# APPRENTICESHIP-BASED UG DEGREE PROGRAMME IN LOGISTICS

## **COLLABORATIVE PROGRAMME OF LSC**



## **REGULATION & CURRICULUM**

**VERSION 2023-24** 

NATIONAL SKILL QUALIFICATION FRAMEWORK LEVEL:5

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## **VERSION 2024-25**

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# Apprenticeship-based UG Degree Programme in Logistics

## COLLABORATIVE PROGRAMME OF LSC

#### The Programme

Apprenticeship-based UG Degree Programme in Logistics is offered by Logistics Sector Skill Council (LSC) in collaboration with Higher Education Institutions that are duly approved by the concerned authorities.

Logistics Sector Skill Council, established by the Ministry of Skill Development and Entrepreneurship (MSDE) through the National Skill Development Corporation of India (NSDC), has taken up several initiatives to create adequate skills for gainful employment at various levels in Logistics Industry. The apprenticeship - based UG Degree Programme in Logistics is one of the programmes.

The Collaborating Institution may choose either B.Com. or BBA or BMS as the nomenclature for this UG Degree Programme. LSC takes up the following responsibilities so far as BBA/BMS/B.Com. Degree is concerned.

- Curriculum Development and Continuous Improvement
- Sensitization of Students on Apprenticeship Assignment
- Create Course Materials on all Domain Courses and provide access to students through Logistics Learning Management System
- Securing Apprenticeship Training (On-the-job Training) in Logistics Companies for all students of this Programme under the provisions of Apprentices Act, 1961
- Securing a monthly stipend, as fixed by the Government from time to time, during the Apprenticeship Training period for every student.
- Assessing the performance & learning of students in Apprenticeship
- Arrange the conduct of final placement drive for the students of this Programme
- Assessment of the progress made by the Collaborating Institutions (CI) in the Programme and offering suggestions & help achieve the objective of making the students skillful.

The Regulation and Curriculum given below shall be duly approved by the various academic bodies of the HEI/University and apply to all candidates admitted to the Programme.

## 1. Eligibility for Admission

Candidates for admission to this Apprenticeship-based UG Degree Programme should have passed 10+2 in any Board or possess an equivalent qualification. Any subject group in 10+2 is acceptable.

## 2. Admission

The Collaborating Institutions shall decide the minimum mark percentage for admission. The Reservation Policy of the State where the HEI is functioning is applicable.

#### 3. Programme Duration

The Programme extends for three years consisting of two teaching years and one apprenticeship year.

## 4. Programme Content

- 8 Domain Courses in Year 1 & 2.
- 6 Commerce Courses in Year 1 & 2
- 2 Skill Course in Year 1 & 2
- 2 Allied Courses in the MOOC format in Year 3.
- 1 Spell of Apprenticeship Training in Year 3.

## 5. Standard of Passing & Award Division

Standard of Passing & Award Divisions shall be as per the Collaborating Institution's policies that offer this Programme.

## 6. Continuous Internal Assessment

The Continuous Internal Assessment System, including the assessment components, periodicity, and proportionate weight in the total score for a particular course, is as per the policies and practices of the Collaborating Institution.

## 7. Attendance

The mandatory minimum attendance in teaching Years is as per the existing policies and practices of the Collaborating Institution.

Attendance requirement during Apprenticeship Training is as per the conditions/norms of the Apprenticeship Contract, Apprentices Act 1961, and National Apprenticeship Promotion Scheme.

## 8. Examination

The End Year Examination for courses scheduled in teaching Year will be conducted and results declared by the Collaborating Institution. The question paper pattern for these examinations is as per the format decided by the Collaborating Institution.

## 9. Miscellaneous

- Each student shall possess Aadhaar Card, PAN, and Bank Account, which are necessary for onboarding for Apprenticeship.
- Students shall be willing to move out of their present place of residence to get onboarded in companies that might be located in different cities.
- Students shall take care of Boarding and Lodging arrangements in cities where the apprenticeship providing company is located.
- Students need to possess the prescribed textbooks for all Courses of the Programme.
- The Collaborating Institution will award the Degree to students who successfully complete the Programme.

## 10. Fee Payment

The Programme Fee and Examination Fee are payable by students to the Collaborating Institution as per its norms.

## **Assessment System**

The Assessment System of the apprenticeship-based Degree Programmes developed & offered by Logistics Sector Skill Council is designed to make an objective assessment of Knowledge, Skill, and Attitude development of students. In order to make the Assessment System fool-proof and inclusive, the Programme provides adequate & appropriate representation to the Industry, Sector Skill Council, and the Collaborating Institution in assessing the students. This makes the Assessment System objectively measure industry-readiness of students.

## **Teaching Years:**

Year I and II are Teaching Years. All Courses scheduled in Teaching Years are assessed by the Collaborating Institution. The Assessment System (proportion of marks between the Continuous Internal Assessment & End Year Examination, and the Question Paper Pattern) for these courses shall be as per the norms, standards and practices of the Collaborating Institution, notwithstanding the Regulations given in the Curriculum Booklet issuedby LSC.

## Apprenticeship Year:

Year III is Apprenticeship Year. Assessment System for the Courses scheduled in this Year will be as per the process described below.

Allied Courses: The Allied Courses are offered by LSC on the pattern of MOOC. LSC delivers the course online through Logistics Learning Management System (LLMS), and makes online assessment of students. End Year Examination (online) comprising 50 multiple choice questions is conducted for a maximum mark of 100. Each question will have four choices of answers from which the candidate should choose the right answer. While each correct answer fetches 2 marks. The marks scored by students would be communicated to the Collaborating Institution by LSC. Being offered under MOOC format, the Allied Courses do not have Internal Assessment.

<u>Apprenticeship</u>: The CIA Component of Apprenticeship is assessed by the Manager / Supervisor under whom the students work during Apprenticeship Year, and LSC for a maximum mark of 250. The Manager / Supervisor makes the assessment for 150 marks based on skill & attitudinal development of students. LSC assesses the practical knowledge of students for 100 marks by conducting a Test on conceptual knowledge relevant to the process undergoneduring Apprenticeship, and Viva.

The Collaborating Institution will evaluate the Apprenticeship Report (comprising Work Diary) submitted by students, and conduct Viva for a mark of 150, which is considered as ESE. The Evaluation & Viva shall be conducted by a Panel comprising of the HoD (or Programme Coordinator), Student's Mentor, and one Executive from Logistics Sector. The Collaborating Institution may modify the proportion of marks between CIA and ESE as per its norms, standards, and practices.

## Minimum Marks, Grading & Classification:

Minimum Marks required for passing courses, Pattern of Grading, and Classification of Successful Candidates between 'Distinction', 'First Class', 'Second Class', etc. shall be as per the norms, standards, and practices of Collaborating Institution.

## Programme Structure From the Academic Year 2024-25

The Programme Structure contains only the Domain Courses. The Collaborating Institutions may include other Courses in each Year as per their Norms. The total Academic Credit shall be decided as per Collaborating Institutions' Norms

## **YEAR - 1** (NSQF 3)

No.	Course	Code	Туре	Hours	Credit	CIA	ESE	Marks
1	Fundamentals of Logistics and Inventory Management (Major- I)	LD2401	Domain	90	6	30	70	100
2	Materials Management (Major - II)	LD2402	Domain	90	6	30	70	100
3	Warehousing & Distribution Centre Operations (Minor – I)	LD2403	Domain	90	6	30	70	100
4	Freight Forwarding (Land, Ocean & Air Cargo) (Minor – II)	LD2404	Domain	90	6	30	70	100
5	Word and Presentation Applications (SEC - I)	LD2405	Skill	60*	4	30	70	100
6	Business Organisation & Communication (GE - I)	LD2406	Comm.	60	4	30	70	100
7	Financial Accounting (GE - II)	LD2407	Comm.	60	4	30	70	100
8	Cost Accounting (GE – III)	LD2408	Comm.	60	4	30	70	100
	Total			600	40	240	560	800

## **YEAR - 2** (NSQF 4)

No.	Course	Code	Туре	Hours	Credit	CIA	ESE	Marks
1	MIS for Logistics (Major- I)	LD2409	Domain	90	6	30	70	100
2	Port Terminal & Liner Logistics (Major- II)	LD2410	Domain	90	6	30	70	100
3	Specialisation Module – Course I (Minor – I)	LD2411	Domain	90	6	30	70	100
4	Specialisation Module – Course II (Minor – II)	LD2412	Domain	90	6	30	70	100
5	Data Analysis using Spreadsheet (SEC – I, Practical)	LD2413	Skill	60	4	30	70	100
6	Income Tax Law & Practice (SEC - II)	LD2414	Comm.	60	4	30	70	100
7	Financial Management (GE - I)	LD2415	Comm.	60	4	30	70	100
8	Goods and Service Tax and Custom Duty (GE - II)	LD2416	Comm.	60	4	30	70	100
	Total			600	40	240	560	800

## **YEAR - 3** (NSQF -5)

No.	Course	Code	Туре	Hours	Credit	CIA	ESE	Marks
1	Allied course - MOOC	LD2417A/B/C	Domain	60	2		100	100
2	Allied Course - MOOC	LD2418A/B/C	Domain	60	2		100	100
3	Apprenticeship Training	LD2419	Domain	2016	44	500	300	800
	Total			2136	48	500	500	1000

Domain Credit Summary									
Year	Credits								
1	8	40							
2	8	40							
3	3	48							
Total	19	128							

