduct PRAs, structure and roles and responsibilities of VWSCs and other rural committees
- KU8. social and behavioural change required at the community level
- KU9. various types of campaigns and campaign activities
- KU10. key messages for awareness building of community members and other stakeholders
- KU11. cleaning and maintenance of water conservation structures

## Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1. read and write common information from water quality reports, campaign related published materials, etc.
- GS2. fill in relevant forms for data collation and sharing
- GS3. co-ordinate with community members, committees and gram panchayats
- GS4. plan the work activities in a flow to minimize the inconvenience of others i.e. co-workers, users.
- GS5. plan work activities and communicate to others whose work plans and timelines may be affected
- GS6. identify the objectives, concerns and priorities of the user and client
- GS7. apply problem solving skills
- GS8. work in a disciplined and focused manner



## Qualification Pack



GS9. communicate and discuss work flow related difficulties and problems in order to find out solution from official authorities that can't be solved at one's level of authority

## Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Gather data and provide inputs required for planning of the scheme</i>	14	26	-	14
PC1. conduct survey to estimate the water requirements in consultation with the Village Water and Sanitation Committee (VWSC)	2	4	-	2
PC2. undertake drinking water quality tests for the geographic area	2	4	-	2
PC3. collate information for water budgeting and water quality mapping	2	4	-	2
PC4. identify location in the community where water quality boards can be put up	2	4	-	2
PC5. collate community related data and suggestions for water conservation, grey water re-use and water usage efficiency potential	2	4	-	2
PC6. verify data and information collected before handover to the relevant authorities	2	3	-	2
PC7. provide suggestions for creating tools and techniques that will engage the community members	2	3	-	2
<i>Mobilize participation of communities and enhance their ownership</i>	16	24	-	6
PC8. conduct stakeholder analysis	2	4	-	0.5
PC9. enroll communities to participate in various schemes for water conservation and water usage efficiency practices.	2	3	-	0.5
PC10. co-ordinate with the village committees and gram panchayat for implementation of schemes for water conservation and efficient water usage	1	3	-	0.5
PC11. setup water quality board at gram panchayat	2	2	-	0.5
PC12. facilitate the creation of a roadmap for Participatory Rural Appraisal (PRA) activities	2	2	-	0.5

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC13. engage communities through various tools of Participatory Rural Appraisal (PRA) in co-ordination with village committees and gram panchayat	1	2	-	0.5
PC14. ensure participation of diverse social groups of the village from different religions, castes and age groups for triangulation	1	2	-	0.5
PC15. initiate dialogue and discussion between community members to find solutions on critical issues like health, sanitation, hygiene, etc.	1	2	-	1
PC16. promote campaigns by conducting workshops, distributing flyers, organising rallies and other awareness building activities	2	2	-	1
PC17. impart training to various local level stakeholders for use and care of the systems and structures installed	2	2	-	0.5
<b>NOS Total</b>	<b>30</b>	<b>50</b>	<b>-</b>	<b>20</b>

## National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	PSC/N0149
<b>NOS Name</b>	Assist Village Water and Sanitation Committees (VWSCs) in scheme planning, social mobilisation and enhancing community ownership of schemes
<b>Sector</b>	Plumbing
<b>Sub-Sector</b>	Industrial / Non-Industrial Plumbing
<b>Occupation</b>	Plumbing Systems Installation and Maintenance
<b>NSQF Level</b>	5
<b>Credits</b>	TBD
<b>Version</b>	1.0
<b>Last Reviewed Date</b>	NA
<b>Next Review Date</b>	NA
<b>NSQC Clearance Date</b>	

## PSC/N0150: Carry out Service Delivery and Management Activities for Rural Projects

### Description

This unit deals in detail with various service delivery and management activities to be performed to function as a rural entrepreneur to start enterprises to meet the local demands.