## **Abbreviations Used:**

- SEC Skill Enhancement Course
- GE Generic Elective
- Comm Commerce

## **FUNDAMENTALS OF LOGISTICS & INVENTORY MANAGEMENT**

Year	Course Type	LD2401	Hours	Credits	Version
1	Domain	LD2401	90	6	2024-25

## **COURSE OBJECTIVES:**

- To develop competencies and knowledge of students to become logistics professionals
- To orient students in the field of Logistics
- To help Students to understand Fundamentals of Logistics
- To help Students to understand inventory management

## **LEARNING OUTCOMES:**

- Students will be able to apply the Basic knowledge of Logistics in the real-life situation
- This subject will enable them to enhance their ability and professional skills in Logistics.
- It will enable them to enhance their ability and professional skills in inventory management

Unit	Topics								
I	Introduction to Logistics: History of Logistics Need for logistics- Cost and Productivity, cost saving & Productivity improvement. Logistics Cost, reduction in logistics cost, benefits of efficient Logistics, Principles of Logistics, Technology & Logistics -Informatics, Logistics optimization. Listing of Sub-sectors of Logistics								
II	Logistics and Customer Service - Definition of Customer Service Elements of Customer Service-Phases in Customer Service-Customer Retention - Procurement and Outsourcing - Definition of Procurement/Outsourcing - Benefits of Logistics Outsourcing - Critical Issues in Logistics Outsourcing								
Ш	Global Logistics - Global Supply Chain - Organizing for Global Logistics-Strategic Issues in Global Logistics - Forces driving Globalization - Modes of Transportation in Global Logistics Barriers to Global Logistics - Markets and Competition - Financial Issues in Logistics Performance - Integrated Logistics - Need for Integration - Activity Centres in Integrated Logistics. Role of 3PL&4PL.								
IV	<ul> <li>a) Warehouse: Warehouse-Meaning, Types of Warehouses Benefits of Warehousing.</li> <li>b) Transportation- Meaning; Types of Transportations, efficient transportation system and Benefits of efficient transportation systems.</li> <li>c) Courier/Express - Courier/Express-Meaning, Categorization of Shipments, Courier Guidelines, Pricing in Courier - Express Sector for international and domestic shipping.</li> <li>d) E-Commerce - Meaning, Brief on Fulfillment Centers, Reverse logistics in e-commerce sector, Marketing in e-commerce and future trends in e-commerce.</li> </ul>								
V	<ul> <li>a) EXIM: Brief on EXIM/FF &amp; CC, Multi-modal transportation, brief on customs clearance, bulk load handling and brief on trans-shipment.</li> <li>b) Supply chain.</li> <li>c) Cold chain.</li> <li>d) Liquid Logistics.</li> <li>e) Rail Logistics.</li> </ul>								
VI	Inventory: Purpose of InventoryTypes of Goods -General Management of Inventory- Multi-Echelon Inventory Systems -Use of Computers in Inventory Management- Evaluation of Performance of Materials Function—Latest trends in Inventory Management								
VII									
VIII	Influence of production policy on inventory levels – inventories and customer service level – steps to improve inventory management – optimum inventory –Inventory management uncertainty (fixed order quantity model) - Calculation of safety stocks								

- Course Material Prepared by LSC
- Sunil Chopra and Peter Meindl, Supply Chain Management Pearson Education Asia, 3rd edition, 2007
- Chaman L Jain, "Fundamentals of Demand Planning & Demand Planning & Processing", Graceway Publishing Company 3rd edition.
- Operations Research Concepts, Problems & Concepts, Solutions- Kapoor V.K.-Sultan Chand & C
- Fundamentals of Logistics Management (The Irwin/McGraw-Hill Series in Marketing), Douglas
- Lambert, James R Stock, Lisa M. Ellram, McGraw-hill/Irwin, First Edition, 1998.
- Vinod V. Sople (2009) Logistic Management (2nd Edn.) Pearson Limited.

## **MATERIALS MANAGEMENT**

Year	Course Type	Code	Hours	Credits	Version
1	Domain	LD2402	90	6	2024-25

#### **COURSE OBJECTIVES:**

- To help Students to understand basic Principles and concept of material Management
- To orient students on contemporary development in the field of material management
- To develop competencies and knowledge of students to become effective professionals

#### **LEARNING OUTCOMES:**

- To apply the knowledge about material management in the real-life business situation
- Understand the contemporary practices followed in the field of Materials Management
- To enhance their managerial ability and professional skills

Unit	Topics
I	Introduction: Materials Management - Evolution, Importance, Scope and Objectives- Interface with other functionsSupply Chain Management -Objectives- Components, Trade off Customer Service & Cost. Supply Chain Analytics.
II	Purchasing: purchasing and procurement activities under Materials management-Purchasing Methods-Purchasing and quality Assurance-Purchase Cycle – governmental purchasing practices and procedures - Negotiation & Bargaining – Vendor relations
III	Inventory - Need of Inventory -Types of Inventory - Basic EOQ Model - EOQ with discounts – Different types of Analysis.
	Forecasting –methods of forecasting-Material Requirement Planning (MRP) -Input and output of MRP system -BOM Explosion -MRP II.
IV	Quality control of material: Incoming material quality control- statistical quality control(Various control charts)-Inventory control & Cost Reduction techniques. Value Analysis & Value Engineering. Standardization – need and importance. Codification - concept, benefits.
V	Stores - Functions- Stores layout -documentation- Materials handling and storage systems, - Principles of Materials Handling system – Safety issues

- 1. Course Material Prepared by LSC
- 2. Materials management: procedures, text and cases A.K. Datta
- 3. Materials management: An integrated approach P. Gopalakrishnan
- 4. Introduction to Materials management J.R. Tony Arnold & Stephen N. Chapman
- 5. Purchasing and Materials Management K S Menon
- 6. Handbook of Materials Management Gopalakrishnan

## **WAREHOUSING & DISTRIBUTION CENTRE OPERATION**

Year	Course Type	Code	Hours	Credits	Version
1	Domain	LD2403	90	6	2024-25

## **COURSE OBJECTIVES:**

- To develop competencies and knowledge of students to become Warehouse professionals
- To help Students to understand Warehousing and distribution centre operations
- To orient students about contemporary practices followed in Warehousing & Logistics

## **LEARNING OUTCOMES:**

- To apply the Basic knowledge of Warehousing and distribution centre operations in the real-life situation
- To enhance their ability and professional skills
- To Understand the contemporary Practices in the Industry

Unit	Topics
I	Introduction to Warehouse (Storage and Packaging) Background - Types of Warehouses - Broad functions in a warehouse - warehouse layouts and layout related to functions. Equipment requirement in warehouse -Strategic Aspects of Warehouse.
II	Receiving of Goods - Advanced shipment notice (ASN)-Goods Receipt note-(GRN)-Stages involved receipt of goods- Visual inspection of goods unloaded- Formats for recording of goods unloaded from carriers- Procedure for Arranging of goods on dock -Put away of Goods- its activity-Put away list and its need-Put away of goods into storage locations - storage location codes and its application
	Procedure to prepare warehouse dispatches-Preparing Packaging List/Dispatch Note-Packaging-its importance of packing-Packing Materials-reading Labels-quality parameters in packing significance-Cross Docking Method-and its application- Automation: Pick / Put to Light - A Frame - Automated Order Selection — Pick-N- Go - Outbound Sorters - Automatic Truck Loading.
IV	Distribution – Definition – Need for physical distribution –-concept – system perspective - functions of distribution – marketing forces affecting distribution. Channels of distribution: role of marketing channels – channel functions – channel structure –designing distribution channel – choice of distribution channels
V	Warehouse Safety Rules and Procedures: Hazardous cargo – Procedure for Identification of Hazardous Cargo - safety data sheet- Familiarization with the industry. Health, Safety & Environment - 5S Concept on shop floor. Personal protective Equipment's (PPE) and their uses.

- 1. Course Material Prepared by LSC
- 2. Definitive Guide to Warehousing, The: Managing the Storage and Handling of Materials and Products in the Supply Chain (Council of Supply Chain Management Professionals) 1st Edition
- 3. Warehouse Management: A Complete Guide to Improving Efficiency and Minimizing Costs in the Modern Warehouse-III Edition-Gwynne Richards

## FREIGHT FORWARDING (LAND, OCEAN & AIR CARGO)

Year	Course Type	Code	Hours	Credits	Version	
1	Domain	LD2404	90	6	2024-25	

## **COURSE OBJECTIVES:**

- To develop competencies and knowledge of students to become freight forwarding professionals
- To develop competencies on documentation procedures
- To help Students to understand freight forwarding.

## **LEARNING OUTCOMES:**

- Students will be able to apply the Basic knowledge of freight forwarding including ocean and air cargo in the real-life situation
- Students will be able to demonstrate their skill on documentation in their profession.
- This subject will enable them to enhance their ability and professional skills.

Unit	Topics
ı	Introduction to EXIM, Freight forwarding and custom clearance – types of custom clearances
	<ul> <li>Importance of custom clearance – certificate of origin, ICEGATE and insurance – custom Act –</li> <li>Regulations pertaining to custom clearance – different modes of freight forwarding — process of freight forwarding.</li> </ul>
II	Operation Procedures of Freight Forwarding - The procedures for Pre-Operating Checks and Operational checks to be performed for every shipment / consignment
III	List of basic handling of errors and the Operational errors that occur in common - Procedure for checking of shipping bill, Airway bill based on invoice and packing list received from department for Freight Forwarding. Regulations (EXIM/IATA/Countries)/COM based on permutations and combinations of weight vs volume.
IV	Cargo handling, INCO terms and terminologies used in Cargoes - Different Types of Cargoes for transportation. Full Export and Import value of the cargo – Importer and exporter Code (IEC), The registered PAN based Business Identification number received from the Directorate General of Foreign Trade - Different type of Cargo, their quantity and value - Packaging requirement for the cargo during shipment from the shipper - Inspection procedure for the cargo while unloading - DO's and DON'T's while handling different cargo
V	Documentation of Freight Forwarding process as per customer timelines and requirements - Carting, unloading, Stacking, Loading; and Stuffing - Procedure for dealing with loss or damage to goods - Different P.G.A and their roles. Technical knowledge on Containers; Pallets; Palletization; Fumigation - Letters of Credit and payment Terms. Etc. computer and its application in internal systems of documentation.
VI	
	Fundamentals of Rating System -Basic Principles of Pricing on Indian Railways - Application of Telescopic principle – distance blocks, tapering of price with distance – Railway Rates Tribunal
VII	Classification of Goods – Goods Tariff - Train load rate- Wagon Load Rate – Piece-meal rateFreight Calculation – Using Distance Tables or RBS (Rates Branch System) – selecting Base Class for rate – 'Paid' and 'To-pay' Charges -Permissible Carrying Capacity (PCC) – Minimum distance for Charge – Owners Risk (OR) Rate Vs Railway Risk (RR) Rate – Charging on Rationalized Routes.
VIII	Introduction -Rating system for road trafficrules of the road -organized traffic - congested traffic- rating roads for safety - Inventory based rating system - types of road freight transport -model structure of road transportation costs - freight transportation costs -operational costs-value of time costs-external cost -cost estimating — Format of the Operating Cost Sheet- Freight calculations ( practical ) based on cost per kilometer - Calculation of Cost Per Unit - Distance Covered- Operating Time- Total Tone KMs-Total Cost- Cost Per Ton KM and Cost Per Ton.

- 1. Course Material Prepared by LSC
- 2. J P Saxena, Warehouse Management and Inventory Control-Vikas Publication House Pvt Ltd, First Edition, 2003.
- 3. Warehouse Management: Automation and Organisation of Warehouse and Order Picking Systems [With CDROM], Michael Ten Hompel, Thorsten Schmidt, Springer verlag, First Edition, 2006.
- 4. Management Guide to Efficient Money Saving Warehousing, Stephen Frey, Gower, 1982.
- 5. Swapna Pillai, Export Import Procedures & Documentation, Sahitya Bhawan Publication, 2020.

## **Word and Presentation Applications**

Year	Course Type	Code	Hours	Credits	Version
1	Skill	LD2405	60	4	2024-25

## **COURSE OBJECTIVES:**

- To introduce the student to the Word &
   Presentation tools and its applications and thereby
   empowering him to utilize resources for upgrading
   their knowledge base.
- To introduce the students with some basic tools and applications which will enable them in ecommunicating effectively and analyse data for decision making using data of different kinds.

## **LEARNING OUTCOMES:**

- Students will be able to apply the Word & Presentation tools in real-life application.
- Enable students to enhance their ability and professional skills in the Computer Application in MS-Word & Presentation

	Total lectures: 60								
Unit	Unit Topic								
1.	Windows 2000- working with windows – moving formation within windows arranging Icons Saving Window settings. MS Office Basics – Creating document – entering text-Selecting text giving instructions- Using tool bars- Menu commands- Keyboards shortcuts- Saving files Opening documents – Manipulating Windows – simple Editing- Printing Files.	12							
2.	Word Basics – Using Auto text – Using Auto Correct Word editing technique finding and replacing text – Checking spelling – using templates- formatting – Formatting with styles creating tables.	12							
3.	Power Point basics- Working in outline view- using a design template- Merging presentations in Slider sorter view applying templates – Adding graphs- adding organization Charts.	12							
4.	MS-Word-Practical Type the text, check spelling and grammar bullets and numbering list items, align the text to left, right justify and centrePrepare a job application letter enclosing your Bio-Data-Perform Mail Merger Operation and Preparing labelsPrepare the document in newspaper column layout.	12							
5.	MS POWER POINT-Practical Prepare a PowerPoint presentation with at least three slides for department Inaugural Function- Draw an organization chart with minimum three hierarchical levels-Design an advertisement campaign with minimum three slides-Insert an excel chart into a power point slide.	12							

- 1. Office 2000 Complete Reference by Stepher L. Nelson.
- ${\it 2. PC Software for window made simplex by R.K Taxali-Tata McGraw Hill Publishers Pvt. Ltd.,}\\$

## **Business Organization & Communication**

Year	Course Type	Code	Hours	Credits	Version	
1 ,	Commerce	LD2406	60	4	2024-25	

#### **LEARNING OUTCOMES:**

- Understand the scope of Business, and its importance.
- · Explain business ethics as an integral part of every business organization
- Identify different forms of business organizations viz; Sole Proprietorship, Partnership, Joint Hindu Family Business & Co-operative Organizations.
- The chapters related communication shall be able to elucidate how communication plays an important role in modern business scenario.
- To demonstrate his/her ability to write error free while making an optimum use of correct Business Vocabulary & Grammar.

To draft effective business correspondence with brevity and clarity.

	Total lectures: 60	
Unit	Торіс	No. of lectures
1.	INTRODUCTION:	10
	Indian traditional businesses and their organizational structures. Concepts of Business, Trade,	
	Industry and Commerce - Classification - Relationship between Trade. Industry and Commerce -	
	Business Organization - Concept, Characteristics, Importance and Objectives . Functions of	
	Business and Social Responsibility of a business - Steps to Start an Enterprise.	
	FORMS OF BUSINESS ORGANIZATION: Business Organization - Classification - Factors Influencing	10
2.	the Choice of Suitable Form of Organization - Sole Proprietorship and Partnership – Meaning,	
	Definition - Characteristics - Advantages. Co-Operative Organization – Meaning, Functions and	
	Limitations of Co-operatives Societies.	
3.	ORGANIZATION OF COMPANIES: Concepts, Meaning, Formation, Characteristics and Significance	10
	of Private Company and Public Company. Multinational Companies (MNC'S) and the Challenges	
	of their organization in India.	
4.	COMMUNICATION: Definition, Nature, Importance, Objectives of Communication.	10
	Communication theories and process- Information theory, Interaction theory, Transaction	
	theory, Elements of communication process. Barriers to Communication: Linguistic Barriers,	
	Psychological Barriers, Interpersonal Barriers, Cultural Barriers, Physical Barriers, Organizational	
	Barriers.	
5.	Written Communication: Writing techniques and Guidelines. Letter writing - Basic Principles,	10
	Purpose, Types of business letters, Report writing, types of reports, Drafting of report. Oral	
	Communication: Speeches for different occasions, Guidelines for effective listening, Job	
	Interviews, Type of information.	
6.	Modern forms of communication E-mail, Video Conferencing, International Communication for	10
	Global Business. Information Technology: Form of technology, uses in modern communication	
	system. Role of Social Media in modern business.	

## **Text & Reference Books:**

- 1. T.N. Chhabra, Business CommunicationHimalaya Publishing House New Delhi
- 2 . K.K. Sihna, Essentials of Business CommunicationVK Global publicationsFaridabad
- 3. Dr. Ramesh Mangal Business Communications Universal Publication Agra
- 4. Dr. S.C. Saksena Business Organisation and Communication, Sahitya bhawan Agra
- 5. Manoj Kumar Garg Business Communication, Kitab Mahal Agra

- file:///C:/Users/Admin/Downloads/8281-Article%20Text-29066-1-10-20130630.pdf
- https://ddceutkal.ac.in/Syllabus/MA\_English/Paper\_21.pdf
- https://drive.google.com/file/d/0B\_V4Kkm2koFqTzdxMjBiWGRvOWs/view
- http://www.rapodar.ac.in/pdf/elearn/Business%20Communication%20Semester%20I%20notes.pdf
- https://phaariz.files.wordpress.com/2009/06/sis-module-summary.pdf

## FINANCIAL ACCOUNTING

Year	Course Type	Code	Hours	Credits	Version
1 /	Commerce /	LD2407 /	60	4	2024-25

## **LEARNING OUTCOMES:**

- Acquire conceptual knowledge of basics of accounting
- Identify events that need to be recorded in the accounting records
- Develop the skill of recording financial transactions and preparation of reports in accordance with GAAP
- Describe the role of accounting information and its limitations
- Equip with the knowledge of accounting process and preparation of final accounts of sole trader
- Identify and analyze the reasons for the difference between cash book and passbook balances
- Recognize circumstances providing for increased exposure to errors and frauds

	Total lectures: 60	
Unit	Торіс	No. of lectures
1.	Accounts :- Indian History . Definition , Objectives ,Basic Concept and Principals of Double Entry System Journal Entry ,Ledger, Subsidiary books ,Trial Balance Introduction of Indian Accounting Standard Final Accounts	10
2.	Accounting for Depreciation (According to Accounting Standard -6) Branch Accounts , Joint Venture Accounts.	10
3.	Royalty Accounts , Departmental Accounts	10
4.	Accounting of Non-Profit Organisation, Investment Account, Consignment Accounts	10
5.	Partnership Accounts :- Dissolution of Partnership (with Insolvency), Amalgamation of Partnership Firms, Conversion of Partnership firm into joint stock Company	10
6.	Computerized Accounts by using any popular accounting software. Creating a company, configure and features setting, creating accounting ledgers and groups, creating stock items and groups, vouchers entry, generating report - cash book, ledger accounts, trial balance, profit and loss account and balance sheet	10

Keywords/Tags: financial A/c, Depreciation, Accounting Standard, branch a/c, royalty A/c, partnership a/c, Computerized Accounts.