### Scope

The scope covers the following :

- Prepare for service delivery
- Carry out service delivery
- Manage post service delivery projects

### Elements and Performance Criteria

#### *Prepare for service delivery*

To be competent, the user/individual on the job must be able to:

- PC1. identify the needs and requirements of the client and the objectives to be achieved
- PC2. prepare a checklist of tasks and schedule of activities to achieve the objectives
- PC3. perform an estimation and costing of the materials and labour required
- PC4. seek approvals and suggestions on the workplan from the stakeholders

#### *Carry out service delivery*

To be competent, the user/individual on the job must be able to:

- PC5. arrange for resources as per plan from authorized sources
- PC6. implement plan with the support of stakeholders
- PC7. review the work to ascertain if the objectives are met
- PC8. ensure to enhance the service delivery, wherever required

#### *Manage post service delivery activities*

To be competent, the user/individual on the job must be able to:

- PC9. seek feedback from stakeholders about the work done
- PC10. maintain records of the materials consumed and inventory
- PC11. maintain accounts for incomes/revenues, expenses, margins and cash-flows
- PC12. identify opportunities for increasing cost effectiveness while maintaining quality and continuity

### Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1. importance of planning and time management
- KU2. how to plan for efficient delivery of projects
- KU3. tools for effective planning

- KU4. estimation and costing of materials and labour
- KU5. importance of maintaining quality, continuity and cost effectiveness
- KU6. importance of maintaining records of materials consumed and inventory
- KU7. basic accounting principles for micro enterprise
- KU8. calculation of margins and cash-flow

## Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1. read and write common plumbing symbols
- GS2. fill in relevant forms for material requisitioning, reporting, employment and other purposes
- GS3. comprehend required quantities, names of materials, equipment and supplies and related forms and formats
- GS4. provide verbal instructions and information about work related matters in local language or Hindi or English
- GS5. state information, doubts and concerns about work related matters with clarity and in a professional manner
- GS6. evaluate adequacy of information available for sound decision making
- GS7. co-ordinate with a range of team members and activities
- GS8. plan work activities and communicate to others whose work plans and timelines may be affected
- GS9. identify the objectives, concerns and priorities of the client
- GS10. identify array of solutions that addresses needs of the client
- GS11. apply problem solving skills
- GS12. communicate and discuss work flow related difficulties and problems in order to find out solution from official authorities that can't be solved at one's level of authority
- GS13. identify how the shortcoming or defects in materials, supplies, tools and equipment can impact work quality and performance



## Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Prepare for service delivery</i>	9	18	-	4
PC1. identify the needs and requirements of the client and the objectives to be achieved	2	4	-	1
PC2. prepare a checklist of tasks and schedule of activities to achieve the objectives	2	4	-	1
PC3. perform an estimation and costing of the materials and labour required	4	7	-	1
PC4. seek approvals and suggestions on the workplan from the stakeholders	1	3	-	1
<i>Carry out service delivery</i>	7	16	-	3
PC5. arrange for resources as per plan from authorized sources	3	6	-	1
PC6. implement plan with the support of stakeholders	2	6	-	1
PC7. review the work to ascertain if the objectives are met	2	4	-	1
PC8. ensure to enhance the service delivery, wherever required	-	-	-	-
<i>Manage post service delivery activities</i>	12	20	-	2
PC9. seek feedback from stakeholders about the work done	3	4	-	0.5
PC10. maintain records of the materials consumed and inventory	3	5	-	0.5
PC11. maintain accounts for incomes/revenues, expenses, margins and cash-flows	3	6	-	0.5
PC12. identify opportunities for increasing cost effectiveness while maintaining quality and continuity	3	5	-	0.5
<b>NOS Total</b>	<b>28</b>	<b>54</b>	<b>-</b>	<b>9</b>

## National Occupational Standards (NOS) Parameters

NOS Code	PSC/N0150
NOS Name	Carry out Service Delivery and Management Activities for Rural Projects
Sector	Plumbing
Sub-Sector	Industrial / Non-Industrial Plumbing
Occupation	Plumbing Systems Installation and Maintenance
NSQF Level	5
Credits	TBD
Version	1.0
Last Reviewed Date	NA
Next Review Date	NA
NSQC Clearance Date	

## PSC/N0136: Apply Health and Safety Practices at the Workplace

### Description

This unit is about following safety procedures, communicating potential hazards and dangers of accidents on the job.