#### **Text & Reference Books:**

- 1. Dr. R.K. Sharma/Dr. R.S. Popli, Financial Accounting, Kitab Mahal Pub. Agra
- 2. Anil, Rajesh & Mariya Financial Accounting Himalya Publication Nagpur
- 3.. Shukla & Grewal, Financial Accounting, S Chand & Sons New Delhi
- 4. Maheshwari S.N., An Introduction to Accountancy, Vikas publication, New Delhi.
- 5. Agrawal Dr. Mahesh Financial Accounting, Ramprasad and sons, Bhopal
- 6. S.M. Shukla, Financial Accounting Shahitya Bhawan Agra.
- 7. Gupta R.L. and Radhaswamy M, Advance Accounting S Chand & Sons, New Delhi

- http://www.ddegjust.ac.in/studymaterial/mba/cp-104.pdf
- http://www.ddegjust.ac.in/studymaterial/bba/bba-104.pdf
- https://deeppanacademy.com/pdf/cma/foundation/fundamentals-of-accounting.pdf
- https://www.academia.edu/38623012/Financial\_Accounting\_IFRS\_Edition\_2e\_th\_Jerry\_J\_Weygandt

## **COST ACCOUNTING**

Year	Course Type		Code	Hours	Credits	Version	
1	Commerce	/	LD2408	60	4	2024-25	/

#### **LEARNING OUTCOMES:**

This subject of cost accounting is very important to make the student of commerce subject self-reliant, students from its study:-

- know the principles, concepts, benefits, utility of cost accounting
- In the event of setting up your own industry, being self-sufficient in cost accounting, you will be able to acquire knowledge of the methods of material issue, control and labor payment.
- · Will be expert in finding out unit cost, finding tender price, finding contract cost and finding profit
- Develop decision making ability through marginal cost analysis, standard cost analysis
- Will be able to get employment as a cost analyst in small, big business houses.

	Total lectures: 60							
Unit	nit Topic							
1.	Cost: Meaning, Concept and Classification, Element of Cost, Nature and Importance,	12						
	<b>Material Costing :</b> Methods of valuation of material issued, Concept ,and material control and its Techniques . Labour Costing ,Methods of Wages Payment							
	Unit Costing: Preparation of Cost Sheet and Statement of Cost	12						
2.	(Including calculation of Tender Price),							
	Overhead Costing: Overhead costing (including Calculation of machine hour rate)							
3.	Contract and Job Costing	12						
	Operating Costing (Transport Costing)							
4.	<b>Process Costing</b> (Including Inter Process Profit and Reserve) Reconciliation of Cost and Financial Accounts.	12						
5.	Marginal Costing-Profit-Volume Ratio, Break-even Point, Margin of Safety, Application of Break-even Analysis. Standard costing and Variance Analysis(Material and Labour only)	12						
Keyw	ords/Tags: Cost, Material Costing, Unit Costing, Contract and Job Costing, Process Costing, Ma	rginal Costing.						

RECOMMENDED STUDY RESOURCES City Author **Publication** Subject Maheshwari S.N. Advance Problem and Solution in Cost S.chand New Delhi Accounting Tulsian P.C. **Practical Costing** Vikas **Publisher** New Delhi Arora, M.N. Cost and Management Accounting Himalya Pub. Nagpur Dutta Cost Accounting: Principles & Practice Pearson New Delhi Agrawal dr Mahesh Ramprasad & sons Bhopal **Cost Accounting** Indore Dr sanjay Mehta / Pro. **Cost Accounting** Devi Ahilya Prakashan Mukesh bramhabhatta Prof. M.L. Agarwal & Dr. K.L. Cost Analysis and Control Sahity Bhavan Agra Gupta

- 1. https://icmai.in/upload/Students/Syllabus2016/Inter/Paper-8-New.pdf
- 2. https://drive.google.com/file/d/1zSNsq0AN5BfC-kvEfcMV0gxZCwso0QUC/view?showad=true
- 3. http://www.universityofcalicut.info/SDE/BComCoreCostAccounting\_on09March2016.pdf
- 4.http://cbseacademic.nic.in/web\_material/Curriculum/Vocational/2018/Accounting%20and%20Taxation/Cost%20Accounting%20class%20XI.pdf
- 5. https://mdu.ac.in/UpFiles/UpPdfFiles/2020/Jan/Advanced%20Cost%20Accounting-Final.pdf

## MIS FOR LOGISTICS

Year	Course Type	Code	Hours	Credits	Version	\	
2	Domain	LD2409	90	6	2024-25		,

#### **COURSE OBJECTIVES:**

- To develop competencies and knowledge of students to become MIS for logistics professionals
- · To orient students in the field of Logistics
- To help Students to understand MIS for Logistics

#### **LEARNING OUTCOMES:**

- Students will be able to apply the Basic knowledge of MIS for Logistics in the real-life situation
- This subject will enable them to enhance their ability and professional skills in Logistics

Unit	Topics
I	Introduction- IT and management opportunities and challenges-Strategic planning and models - Information management & IT Architecture – IT Architecture & infrastructure, cloud computing and services, Virtualization and Virtual Machines.
II	Database Technology- Data warehouse- Data Mart Technologies- Data and Text mining- Business Intelligence & Analytics, Digital and physical document management. Networks, collaboration & sustainability: Business IT networks & components, communication technologies – Sustainability and Ethical issues - Internal control-Business Control and Auditing.
III	Dissemination of technology information- and strategic planning – Technology choice and evaluation methods – Analysis of alternative technologies – Implementing technology programmes - Intellectual Capital - An introduction to Intellectual Property Right - Patent -Copyrights - Trademarks and other issues.
IV	Functional Area & Compliance systems: Management levels and functional systems Enterprise Systems and applications: Enterprise systems, Enterprise Resource Planning (ERP), Supply Chain Management (SCM), Collaborative Planning, Forecasting, and Replenishment system (CPFR), Customer Relationship Management (CRM). Performance Management: Data visualization, Mashups, and Mobile intelligence, Fleet Management Information System.
V	Business Process and Project Management: - Architecture & IT design, System development, Software & Applications for management (Business software tools), Support system. ERP modules -sales and Marketing, Accounting, Finance, Materials and Production management etc.

- 1. Course Material Prepared by LSC
- 2. KENNETH C. L., JANE P. L., & RAJANISH DASS (2001) Management Information System Managing the Digital Firm. Pearson Education: New Delhi.
- 3. RAVI, K., & ANDREW, B. W. Frontiers of Electronic Commerce. Pearson Education: New Delhi.
- 4. KENNETH, C. L., & JANEP, L. (2001) Essentials of MIS. Prentice Hall India: New Delhi.
- 5. SADAGOPAN, S. (2003) Management Information System. Prentice Hall India: New Delhi.
- 6. EFF, O.Z. (2003) Management Information Systems. Vikas Publishing House Pvt. Ltd.: New Delhi.

## PORT TERMINAL & LINER LOGISTICS

Year	Course Type	Code	Hours	Credits	Version
2	Domain	LD2410	90	6	2024-25

## **COURSE OBJECTIVES:**

- To develop competencies and knowledge of students to Liner logistics professionals
- To orient students in the field of Logistics
- To help Students to understand Liner logistics

## **LEARNING OUTCOMES:**

- Students will be able to apply the Basic knowledge of Liner Logistics in the real-life situation
- This subject will enable them to enhance their ability and professional skills in Logistics.

Unit	Topics
I	Definitions of liner trades; tramp trades; containerization- Unitization - containerization, liner operations, port organization – Vessel loading and discharging, liner trade routes, The major ports, liner service options - Liner trade – ship types – Tonnages; basic ship layout, types of container ships, Ro-Ro barge carrying vessels, The refrigerated cargo ship conventional (Break bulk) vessels future vessel developments, economy of scale, shipboard handling equipment.
II	Cargoes & cargo equipment – Dangerous goods IMO special goods, cargo handlings other methods of lifting cargo port handling equipment, port terminals; port and terminal management; the role of ships officers - agent. Liner Shipping operations - Management and policy, ship management and operations, independent ship management, insurance, trade of commercial department, accounting, budgeting, freight collection and port disbursements agency duties.
III	Containerization unitization and inter-modalism - Growth in world trade unitization; container dimensions, types of container other container expressions container inventory, owning, leasing meeting the demand for containers tracking the container fleet, container control, FCLS LCLS & ICDS, legal & insurance implications in the container trade.
IV	The Bill of Lading and other Documentation - The Bill of Lading UK bill of lading Act 1855 and UK carriage of goods by sea Act 1992, The use of Bill of Lading in liner trades, Bill of Lading documentary credits, Bill of Lading clauses The printed clauses – The evidence of the contract, other forms of Bill of Lading other liner documents, Intl conventions relating to Bill of Lading, paperless trading
V	The Exchange of goods transfer - Transfer of funds from country to country, methods of payments in International trade who are the merchants, International contracts of sale INCO terms; Legal aspects of the liner trades - The carrier insurance the carrier's liability for the cargo the liabilities of the agent, legal aspects of the Bill of Lading, cargo claims general average (GA), security, ISPS code.

- Course Material Prepared by LSC
- Handbook of Ship Calculations, Construction and Operation, Charles H. Hughes, Wexford College Press, 2008.
- Ocean Shipping Elements of Practical Steamship Operation, Robert Edwards Annin, Thompson Press, 2010.
- Major Port Trust Act Government of India
- Port Industry Statistics, American Association of Port Authorities
- AP MOLLOR Guidebook on Terminal
- DUBAI PORT AUTHORITIES Manual

## Specialisation Module - Group A - Course I

## **INTRODUCTION TO AVIATION INDUSTRY & AIRPORT OPERATIONS**

Year	Course Type	Code	Hours	Credits	Version
2	Domain	LD2411A	60	4	2024-25

#### **COURSE OBJECTIVES:**

- To develop competencies and knowledge of students to become Aviation Professionals
- To help Students to understand Fundamentals of Aviation Industry & Airport Operations

#### **LEARNING OUTCOMES:**

- Students will be able to apply the Basic knowledge of Aviation and Airport Operations in the real-life situation
- This subject will enable them to enhance their ability and professional skills in the Aviation Industry & Airport Operations

Unit	Topics
I	History of Aviation & Key Organizations in the Aviation Industry
	a. History of Aviation through the ages-Origins in Greek Mythology- The Wright Brothers- Aviation in the era of World War 1 & 2- Commercial Aircraft Era- Modern Jetliners
	b. Key Organizations in the Aviation Industry-
	<ol> <li>ICAO- International Civil Aviation Organization, 2. IATA - International Air Transport Association</li> <li>MoCA - Ministry of Civil Aviation, 4. DGCA - Directorate General of Civil Aviation</li> <li>AAI- Airports Authority of India, 6.AAICLAS- Airports Authority of India Cargo Logistics Allied Services</li> <li>AERA- Airport Economic Regulatory Authority 8. BCAS- Bureau of Civil Aviation Security</li> </ol>
II	Freedoms of the Air & the Airline Business
	<ul><li>a. Freedoms of the Air- Overview- Nine Freedoms of the Air</li><li>b. Airline Business-</li></ul>
	i Business Models- Legacy, Low Cost, Charter, Regional, Cargo & Hybrid
	ii Airplane Manufacturers- Primary Manufacturers- Boeing, Airbus and others
	iii Narrow Body v/s Wide Body- Definition & Features
	iv The Airline Industry as a Business- Key Functions in the Airline Business
	v Airline Codeshares & Alliances-
	a. Concept, b. Key Benefits, c. Major Airline Alliances
	vi Airline Cabin Classes- First, Business, Premium Economy & Economy
III	World Geography & Airline Communication Protocol
	Traffic Conference Areas, Time Zones, Codes-Country, City, Carrier, Currency, Aircraft Registration, Airline Phonetics
IV	Airport Operations
	a. Key Stakeholders, Airport Types, Airport Revenue Sources, Airport Functional Layout-Landside, Governmental Agencies at Airport, Baggage Handling, Airside Operations
	b. Airport as an Operational System-Infrastructure & Facilities, Airport Operations Control Centre (AOCC), Airport Collaborative Decision Making (ACDM), Key Information Technology Systems at Airports
V	Concessionaire Activities at Airports (terminology restricted to Indian scenario)
	a. Non-Aero Activities- Retail, Food & Beverage, Real Estate, Car Rentals Car Parking, Currency & Banking, Advertising
	b. Maintenance Repair & Overhaul (MRO)- Types of MRO Models
	c. Ground Handling
	i Concept, ii Self-Handling V/s Outsourced Handling
	iii IATA Standard Ground Handling Agreement

- 1 Course Material Prepared by LSC
- 1. Airport Operations-Norman Ashford, Pierre Coutu, John Beasley-McGraw-Hill Education; 3rdedition(16 December 2012)
- 2. Principles of Airport Economics-P.S. Sengupta-Excel Books(1December2007)
- 3. ManagingAirports-AnInternationalPerspective-AnneGraham-Routledge; 5 edition(June9,2018)
- 4. IATAAirportHandlingManual-40thedition-Year of Publication-2020
- 5. IATAGroundOperationsManual-9thedition-YearofPublication-2020

## Specialisation Module – Group B - Course I

## **FIRST MILE OPERATIONS**

Year	Course Type	Code	Hours	Credits	Version
2	Domain	LD2411B	60	4	2024-25

## **COURSE OBJECTIVES:**

• To understand the First Mile operational processes in e-commerce logistics.

## **LEARNING OUTCOMES:**

THE STUDENTS WILL LEARN:

- Basics of First Mile operations.
- Shipment pickup operations.
- Different types of shipment processing operations at Processing Centers.
- Layout of a Processing Centre.
- Key challenges in First Mile operations and First Mile metrics.

Unit	Topics
I	Role of First Mile in E-Commerce Logistics
	Difference between First Mile, Line Haul and Last Mile operationsFirst Mile Operations - OverviewWhy is First Mile operations important in e-commerce logistics-First Mile process flow.
П	Shipment Pickup Operations
	Shipment pickup processPickup operations staff - roles and responsibilitiesPickup coordinationSafety and security of shipments during pickup-Pickup documentation.
Ш	Shipment Processing Operations
	Primary and secondary processingBagging operationsManual processing operations-Automated processing operations
IV	Layout of A Processing Centre Inbound Operations-Processing Operations-Outbound Operations-Safety and security-Processing Centre staff - roles and responsibilities
V	First Mile Analytics and Metrics
	Productivity-Pickup operations metrics-Processing operations metrics-First Mile dashboard.
	Tools and Applications
	Pick up tools and applications-Processing tools and applications-Exceptions in First Mile and impact on operations- Tools and communication to resolve exceptions.

## **Text & Reference Books:**

1. Course Material Prepared by LSC

# Specialisation Module – Group C – Course I PRINCIPLES & PRACTICES OF TOURISM

Year	\ [	Course Type	Code	Hours	Credits	Version	
2 /	/	Domain	LD2411C	60	4	2024-25	/

## **COURSE OBJECTIVES:**

- Understand the fundamentals of the Tourism industry and its development in India.
- Develop insights on the difference between International and National Industry.
- Knowhow on Tourism in India through Surface transportation.
- Impart knowledge on new trends in Tourism.

## **LEARNING OUTCOMES:**

- To develop an understanding of the nature of tourism in India
- Throw light on an initiative by Government and Railways to promote tourism.
- To understand different modes and package tours by Travel
- Agencies and to learn how to develop packages.
- Recent trends of tourism and Infrastructure including Hotels

Unit	Topics
	Basics of Tourism-History & Growth-Tourism & Economy, Multiplier Effect-Principles, Components & Types of Tourism – Service Industry, Passenger Transportation. Travel Agencies
	Domestic & International Tourism-Tourism Policy & Initiatives of Govt – Dept of Tourism, ITDC, IRCTC Etc- Inbound & Outbound Tourism – Segmentation, Bookings, Package Tours-Travel Agencies, Destinations & Infrastructure – Ratings
	Tourism - Road-Road Infrastructure – Connectivity to destinations, Quadrangle, Highways, Bharatmala Project-Road Vehicles – Cabs, Minibuses, luxury buses, Double deck sleeper. Regulations-Single point. Multiple destinations, Group booking, Cluster approach.
	Tourism by Rail-Infrastructure – Rail destination. Toy trains to Hills – Shimla, Darjeeling, Ooty – Last mile connectivity-Railway Initiatives – Rail Yatrik Niwas at stations, Budget hotels. Online bookings, Tourist lounges. Bookings – Group ticket, package tours, circular journey ticket etcTourist trains – Palace on Wheels, Maharaja, Deccan Odyssey, Rail package tours, Coach Bookings itinerary.
	Trends in Tourism-Sustainable tourism – Ecological & environmental issues-Heritage, Religious, Medical, Leisure, Conferences Tourism, Destination weddings-New destinations- Statue of Unity, Akshardham, Winter tourism etc

## Suggested Readings:

1. Course Material Prepared by LSC

## Specialisation Module - Group A - Course II

## INTRODUCTION TO AIR CARGO INDUSTRY

Year	Course Type	Code	Hours	Credits	Version
2	Domain	LD2412A	60	4	2024-25

## **COURSE OBJECTIVES:**

- To develop competencies and knowledge of students to become Air Cargo Professionals
- To help Students to understand Fundamentals of Air Cargo Industry

#### **LEARNING OUTCOMES:**

- Students will be able to apply the Basic knowledge of Air Cargo Industry in the real-life situation
- This subject will enable them to enhance their ability and professional skills in the Air Cargo Industry

Unit	Topics
I	History of Air Cargo & Multi Modal forms of Transport
	a. History of Air Cargo & Mail, Air Freight, Air Express, Overnight Air Express & Air Mail
	b. Other Multi Modal forms of Transport- Rail, Sea & Surface Transport- Key Concepts
П	Key Organizations Facilitating Air Cargo
	International Air Transport Association (IATA), International Civil Aviation Organization (ICAO), International Federation of Freight Forwarders Association (FIATA), The International Air Cargo Association (TIACA)
Ш	Air Cargo Business Models
	Freighters, Charters, Integrators, Combination Carriers, Systems), Couriers, E-commerce, Postal mail
	a. Key Concepts- Brief Introduction to the Business Models
	b. Impact of various Business Models in relation to geography, size and scope
IV	Key Stakeholders & Key Terminologies
	a. Key Stakeholders- Airports, Airlines (Direct), Airlines through General Sales Agents (GSA) or General Sales & Service Agents (GSSA), Shippers, Freight Forwarders, Custom Brokers, Consolidators, Trucking
	b. Key Terminologies & Abbreviations
V	Training & Development in Air Cargo Industry
	a. Importance of Training in the Aviation & Cargo Industry
	b. Areas of Training in the Air Cargo Industry
	c. Key Organizations facilitating Training & Development in the Aviation & Air Cargo Industry.