### Scope

The scope covers the following :

- Follow safety measures to avoid accidents
- Daily inspection of tools and equipment
- Deal with emergencies

### Elements and Performance Criteria

#### *Follow safety measures to avoid accidents*

To be competent, the user/individual on the job must be able to:

- PC1. identify risks and hazards at the workplace
- PC2. wear personal protective equipment (PPE) as per the type of plumbing work
- PC3. place protective barricades and signages around the pits and trenches
- PC4. isolate the plumbing fittings and fixtures from electrical wiring to avoid accidents
- PC5. adhere to organisational procedures for reporting hazards and incidents to relevant authorities
- PC6. establish ventilation before entering underground work areas
- PC7. work safely in and around trenches, elevated places and confined areas
- PC8. ensure tools and hazardous materials are not left unattended
- PC9. ensure good housekeeping in order to prevent hazards e.g. fire
- PC10. dispose waste materials and used PPE according to regulations and codes of practice

#### *Follow hygiene and sanitation practices*

To be competent, the user/individual on the job must be able to:

- PC11. follow recommended personal hygiene and sanitation practices, for example, washing/sanitizing hands, covering face with a bent elbow while coughing/sneezing etc.
- PC12. clean and disinfect work area, materials/supplies, equipment etc. before and after use.
- PC13. report hygiene and sanitation issues to appropriate authority

#### *Use tools, equipment and materials safely*

To be competent, the user/individual on the job must be able to:

- PC14. check that the tools, equipment and materials are in good condition and as per industry standards before use
- PC15. use power tools and machinery that are grounded
- PC16. replace or repair split or loose tools before use
- PC17. store and transport various plumbing materials safely

#### *Deal with emergencies*

To be competent, the user/individual on the job must be able to:

PC18. follow workplace emergency and evacuation procedures

PC19. use a fire extinguisher correctly

PC20. use safe methods to free a person from electrocution

PC21. administer appropriate first aid (such as CPR etc.) to victims in case of cuts, bleeding, burns, choking, electric shock, poisoning etc.

## **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:

KU1. possible causes of risk, hazard or accident in the workplace

KU2. organisational procedures for upkeep of tools and plumbing materials, health and safety

KU3. location of all the general health and safety equipment in the workplace

KU4. meaning of hazards and risks

KU5. hazardous environment encountered during work such as underground areas, elevated areas, areas with water and electricity supply, presence of biological waste, under construction sites etc.

KU6. work practices and precautions to control and prevent risks, hazards and accidents

KU7. importance of each personal protective equipment used such as eye protection mask, hard hats, gloves, apron, rubber boots etc.

KU8. tools and plumbing equipment as per latest industry standards

KU9. preventative and remedial actions to be taken in case of exposure to toxic materials

KU10. specific safety and health related problems faced in domestic, commercial and institutional setups

KU11. various causes of fire and precautionary activities to prevent the fire accident

KU12. techniques of using the different fire extinguishers

KU13. rescue techniques applied during a fire hazard

KU14. various types of safety signs and meaning

KU15. appropriate basic first aid treatment relevant to the condition e.g. shock, electrical shock, bleeding, minor burns, poisoning, eye injuries etc.

KU16. potential injuries and ill health associated with incorrect handling of tools and equipment

## **Generic Skills (GS)**

User/individual on the job needs to know how to:

GS1. write an accident/incident report in local language or English

GS2. read and comprehend labels, charts, signages, manuals, plumbing symbols etc.

GS3. question coworkers appropriately in order to clarify instructions and other issues

GS4. plan and organize the work schedule, work area, tools, equipment and materials for improved productivity

GS5. determine key considerations and priorities when faced with problems



## Qualification Pack



GS6. seek official and authorised sources of help and guidance to resolve problems that cannot be solved at one's level of authority

## Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Follow safety measures to avoid accidents</i>	13	32	-	3
PC1. identify risks and hazards at the workplace	2	2	-	0.5
PC2. wear personal protective equipment (PPE) as per the type of plumbing work	2	2	-	0.5
PC3. place protective barricades and signages around the pits and trenches	1	4	-	0.5
PC4. isolate the plumbing fittings and fixtures from electrical wiring to avoid accidents	1	4	-	-
PC5. adhere to organisational procedures for reporting hazards and incidents to relevant authorities	2	4	-	0.5
PC6. establish ventilation before entering underground work areas	1	4	-	-
PC7. work safely in and around trenches, elevated places and confined areas	1	3	-	-
PC8. ensure tools and hazardous materials are not left unattended	1	3	-	-
PC9. ensure good housekeeping in order to prevent hazards e.g. fire	1	3	-	0.5
PC10. dispose waste materials and used PPE according to regulations and codes of practice	1	3	-	0.5
<i>Follow hygiene and sanitation practices</i>	3	8	-	1
PC11. follow recommended personal hygiene and sanitation practices, for example, washing/sanitizing hands, covering face with a bent elbow while coughing/sneezing etc.	1	3	-	0.5
PC12. clean and disinfect work area, materials/supplies, equipment etc. before and after use.	1	3	-	0.5
PC13. report hygiene and sanitation issues to appropriate authority	1	2	-	-
<i>Use tools, equipment and materials safely</i>	6	9	-	1

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC14. check that the tools, equipment and materials are in good condition and as per industry standards before use	1	3	-	0.25
PC15. use power tools and machinery that are grounded	1	2	-	0.25
PC16. replace or repair split or loose tools before use	2	2	-	0.25
PC17. store and transport various plumbing materials safely	2	2	-	0.25
<i>Deal with emergencies</i>	8	14	-	2
PC18. follow workplace emergency and evacuation procedures	2	3	-	0.5
PC19. use a fire extinguisher correctly	2	4	-	0.5
PC20. use safe methods to free a person from electrocution	2	3	-	0.5
PC21. administer appropriate first aid (such as CPR etc.) to victims in case of cuts, bleeding, burns, choking, electric shock, poisoning etc.	2	4	-	0.5
<b>NOS Total</b>	<b>30</b>	<b>63</b>	<b>-</b>	<b>7</b>

## National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	PSC/N0136
<b>NOS Name</b>	Apply Health and Safety Practices at the Workplace
<b>Sector</b>	Plumbing
<b>Sub-Sector</b>	Industrial / Non-Industrial Plumbing, Water Supply & Water Treatment & Quality Control, Sewerage & Sewage Treatment, Drainage, Water Harvesting & Ground Recharging, Firefighting & Safety Systems, Gas & Piping (Industrial / Medical), HVAC & Steam, Manufacturing of Plumbing / Firefighting Products, Micro-Hydel Power
<b>Occupation</b>	Plumbing Systems Installation and Maintenance, Designing, Sales, Material Handling, Plumbing Servicing, Plumbing Plant Operations
<b>NSQF Level</b>	4
<b>Credits</b>	TBD
<b>Version</b>	1.0
<b>Last Reviewed Date</b>	NA
<b>Next Review Date</b>	NA
<b>NSQC Clearance Date</b>	



## PSC/N0138: Implement Measures to Work Effectively

### Description

This unit covers basic etiquette and competencies that a candidate requires to implement measures for effective team working and communication at the workplace.

### Scope

The scope covers the following :

- Ensure team preparedness for the tasks
- Monitor completion of work as per expected standards
- Handle queries, concerns and welfare of workers
- Respect diversity

### Elements and Performance Criteria

#### *Ensure team preparedness for the tasks*

To be competent, the user/individual on the job must be able to:

- PC1. create a work plan and schedule for the workers as per work priorities, availability of manpower, equipment and weather conditions
- PC2. assign work taking full account of each team member's abilities
- PC3. train the workers

#### *Monitor completion of work as per expected standards*

To be competent, the user/individual on the job must be able to:

- PC4. monitor project activities to ensure adherence to work instructions, schedules, budgets and targets
- PC5. identify causes for any lag in performance as well as possible solutions to bridge the gap
- PC6. provide feedback on individual work performance to each team member for improvement in work quality
- PC7. implement measures to improve team effectiveness e.g. adhering to timelines, taking scheduled breaks, proactiveness, minimum interruptions etc.
- PC8. ensure accurate and effective delivery of written communication (reports, updates etc.) to stakeholders within agreed timelines