- 1. Course Material Prepared by LSC
- 2. Air Cargo Management- Air Freight and The Global Supply Chain- Michael Sales- Routledge (2016)
- 3. Air Cargo and Logistics Classics and Contemporary practice by Rico Merket and Jackie Walters- Academic Publishers (01 June, 2019)
- 4. Moving Boxes by Air The Economics of International Air Cargo by Peter S. Morrell and Thomas Klein Routledge; 2 edition (19 October 2018)

## Specialisation Module - Group B - Course II

## LAST MILE OPERATIONS

Year	Course Type	Code	Hours	Credits	Version
2	Domain /	LD2412B /	60	4	2024-25

## **COURSE OBJECTIVES:**

• To understand Last Mile Operations in E-Commerce

## **COURSE OUTCOME:**

The students will be able to:

- Understand the basics concept of Last mile logistics in E-Commerce
- Understand the processes involved in Last mile logistics
- Understand various metrics and customer services processes to be followed in last mile logistics
- Explain the prospects of last mile logistic

Unit	Topics
ı	Introduction
	1.1 What is Last Mile in Ecommerce?
	1.2 Importance of Last Mile in the supply chain
	1.3 Last Mile Delivery challenges for ecommerce
	1.4 Trends in Last Mile delivery
	1.5 Route optimization in Last Mile operations
Ш	Last Mile Processes
	2.1 Delivery Process & its challenges
	2.2 Reverse pickup process in Last mile operations
	2.3 Challenges in Reverse Pickup process
	2.4 Tools and applications in Last Mile operations
	2.5 Considerations for effective last mile logistics strategy
Ш	Metrics
	3.1 Metrics to measure in last file
	3.2 Automation and technology driving metrics.
IV	Customer service
	4.1 Customer service and its importance
	4.2 Good and bad customer service (Dos and Don'ts of customer service)
	4.3 Relationship between metrics and customer service.
V	Prospects of Last Mile Logistics- 5Hrs
	5.1 Innovations in Last Mile Logistics
	5.2 Technology Trends in Last Mile Delivery
	5.3 Last Mile Delivery Market Future Prospects

## **Text & Reference Books:**

1. Course Material Prepared by LSC.

## Specialisation Module – Group C - Course II

## **COMMERCIAL ASPECTS OF TRANSPORTATION**

Year	Course Type	Code	Hours	Credits	Version
2	Domain	LD2412C	60	4	2024-25

## **COURSE OBJECTIVES:**

- To high light vital part of commercial considerations in providing transport services for Freight and Passengersmovement.
- To Understand the importance and need for marketing and strategies involved.
- To Describe the principles in fixing Railway Freight and Rates
- To evaluate Competition in rates of Road and Rail mode of transportation.

## **LEARNING OUTCOMES:**

- Develop a clear perspective of various commercial aspects in transportation
- Distinguish between the Operational feasibility of a work and its commercial viability
- Know the issues involved in booking and reservation of passengers,
- Know the various types of costs involved and understand the concept of cost-of-service vs value of service

Unit	Topics
I	Commercial Aspects in Transportation – A Perspective-Role and importance of Commercial Aspects, relative strengths of rail vs road-Concept of commercial viability vis a vis operational feasibility-Issues/ functions included in the commercial aspects, organisational set up to handle these
II	Commercial Aspects involving Passenger transportation —Passenger Services on Indian Railways; Booking and Reservation of passengers, Various class of services, types of tickets, concessions etc-Passengers Services in Road Sector, A state subject- differences from State to state-Supplementary and related services such luggage, parcel, refunds, catering etc.
III	Commercial Aspects involving Goods / Freight transportation—Different components of freight traffic, Booking and delivery of freight traffic on Railways, Demurrage and Wharfage, sidings-Booking and delivery of goods in roadways, agencies involved and their role-Claims and liabilities, Organisational set-up and procedure for Claims' compensation,
IV	Pricing of Transport-Basic consideration in pricing; Different type of costs involved in computing price, Relativity index of passenger fares in Indian Railways; surcharges and discounts-Principles of classification and Rate fixation and routing of traffic-Cost of service vs value of service, Cross subsidisation etc
V	Marketing Strategies for Commercial growth –Need for marketing, Rail vs Road: Complementary and not competitive role, High profit yielding commodities-Incentive schemes, IT-enabled user-friendly solutions for Booking, payment, tracking consignments and trains, Passenger movement – PRS, etc-Future trends: technology-induced improvements in various aspects of commercial working

## **Textbooks**

1. Course Material Prepared by LSC

## **DATA ANALYSIS USING SPREADSHEET**

Year		Course Type	Code	Hours		Credits	Version	\
2 /	/	Skill	LD2413	60	/	4	2024-25	/

## **COURSE OBJECTIVES:**

This course is designed with the view of making the student skilful at

- Performing data analysis using spreadsheet (MS Excel)
- Creating pivot tables from a range with rows and columns in Excel.

## **LEARNING OUTCOMES:**

- Support the E communication effectively with help of Spread Sheet
- Summarize data with data analysis, Pivot Tables, and Pivot Charts.
- Work with charts and the drawing tools.
- Import and export data from other applications.

	Total lectures: 60	
Unit	Topic	No. of lectures
1.	Introduction to Excel, About Excel & Microsoft, Uses of Excel, Excel software, Spreadsheet	12
	windowpane, Title Bar, Menu Bar, Standard Toolbar, Formatting Toolbar, the Ribbon, File Tab and	
	Backstage View, Formula Bar, Workbook Window, Status Bar, Task Pane, Workbook & sheets	
	Columns & Rows	
	Selecting Columns & Rows, Changing Column Width & Row Height, Auto fitting Columns & Rows,	12
2.	Hiding /Unhiding Columns & Rows, Inserting & Deleting Columns & Rows, Cell, Address of a cell,	
	Components of a cell – Format, value, formula, Use of paste and paste special Functionality Using	
	Ranges. Using Ranges, Selecting Ranges, Entering Information into a Range, Using AutoFill	
3.	Creating Formulas, Using Formulas, Formula Functions – Sum, Average, if, Count, max, min,	12
	Proper, Upper, Lower, Using AutoSum, Advance Formulas Concatenate, Lookup, Lookup, Match,	
	Count if, Text, moving between Spreadsheets, Selecting Multiple Spreadsheets, Inserting and	
	Deleting Spreadsheets Renaming Spreadsheets, Splitting the Screen, Freezing Panes, Copying and	
	Pasting Data between Spreadsheets, Hiding, Protecting worksheets	
4.	Creating Charts, Different types of chart, Formatting Chart Objects, Changing the Chart Type,	12
	Showing and Hiding the Legend, Showing and Hiding the Data Table Data Analysis Sorting, Filter,	
	Text to Column, Data Validation	
5.	PivotTables, Creating PivotTables, manipulating a PivotTable, Using the PivotTable Toolbar,	12
	Changing Data Field, Properties, Displaying a PivotChart, Setting PivotTable Options, Adding	
	Subtotals to PivotTables Spreadsheet Tools, Making Macros, Recording Macros, Running Macros,	
	Deleting Macros	

## **Text & Reference Books:**

Microsoft Excel 2016: Comprehensive, Freund, Starks, and Schmieder, Cengage Learning, 2017, ISBN: 9781305870727.

## **INCOME TAX LAW AND PRACTICES**

Year		Course Type	Code	Hours	Credits	Version	
2 /	/	Commerce	LD2414	60	4	2024-25	/

#### **LEARNING OUTCOMES:**

On successful completion of this course, the students will be able:-

- Understand the basic concepts in the law of Income Tax and determine the Residential status of different persons
- Identify the five heads in which income is categorised and compute income under the provisions various heads.
- Understand clubbing procedures, aggregate income after set-off and carry forward of losses and deduction allowed under the income tax act. and further to compute taxable income and tax liability of individuals
- Develop the ability to file online return.

	Total lectures: 60	
Unit	Topic	No. of lectures
Unit - 1	General Introduction of Indian Income Tax Act. 1961 : Brief History, Basic Concepts, Income,	12
	Agriculture Income, Casual Income, Previous Year, Assessment Year, Gross Total Income,	
	Total Income, Person, Assesses, Exempted Income. Residential Status and Tax Liability,	
Unit - 2	Income from Salary.	12
	Income from house property.	
Unit - 3	Income from Business and Profession.	12
	Capital Gains.	
	Income from other Sources.	
Unit - 4	Set off and Carry forward of Losses, Deduction from Gross total Income, Clubbing of Income,	12
	Computation of total Income and tax Liability of an Individual.	
Unit - 5	Assessment Procedure, Tax deduction & Collection Number (TAN), Permanent Account	12
	Number (PAN) Tax deduction at Source, (TDS) Advance Payment of Tax, Income Tax	
	Authorities, Appeal, Revision and Penalties, e-Fileing of return.	
Keyword	s/Tags: Income Tax, Basic Concepts, Capital Gains, Set off, Carry forward, Assessment	•

RECOMMENDED STUDY RESOURCES							
Author	Subject	Publication					
Ahuja Girish and Gupta Ravi	Systematic Approach to income tax	Bhart law House,					
Singhania vinod k. and Singhania monica	students guide to income tax	Taxmann publication pvt ltd					

- https://www.gacrkl.ac.in/studymaterial/gacr-ug-com-c6.pdf
- https://www.icsi.edu/media/website/Tax\_Law\_and\_Practice\_Final.PDF
- https://sist.sathyabama.ac.in/sist\_coursematerial/uploads/SBAX1022.pdf
- $\bullet\ https://dor.gov.in/sites/default/files/IT\%20Act\%20\%28English\%29\_0.pdf$
- https://www.icsi.edu/media/webmodules/FINAL\_TL&P.pdf
- https://www.eshiksha.mp.gov.in

## FINANCIAL MANAGEMENT

Year	Course Type	Code	Hours	Credits	Version
2	Commerce	LD2415	60	4	2024-25

## **LEARNING OUTCOMES:**

On successful completion of this course, the students will be able:-

- **Financial Management Principles**: Understanding financial management concepts and distinguishing between profit and wealth maximization.
- **Capital Structure and Leverage**: Analysing capital structure determinants and assessing the impact of leverage on profitability.
- Investment Proposal Evaluation: Evaluating investment decisions using criteria like NPV, IRR, and payback period.
- **Cost of Capital**: Calculating the cost of capital for various sources and understanding its significance in financial decisions.
- Working Capital Management: Managing working capital, including cash, receivables, and inventory, and determining working capital requirements.

	Total lectures: 60	
Unit	Торіс	No. of lectures
1.	<b>Financial Management :</b> Concepts, scope, function and importance financial goal, profit vs. Wealth maximization; financial functions-Investment, financing and dividend decision, financial planning.	12
2.	<b>Capital structure</b> : meaning and determinants, operating and financial Leverage, their measured, Effect on profit, analysing alternate, financial plans, Operating financial and, combined leverage.	12
3.	<b>Decisions on Investment Proposals :</b> Nature of investment decisions, investment evaluation criteria, payback period, net present value, internal rate of return, profitability index, NPV and IRR comparison.	12
4.	<b>Cost of capital</b> : significance of cost, cost of capital, Calculation cost of debt, Preference shares, equity capital, retained earnings, Weighted Average. cost of capital. Dividend Policies, forms of dividends, stability in dividends, determinants of dividends, issues in dividend Policies, Waltor's Model, Gordan's Model, M.M. Hypothesis.	12
5.	Management of working capital: Nature, types and importance of working capital. Operating cycle and factors, determining working capital requirement, Management of working capital, Management of Cash Management of receivables, Management of Inventory.	12

Keywords/Tags: Financial Management, Capital structure, Investment Proposals, Cost of capital, working capital

RECOMMENDED STUDY RESOURCES							
Author	Subject	Publication					
Reddy, G.S.	Financial Management — Principles and Practice	Himalya Publication's Nagpur					
Khan M.Y & Jain P.K.	Financial Management	McGraw Hill New Delhi					
Pandey I.M.	Financial Management	Vikas Publishing house, New Delhi					
Prasanna Chandra	Financial Management, Theory and Practice	McGraw Hill New Delhi					
Eugene F. Brigham/Joel F. Houston	Fundamentals of Financial Management	Cengage India Private Limited					
Dr. S.P. Gupta	Financial Management	Sahitya Bhawan Publications					

- https://www.eshiksha.mp.gov.in
- https://www.iare.ac.in/sites/default/files/lecture\_notes/IARE\_FM\_Lecture%20\_Notes\_2-converted.pdf
- https://mdu.ac.in/UpFiles/UpPdfFiles/2020/Jan/FinancialManagement.pdf
- http://sdeuoc.ac.in/sites/default/files/sde\_videos/Study\_material\_financial\_mgmnt.pdf
- https://www.icsi.edu/media/webmodules/Financial%20and%20Strategic%20Management.pdf
- https://vou.ac.in/slm/mba/MBA-202-Financial%20Management.pdf

## Goods and Service tax and Custom duty

Year	Course Type	Code	Hours	Credits	Version
2	Commerce	LD2416	60	4	2024-25

## **LEARNING OUTCOMES:**

On successful completion of this course, the students will be able:-

- 1. Connect with the genesis of goods and services tax (GST), decipher the constitutional amendment carried out to install in India and comprehend the composition and working of GST council.
- 2. Understand the meaning of supply under GST law.
- 3. Comprehend the utilization of input tax credit
- 4. Understand the provisions for registration under GST law
- 5. Know the basic concepts of customs Act and to compute the assessable value for charging customs duty.

	Total lectures: 60	
Unit	Topic	No. of lectures
1.	Goods and service tax - Introduction, meaning, features and basic Elements. Important terms and Definition Regarding GST. Background and implementation of GST in India. Structure and Classification of GST.	12
2.	Meaning and scope of Supply, Tax Liability on composite and mixed supply, Levy and Collection of Tax, Registration under GST. List of exempt goods under GST. Time and place of supply of goods and services, Determination of value of Taxable supply. practical problems, Preparation of Tax invoice and rules and proforma.	12
3.	Composition Levy- Person eligible to opt composition, intermation for composition option.  Condition and restriction for composition, Rate of tax of the composition levy and the rules regarding Return, Practical, Problems, relating to composition levy.	12
4.	Rules Provisions and procedure for Input tax Credit, Provisions regarding job-work. Classification of taxable goods and Services at the basis of tax rates and Practical Problems.	12
5.	Customs duty: History, Introduction and nature, types of customs duty. Prohibition of Import and Export, Valuation rules, Computation of assessable value and calculation of customs duty.	12
	· · · · · · · · · · · · · · · · · · ·	ms duty

RECOMMENDED STUDY RESOURCES						
Author	Subject	Publication	City			
Singhania V.K	GST & Customs Law	Taxmann Publication.	New Delhi			
Sisodia Pushpendra	GST Law	Bharat Law House.	New Delhi			
Bansal K.M.	GST & Customs Law	Taxmann Publication.	New Delhi			
महरोत्रा एवं गोयल	वस्तु एवं सेवाकर	साहित्य भवन पब्लिकेन	आगरा			
श्रीपाल सकलेचा	वस्तु एवं सेवाकर	सतीश प्रिन्टर्स	इन्दौर			
सीए अनूप मोदी, सीए महेश गुप्ता	वस्तु एवं सेवा कर तथा सीमा शुल्क	एस. बी. पी. डी.	आगरा			

- 1. https://www.cbic.gov.in/resources//htdocs-Concept%20and%20Status01072019n.pdf
- 2. https://www.bankbazaar.com/tax/custom-duty.html
- 3. https://cbic-gst.gov.in/pdf/ovw-short.pdf
- 4. https://www.rccmindore.com/wp-content/uploads/2020/12/Goods-Severvice-Tax-Costom-duty-1.pdf
- 5. https://www.eshiksha.mp.gov.in

## **LOGISTICS 4.0**

Year	Course Type		Code		Hours	Credits	\	Version	
3	Domain	/	LD2417A	/	60	2 ,	/	2024-25	/

## **COURSE OBJECTIVES:**

- To develop competencies and knowledge of students to understand the revolution in Logistics Industry
- To orient students in the field of Logistics
- To help students to learn the recent technology changes and challenges in Logistics Industry

## **LEARNING OUTCOMES:**

- Students will be able to apply the basic knowledge of technology and ITC development
- This subject will enable them to enhance their ability and professional skills in Logistic

Unit		Topics
I	1.1	First Three Industrial Revolutions: Industry 1.0–3.0
	1.2	Introduction to Industry 4.0
	1.3	Digitalization and the Connected Economy
	1.4	Drivers, Enablers, Compelling Forces and Challenges for Industry 4.0
	1.5	The Journey so far: Developments in USA, Europe, China, and other countries
	1.6	Comparison of Industry 4.0 Factory and Today's SMART Factory
	1.7	Trends of Big Data (Evolution) along with the Maturity framework and Predictive Analytics for Smart Business Transformation
II	2.1	Evolution of Logistics
	2.2	Introduction to Logistics 4.0
	2.3	Digital Transformation of Supply Chain Management
	2.4	Advanced robots, Augmented Reality, Digital Twins
	2.5	Simulation — Network simulation and optimization
	2.6	The Industrial Internet of Things
	2.7	Cloud Computing
	2.8	Cyber Security
	2.9	Big data and analytics – Data Warehouse v/s Data Mart
Ш	3.1	Digitalization of Logistics and Challenges in Logistics 4.0
	3.2	Inventory Control Systems (ICS)-MRP-1-MRP-2-ERP-1 3.3 The Internet of Things
	3.3 3.4	Challenges of The Internet of Things Changes in Business Models and Production Processes
	3.5	Telematics Technology – Application in Logistics
IV	4.1	Technology in Procurement 4.0 (Consignor Inventory Model)
	4.2	Technology in Inventory Management 4.0 (Impact of Digital Technologies on the Inventory Management Techniques)
	4.3	Technology in Logistics and Warehousing 4.0
	4.4	Logistics and Supply Chain Analytics
V	5.1	Business issues in Logistics 4.0
	5.2	Opportunities and Challenges
		Future of Works and Skills for Workers in the Logistics 4.0 Era
		Advantages and disadvantages of Logistics 4.0
	5.5	Strategies for competing in a Logistics 4.0 world

## **EXPORT AND IMPORT DOCUMENTATION**

Year	Course Type	Code	Hours	Credits	Version
3	Domain /	LD2417B /	60	2	2024-25

## **COURSE OBJECTIVES:**

 To familiarize the student with the basic concept of formalities for export trade, and the documentation process required for import and export.

#### **LEARNING OUTCOMES:**

- Recognize the impact of information and communication technologies, especially of the internet in business operations.
- Recognize the fundamental principles of eBusiness and eCommerce.
- Explain the security protocols and the issues in internet security.

Unit	Topics
I	Introduction to Export and Import 12 Hrs Basics of Exports - Classification of goods - Preparation for Exports - Methods of Exporting - Export Marketing Organizations - Functions - Registration formalities IEC Number - Procedure of obtaining IEC Number - RCMC (Registration Cum Membership Certificate) – Export Credit Guarantee Council (ECGC) - Application for import and export of restricted items.
II	Documentation Framework and Contracts 15 Hrs Aligned Documentation System: Commercial Documents - Auxiliary Commercial Documents - Regulatory Documents - Documents related to goods - Documents related to Shipment - Documents related to Payments - Documents related to Inspection - Documents related to Excisable Goods - Types of Contracts - Export Contracts.
Ш	Payments and Finance 15 Hrs Factors - Methods of receiving Payment - Instruments of Payments-Letter of Credit Pre-shipment Finance - Post-shipment Finance - Post-shipment Credit in Foreign Currency - Negotiation of documents with bank - CENVAT - Duty Draw back
IV	Quality Control and Clearance of Cargo 15Hrs Objective of Quality Control - Methods - Procedure for Pre-shipment Inspection - Role of Clearing and Forwarding Agents – Role of Inspection Agents-Clearance of Cargo Central Excise Clearance Procedure - Central Excise Clearance Option - Shipment of Export Cargo.
V	Customs Clearance, Risk and Insurance Policy 15 Hrs Customs Clearance of Export Cargo - Customs Clearance of Import Cargo - Risk: Types - Types of cover issued by ECGC - Cargo Insurance. Processing of an export order - Major laws governing export contract.