#### *Handle queries, concerns and welfare of workers*

To be competent, the user/individual on the job must be able to:

- PC9. investigate work-related complaints to verify problems and record responses relevant to the project
- PC10. perform administrative duties, such as authorising leaves, processing time sheets as per standard operating procedure (SOP)
- PC11. review contracts or work assignments to determine service, machine, or workforce requirements for jobs
- PC12. deal with conflicts among the team members in a professional manner
- PC13. prepare and maintain required records, such as work activity or personnel reports

#### *Respect diversity*

To be competent, the user/individual on the job must be able to:

- PC14. use respectful verbal, non-verbal and written communication that is gender, disability, age and culturally sensitive
- PC15. transact with all people without any personal bias based on gender, disability, caste, religion, colour, sexual orientation or culture and in accordance with their legal rights
- PC16. recognize indicators of harassment and discrimination based on gender, disability, caste, religion, colour, sexual orientation or culture at workplace and follow organisational policy for reporting the same.

## Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1. legislation, standards, policies, and procedures followed in the company relevant to employment, behaviour and performance conditions
- KU2. reporting structure, inter-dependent functions, lines and procedures in the work area
- KU3. relevant people and their responsibilities within the work area
- KU4. escalation matrix and procedures for reporting work and employment related issues
- KU5. sexual harassment of women at workplace (Prevention, Prohibition and Redressal) Act, 2013
- KU6. organizational policy for harassment and discrimination based on gender, disability, caste, religion, colour, sexual orientation or culture
- KU7. internal and external stakeholders at the workplace and their communication requirements
- KU8. importance of effective communication in the workplace and the impact of poor communication on the employee, the employer and the customer
- KU9. various components of effective communication such as tone and pitch
- KU10. advantages and disadvantages of various modes of communication
- KU11. importance of teamwork in organizational and individual success
- KU12. goal setting
- KU13. group dynamics and processes
- KU14. measures to improve workplace productivity
- KU15. importance of ethics and discipline for professional success
- KU16. common reasons for interpersonal conflict
- KU17. importance of developing effective working relationships for professional success
- KU18. how to deal with grievances and problems appropriately and effectively
- KU19. importance and ways of managing interpersonal conflict effectively
- KU20. laws, acts and provisions defined for PwD by the statutory bodies
- KU21. government and private schemes and benefits available for PwD
- KU22. basic gender concepts such as gender power relations, gender roles, access and control, gender sensitivity, gender equity and equality
- KU23. gender, disability, cultural and age related biases, stereotyping and its impact
- KU24. actions and consequences of gendered behavior
- KU25. types of harassment and discrimination based on gender, disability, caste, religion or culture that occurs at a typical workplace and how to recognize it
- KU26. types of unacceptable behavior

## Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1. write clear and legible notes, instructions and maintain records in local language or English
- GS2. comprehend quantities and basic work-related terminology for operational requirements
- GS3. interpret information accurately from work-related documents, work instructions and records
- GS4. communicate appropriately (correct protocol and manner of speaking) to understand about the type of output required and answer queries
- GS5. display active listening skills while interacting with co-workers and others in the workplace
- GS6. plan tasks to maintain a smooth relationship with fellow team members
- GS7. plan the steps within one's limits of authority as per required modification
- GS8. perform activities accurately and effectively in order to meet customer requirements
- GS9. work with co-workers and supervisor to resolve any issues that threaten work quality as per the planned schedule

## Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Ensure team preparedness for the tasks</i>	6	11	2	2
PC1. create a work plan and schedule for the workers as per work priorities, availability of manpower, equipment and weather conditions	2	4	1	0.5
PC2. assign work taking full account of each team member's abilities	2	4	1	0.5
PC3. train the workers	2	3	-	1
<i>Monitor completion of work as per expected standards</i>	10	15	4	3
PC4. monitor project activities to ensure adherence to work instructions, schedules, budgets and targets	2	3	1	0.5
PC5. identify causes for any lag in performance as well as possible solutions to bridge the gap	2	3	1	0.5
PC6. provide feedback on individual work performance to each team member for improvement in work quality	2	3	0.5	0.5
PC7. implement measures to improve team effectiveness e.g. adhering to timelines, taking scheduled breaks, proactiveness, minimum interruptions etc.	2	3	0.5	0.5
PC8. ensure accurate and effective delivery of written communication (reports, updates etc.) to stakeholders within agreed timelines	2	3	1	1
<i>Handle queries, concerns and welfare of workers</i>	7	14	5	1
PC9. investigate work-related complaints to verify problems and record responses relevant to the project	1	3	1	-
PC10. perform administrative duties, such as authorising leaves, processing time sheets as per standard operating procedure (SOP)	2	3	1	0.5
PC11. review contracts or work assignments to determine service, machine, or workforce requirements for jobs	2	3	1	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC12. deal with conflicts among the team members in a professional manner	1	3	1	0.5
PC13. prepare and maintain required records, such as work activity or personnel reports	1	2	1	-
<i>Respect diversity</i>	7	9	3	1
PC14. use respectful verbal, non-verbal and written communication that is gender, disability, age and culturally sensitive	3	3	1	-
PC15. transact with all people without any personal bias based on gender, disability, caste, religion, colour, sexual orientation or culture and in accordance with their legal rights	2	3	1	0.5
PC16. recognize indicators of harassment and discrimination based on gender, disability, caste, religion, colour, sexual orientation or culture at workplace and follow organisational policy for reporting the same.	2	3	1	0.5
<b>NOS Total</b>	<b>30</b>	<b>49</b>	<b>14</b>	<b>7</b>

## National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	PSC/N0138
<b>NOS Name</b>	Implement Measures to Work Effectively
<b>Sector</b>	Plumbing
<b>Sub-Sector</b>	Industrial / Non-Industrial Plumbing, Water Supply & Water Treatment & Quality Control, Sewerage & Sewage Treatment, Drainage, Water Harvesting & Ground Recharging, Firefighting & Safety Systems, Gas & Piping (Industrial / Medical), HVAC & Steam, Manufacturing of Plumbing / Firefighting Products, Micro-Hydel Power
<b>Occupation</b>	Plumbing Systems Installation and Maintenance, Designing, Sales, Material Handling, Plumbing Servicing
<b>NSQF Level</b>	5
<b>Credits</b>	TBD
<b>Version</b>	1.0
<b>Last Reviewed Date</b>	NA
<b>Next Review Date</b>	NA
<b>NSQC Clearance Date</b>	

## SGJ/N1702: Optimize resource utilization at workplace

### Description

This unit is about adopting sustainable practices and optimizing use of resources, especially material, energy and waste, in day-to-day operations at work

### Scope

The scope covers the following :

- Material conservation practices
- Energy/electricity conservation practices
- Effective waste management/recycling practices

### Elements and Performance Criteria

#### *Material conservation practices*

To be competent, the user/individual on the job must be able to:

- PC1. identify ways to optimize usage of material including water in various tasks/activities/processes
- PC2. check for spills/leakages in various tasks/activities/processes
- PC3. plug spills/leakages and escalate to appropriate authority if unable to rectify
- PC4. carry out routine cleaning of tools, machines and equipment

#### *Energy/electricity conservation practices*

To be competent, the user/individual on the job must be able to:

- PC5. identify ways to optimize usage of electricity/energy in various tasks/activities/processes
- PC6. check if the equipment/machine is functioning normally before commencing work and rectify wherever required
- PC7. report malfunctioning (fumes/sparks/emission/vibration/noise) and lapse in maintenance of equipment
- PC8. ensure electrical equipment and appliances are properly connected and turned off when not in use

#### *Effective waste management/recycling practices*

To be competent, the user/individual on the job must be able to:

- PC9. identify recyclable and non-recyclable, and hazardous waste generated
- PC10. segregate waste into different categories
- PC11. dispose non-recyclable waste appropriately
- PC12. deposit recyclable and reusable material at identified location
- PC13. follow processes specified for disposal of hazardous waste

### Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1. potential hazards, risks and threats based on the nature of work
- KU2. layout of the workstation and electrical and thermal equipment used
- KU3. organizations procedures for minimizing waste
- KU4. efficient and inefficient utilization of material and water
- KU5. ways of efficiently managing material and water in the process
- KU6. basics of electricity and prevalent energy efficient devices
- KU7. ways to recognize common electrical problems
- KU8. common practices of conserving electricity
- KU9. usage of different colours of dustbins
- KU10. categorization of waste into dry, wet, recyclable, non-recyclable and items of single-use plastics
- KU11. waste management and methods of waste disposal
- KU12. common sources of pollution and ways to minimize it

### Generic Skills (GS)

User/individual on the job needs to know how to:

- GS1. record data on waste disposal at workplace
- GS2. complete statutory documents relevant to safety and hygiene
- GS3. read Standard Operating Practices (SOP) documents
- GS4. communicate with colleagues on the significance of greening of jobs
- GS5. make timely decisions for efficient utilization of resources
- GS6. complete tasks efficiently and accurately within stipulated time
- GS7. work with supervisors/team members to carry out work related tasks
- GS8. identify cause and effect of greening of jobs



## Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Material conservation practices</i>	4	8	-	-
PC1. identify ways to optimize usage of material including water in various tasks/activities/processes	1	2	-	-
PC2. check for spills/leakages in various tasks/activities/processes	1	2	-	-
PC3. plug spills/leakages and escalate to appropriate authority if unable to rectify	1	2	-	-
PC4. carry out routine cleaning of tools, machines and equipment	1	2	-	-
<i>Energy/electricity conservation practices</i>	4	8	-	-
PC5. identify ways to optimize usage of electricity/energy in various tasks/activities/processes	1	2	-	-
PC6. check if the equipment/machine is functioning normally before commencing work and rectify wherever required	1	2	-	-
PC7. report malfunctioning (fumes/sparks/emission/vibration/noise) and lapse in maintenance of equipment	1	2	-	-
PC8. ensure electrical equipment and appliances are properly connected and turned off when not in use	1	2	-	-
<i>Effective waste management/recycling practices</i>	5	10	-	-
PC9. identify recyclable and non-recyclable, and hazardous waste generated	1	2	-	-
PC10. segregate waste into different categories	1	2	-	-
PC11. dispose non-recyclable waste appropriately	1	2	-	-
PC12. deposit recyclable and reusable material at identified location	1	2	-	-
PC13. follow processes specified for disposal of hazardous waste	1	2	-	-
<b>NOS Total</b>	<b>13</b>	<b>26</b>	<b>-</b>	<b>-</b>

## National Occupational Standards (NOS) Parameters

NOS Code	SGJ/N1702
NOS Name	Optimize resource utilization at workplace
Sector	Green Jobs
Sub-Sector	Other Green Jobs
Occupation	Resource Optimization
NSQF Level	3
Credits	TBD
Version	1.0
Last Reviewed Date	16/12/2019
Next Review Date	27/04/2022
NSQC Clearance Date	

## Assessment Guidelines and Assessment Weightage

### Assessment Guidelines

1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down the proportion of marks for Theory and Skills Practical for each PC.
2. The assessment for the theory part will be based on the knowledge bank of questions created by the SSC.
3. Assessment will be conducted for all compulsory NOS, and where applicable, on the selected elective/option NOS/set of NOS.
4. Individual assessment agencies will create unique question papers for the theory part for each candidate at each examination/training center (as per assessment criteria below).
5. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/ training center based on these criteria.
6. To pass the Qualification Pack assessment, every trainee should score a minimum of 70% of % aggregate marks to successfully clear the assessment.
7. In case of unsuccessful completion, the trainee may seek reassessment on the Qualification Pack.

**Minimum Aggregate Passing % at QP Level : 70**

(Please note: Every Trainee should score a minimum aggregate passing percentage as specified above, to successfully clear the Qualification Pack assessment.)

## Assessment Weightage

Compulsory NOS

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
PSC/N0146. Construct and maintain water conservation structures for village dwellings, farms and small communities	30	40	-	30	100	15
PSC/N0147. Construct and repair soak pits and kitchen gardens for re-use of grey water in a household and community	30	40	-	30	100	15
PSC/N0148. Assess functionality of IoT based remote monitoring systems used in rural water supply programs	30	50	-	20	100	15
PSC/N0149. Assist village water and sanitation committees (VWSCs) in scheme planning, social mobilisation and enhancing community ownership of schemes	30	50	-	20	100	15
PSC/N0150. Carry out Service Delivery and Management Activities for Rural Projects	28	54	0	9	91	15
PSC/N0136. Apply Health and Safety Practices at the Workplace	30	63	-	7	100	10
PSC/N0138. Implement Measures to Work Effectively	30	49	14	7	100	10



## Qualification Pack



National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
SGJ/N1702.Optimize resource utilization at workplace	13	26	-	-	39	5
<b>Total</b>	<b>221</b>	<b>372</b>	<b>0</b>	<b>123</b>	<b>730</b>	<b>100</b>

## Acronyms

NOS	National Occupational Standard(s)
NSQF	National Skills Qualifications Framework
QP	Qualifications Pack
TVET	Technical and Vocational Education and Training

## Glossary

<b>Sector</b>	Sector is a conglomeration of different business operations having similar business and interests. It may also be defined as a distinct subset of the economy whose components share similar characteristics and interests.
<b>Sub-sector</b>	Sub-sector is derived from a further breakdown based on the characteristics and interests of its components.
<b>Occupation</b>	Occupation is a set of job roles, which perform similar/ related set of functions in an industry.
<b>Job role</b>	Job role defines a unique set of functions that together form a unique employment opportunity in an organisation.
<b>Occupational Standards (OS)</b>	OS specify the standards of performance an individual must achieve when carrying out a function in the workplace, together with the Knowledge and Understanding (KU) they need to meet that standard consistently. Occupational Standards are applicable both in the Indian and global contexts.
<b>Performance Criteria (PC)</b>	Performance Criteria (PC) are statements that together specify the standard of performance required when carrying out a task.
<b>National Occupational Standards (NOS)</b>	NOS are occupational standards which apply uniquely in the Indian context.
<b>Qualifications Pack (QP)</b>	QP comprises the set of OS, together with the educational, training and other criteria required to perform a job role. A QP is assigned a unique qualifications pack code.
<b>Unit Code</b>	Unit code is a unique identifier for an Occupational Standard, which is denoted by an 'N'
<b>Unit Title</b>	Unit title gives a clear overall statement about what the incumbent should be able to do.
<b>Description</b>	Description gives a short summary of the unit content. This would be helpful to anyone searching on a database to verify that this is the appropriate OS they are looking for.
<b>Scope</b>	Scope is a set of statements specifying the range of variables that an individual may have to deal with in carrying out the function which have a critical impact on quality of performance required.
<b>Knowledge and Understanding (KU)</b>	Knowledge and Understanding (KU) are statements which together specify the technical, generic, professional and organisational specific knowledge that an individual needs in order to perform to the required standard.

<b>Organisational Context</b>	Organisational context includes the way the organisation is structured and how it operates, including the extent of operative knowledge managers have of their relevant areas of responsibility.
<b>Technical Knowledge</b>	Technical knowledge is the specific knowledge needed to accomplish specific designated responsibilities.
<b>Core Skills/ Generic Skills (GS)</b>	Core skills or Generic Skills (GS) are a group of skills that are the key to learning and working in today's world. These skills are typically needed in any work environment in today's world. These skills are typically needed in any work environment. In the context of the OS, these include communication related skills that are applicable to most job roles.
<b>Electives</b>	Electives are NOS/set of NOS that are identified by the sector as contributive to specialization in a job role. There may be multiple electives within a QP for each specialized job role. Trainees must select at least one elective for the successful completion of a QP with Electives.
<b>Options</b>	Options are NOS/set of NOS that are identified by the sector as additional skills. There may be multiple options within a QP. It is not mandatory to select any of the options to complete a QP with Options.