## **Text & Reference Books:**

- 1. RAMA, GOPAL C. (2008) Export Import Procedures Documentation and Logistics. New Age International Publishers: New Delhi.
- 2. KHUSHPAT, S. J. (2013) Export Import Procedures and Documentation. Himalaya Publishing House: New Delhi.
- 3. PAWAN, KUMAR (2001) Export of India's Major Products Problems and Prospects. New Century Publications: New Delhi.
- 4. KAPOOR, D. C. (2002) Export Management. Vikas Publications: New Delhi.
- 5. CHERUNILAM, F. (2004) International Trade and Export Management. Himalaya Publications: New Delhi.

#### Websites:

- 1. www.cbec.gov.in/customs/cs-act/cs-act-idx.htm (Central Board of Excise and Customs Customs Act, 1962, Customs Tariff Act 1975, Other Acts)
- 2. www.epckenya.org/(Export Promotion Council)
- 3. commerce.nic.in/MOC/index.asp (Ministry of Commerce and Industry)
- 4. www.dgft.gov.in/ (Directorate General of Foreign Trade)

## **INLAND WATERWAYS & COASTAL SHIPPING**

Year	Course Type	Code	Hours		Credits		Version	
3	Domain	LD2417C	60	/	2	/	2024-25	

## **COURSE OBJECTIVES:**

 To familiarize the student with the basic concept of Inland water ways and coastal shipping, their importance and future development of Indian water ways

## **LEARNING OUTCOMES:**

- Recognize the impact of Inland water ways and coastal shipping
- Recognize the importance and future development of Indian water ways.

Unit	Topics
I	Basics of shipping-Introduction for shipping - Types of ship- sizes of ship – Basic terminology of ships- Sea transport and its importance- Roll of ports in sea transport - Coastal shipping and its importance.
II	Inland waterways: Introduction –Scope –Sources (lakes, Rivers, Canals, Back water, creeks, water courses inlets and bays)-Working principles -Impact - Inland waterways in India: locations
III	Roll and importance of inland waterways: Infrastructure facility required - Roll and importance of inland water ways in transportation- Transportation through creeks
IV	Inland waterways: Road connectivity – Availability of cargo (scarcity)-Navigation (night navigation)- Draft restriction
V	Inland waterways in other countries: Bangladesh – China - Vietnam - Europe Inland waterways in India: Network in India –upcoming inland waterways – Inland waterways authority – Government policies on inland waterways – National waterways Act

- 1. Course Material Prepared by LSC
- 2. Inland Waterway Transport: Challenges and prospects (Routledge Studies in Transport Analysis) Hardcover Import, 12 Jul 2016 by Bart Wiegmans (Editor), Rob Konings (Editor)
- 3. Inland waterways Transportation (IWT) in India Machiraju presentation Pvt ltd

## **COURIER, EXPRESS & PARCEL SERVICES**

Year	Course Type	Code	Hours	Credits	Version	
3	Domain	LD2418A	60	2	2024-25	/

## **COURSE OBJECTIVES:**

- To develop competencies and knowledge of students to become Courier and Express
- Professionals
- To orient students in the field of Courier and Express
- To help Students to understand Courier and Express

## **LEARNING OUTCOMES:**

- Students will be able to apply the Basic knowledge of Courier and Express in the real-life situation
- This subject will enable them to enhance their ability and professional skills

Unit	Topics
I	Types of consignments for shipment - Information on labels and handling instructions - consignee locations-consignments and destinations- consignment shipment operations – (loading, handling, scheduling and documentation) - Special instructions for safe handling of fragile consignments
II	Customer declarations – verification of customer declarations and consignment package - Clarification procedure in case of discrepancies noticed - Generation of bill of lading / shipping bill for export consignments – Coordination for import/export consignments clearance
III	Hub-Spoke Operations & Inbound and Outbound activities: Introduction – Hub spoke activities inbound and outbound activities. Types of consignments coming in the hub-spoke - layout of the hub-spoke - Areas to receive, sort and inspect - Documentation activities in hub-spoke - Inspection process of inbound sorted and outbound consignments
IV	Tracking and tracing; AWB –essential time of arrival delivery - Last mile delivery – LMD -First mile delivery
V	Customer satisfaction- quality, delivery time, costs (shortest cost, loss prevention) - Weighment rate, cube scan –diversions/LBW/Volumetric density of cargo

- 1. Course Material Prepared by LSC
- 2. Logistics and Supply chain management Martin Christopher
- 3. Basics of Distribution Management; A Logistical Approach Prentice HALL of India Kapoor Sathish
- 4. Ware house management and Inventory control Vikas Publication House

## **IN PLANT LOGISTICS**

Year	Course Type	Code	Hours	Credits	Version
3	Domain /	LD2418B /	60	2	2024-25

## **COURSE OBJECTIVES:**

- To develop competencies and knowledge of students to become In-plant logistics professionals
- To orient students in the field of Logistics
- To help Students to understand In-plant logistics operations

## **LEARNING OUTCOMES:**

- Students will be able to apply the Basic knowledge of In-plant operations in the real life situation
- This subject will enable them to enhance their ability and professional skills

Unit	Topics
ı	Introduction to Logistics in a manufacturing setup - Manufacturing process - physical flow - Assembly line – OTIF (on time in full) - Basic activities of in-plant logistics: Loading, Unloading, Receiving, sorting, Storing, Picking and dispatch activities - process of coordination with assembly line
II	Job shop- work allocation - Production scheduling – selection of products/ models/parts/ Team table/Time table - Material flow – production line –feeding just in time inventory, Vendor management -
III	Inbound logistics- inventory management, importance, Value addition, stock counts, audits
IV	Out bound logistics – Finished goods (FG)-tooling, binding, creating, input process, output - packaging, Kitting, far goods(FH), Spare parts,, After markets process, schedule of transport, vendor coordination
V	Timely supply – scheduling, vendor coordination quality control, pre delivery Inspection, Quality assurance, on time in full (OTIF)

## **Text & Reference Books:**

6. Course Material Prepared by LSC

## **MULTI-MODAL TRANSPORTATION**

Year	Course Type	Code	Hours	Credits	Version	\
3	Domain	LD2418C	60	2	2024-25	/

## **COURSE OBJECTIVES:**

- Introduce Multi-modal and Intermodal Transport concepts.
- Explain Regulatory framework and policies for Multi-modal transportation.
- Describe Indian Railways' initiatives to promote Multimodal Logistics in India.
- Overview evolution of infrastructure facilitating Multi-modal Logistics in India.

## **LEARNING OUTCOMES:**

After completing this Course, the student will have the following learnings:

- The importance and role played by Multi-modal transport in the efficient and cost-effective movement of cargo
- Types of multi-modal movement and the role of containerisation for security and speed
- The provisions and procedures for Exim trade and INCOTERMS
- Indian Government's policies and vision R for development of seamless multi-modal transport.

Unit	Topics
I	Transportation Systems & Multi modal Transport –Concept of Multi modal & Intermodal Transport – introduction to Multi modal transport, the difference between Multi modal and Intermodal transport-Type of transport Modes – detail and characteristics of air, road, rail, water, pipelines, package carriers-Need, Aim and Key Issues of Multi modal transport.
II	How to organise Multi modal transport-Role of Containerisation in MMT- history, utility, types, ease of handling, cost saving-Types of Multi modal transport – combined container transport, rolling Road & forwarding of trailers, RORO & LASH transportation-National Multi modal Transport Committee (NMTC) and Logistics Policy of India – key features and importance
III	Multi modal Transportation Act & Procedures-MMTG Act of 1993-Custom procedures for Export & Import - Bill Of Lading – Hague Rules, Visby Rules, Hamburg Rules, Voyage by Sea-INCOTERMS – meaning, explanation, list, and types
IV	MMT and Indian Railways-PFT Policy – maintenance of rolling stock, cargo handling, customs, etc-Warehousing Policy – stuffing, de-stuffing, stacking, use of MHE, etc-Layout and design of Multi modal Logistics parks
V	Multi modal transport & Practice Today-India's growing conflict between Trade & transport – issues, policy, problems & pricing-Integrated Transport – Bharatmala, Sagarmala, IWT, DFC, the concept of ICP (International Check Posts-Scenario in India and neighboring countries with a case study

## **TEXT BOOKS**

1 Course Material Prepared by LSC

## **APPRENTICESHIP**

Year		Course Type		Code		Hours		Credits	Version	
3	$\geq$	Domain	$\geq$	LD2419	$\geq$	2016	$\geq$	44	2024-25	$\geq$

The students would be onboarded in Logistics Processes of companies by the Logistics Sector Skill Council for Apprenticeship Training. The duration of Apprenticeship Training is 6 months. During Apprenticeship Training students would be assigned on-the-job-training by companies. Being a legal engagement, students would receive a monthly stipend during Apprenticeship Training as per the existing norms.

On completion of the Apprenticeship Training, students shall submit Apprenticeship Report in the form of Work Diary to the Collaborating Institutions. The Report would be evaluated and Viva conducted by the Collaborating Institution.



## **Logistics Sector Skill Council**

'Temple Towers', Ground Floor 476, Anna Salai, Nandanam, Chennai - 600 035, India www.lsc-india.com