# APPRENTICESHIP-BASED UG DEGREE PROGRAMME IN LOGISTICS

**COLLABORATIVE PROGRAMME OF LSC** 



# **REGULATION & CURRICULUM**

VERSION 2021-22

NATIONAL SKILL QUALIFICATION FRAMEWORK LEVEL:5

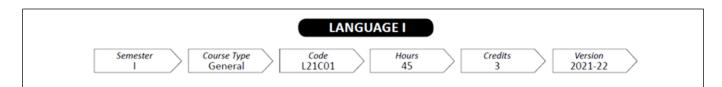
# APPRENTICESHIP-BASED UG DEGREE PROGRAMME IN LOGISTICS

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**VERSION 2021-22** 

NATIONAL SKILL QUALIFICATION FRAMEWORK LEVEL:5



#### Learning Outcome:

- To develop the skill of articulation for communication.
- To identify, observe and understand appropriate forms of communication.
- To demonstrate the ability to engage in group communication.
- To develop employability skills.

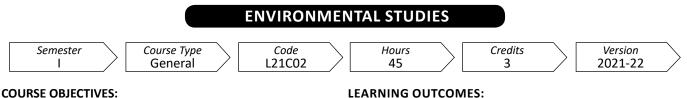
#### Learning Objectives:

- To identify and evaluate the key aspects of grammar.
- To understand and engage in various forms of oral communication.
- To improve writing skills.
- To improve reading skills and gain exposure to different types of text.
- To develop interpersonal and group communication skills.

Unit	Topics
I	Module 1: Language
	Key aspects of language, Sentence: Syntax and Parts, Articles, Linking Words, Modal Verbs, Tense
II	<b>Module 2: Theory of Communication</b> Organizational Communication (Added) Age of Globalization and the Need for Communicating in English. Communication : Concept & process Models of Communication - Shannon Weaver, Modes of Communication, Oral & Written Communication
	Types of Communication : Verbal & Non Verbal,
	Non-Verbal-Personal Appearance, Gestures, Postures, Facial Expression, Eye Contacts, Body Language (Kinesics), Silence & Proxemics.
	Module 3: Speaking
	Interpersonal & Group Communication: Meaning, importance & usage.
	Group Dynamics in Group Communication (Added)
IV	Techniques used to enhance communication. One on one communication, Correct Pronunciation (Added), Word and Sentence Stress (Added), Story- telling, (Narrating a short incident- focusing on articulation, fluency and connectivity)
	Module 4: Written Communication
v	Written Communication : Importance, 7Cs of Written Communication, Précis Writing, Data Interpretation Letter Writing - Personal Correspondence Letters, Invitation Letters, Request Letters & Letters of Gratitude (Thank you letters), Paragraph Writing (Importance of topic sentences)
VI	Module 5: Reading Importance of Reading, Methods of Reading - Skimming & Scanning, Speed Reading- Importance &
	Techniques. Reading to enhance vocabulary: Articles on relevant topics.
	Module 6: Practicals
	Individual Presentation, Group Presentations, Role Play with a Social Message, Book Review.
	Individual Presentation, Group Presentations, Role Play with a Social Message, Book Review.

Text & Reference Books (Language I & II)

- Courtland L. Bovee, John V. Thill, Abha Chaterjee 'Business Communication Today', 10th Edition, Pearson Publication
- Krishna Mohan & Meenakshi Raman, 'Advanced Communicative English' Tata McGraw Hill Education Private Limited, New Delhi.
- Er. A.K.Jain, Dr. Pravin S.R.Bhatia & Dr. A.M. Sheikh, 'Professional Communication Skills', S.Chand Publishing, New Delhi.
- Benjamin, James (1993), 'Business and Professional Communication
- Dr. R.K. Gupta, 'Personality Development & Presentation', Ritu Publication, Mumbai.
- S. Chand, 'Professional Communication Skills', S. Chand Publication, New Delhi.
- R.C. Bhatia 'Business Communication'
- R.K.Madhukar 'Business Communication'



- It is concerned with the exploration, investigation and development of an understanding of the natural, human and social dimensions of local and wider environments.
- It provides opportunities to engage in active learning, to use a wide range of skills, and to acquire open, critical and responsible attitudes.

#### **LEARNING OUTCOMES:**

- Master core concepts and methods from economic, political, and social analysis as they pertain to the design and evaluation of environmental policies and institutions.
- Appreciate the ethical, cross-cultural, and historical context of environmental issues and the links between human and natural systems.
- Understand the transnational character of environmental problems and ways of addressing them, including interactions across local to global scales.

Unit	Topics
I	Ecology
	Ecosystem – Introduction- Abiotic and Biotic components. Structure and functions of Ecosystem – Food Chain, Food web, Ecological pyramids, Energy flow and biogeochemical cycles. Biodiversity – Values, Type and levels of Biodiversity. Causes of depletion. Conservation of biodiversity
п	Pollution
	Water Pollution - Sources of water, water quality standards, type of pollutants - its sources and effects. Air Pollution
	- composition of atmosphere, Air quality standards, Sources and adverse effects of air pollution, Greenhouse effect, global warming, acid rain, ozone depletion, Noise Pollution - Introduction, Level of noise, Sources and adverse effects of noise, Control of noise pollution.
ш	Solid Waste Management
	Municipal waste – Introduction, classification of solid waste, composition and characteristics of solid waste, collection conveyance and disposal of solid waste, recovery of resources. Sanitary land filling, Vermi composting, incineration. Biomedical waste – Generation, collection and disposal.
١V	Non-Conventional energy sources
	Introduction, renewable sources of energy: solar energy, wind energy, Energy from ocean, energy from biomass, geothermal energy and nuclear energy. Potential of renewable energy resources in India.
V	Social Issues and EIA Sustainable Development-Rainwater harvesting. Public awareness and environmental education. Environmental Legislations in India – Environmental Protection act-1986, Air (Prevention and control of Pollution) act, water (Prevention and control of Pollution) act, wildlife protection act, Forest conservation act.

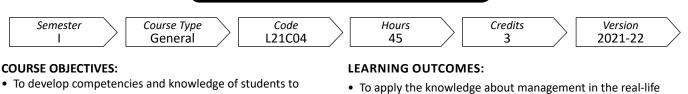
- 1. Agarwal Shikha, Suresh Sahu, Environmental Engineering and Disaster Management, Dhanpat Rai & Co., 2010
- 2. Brunner R.C., Hazardous Waste Incineration, McGraw Hill Inc. 1989. Textbooks & Suggested Readings:
- 3. Clark R.S., Marine Pollution, Clanderson Press Oxford (TB)
- 4. Cunningham, W.P, Cooper, T.H. Gorhani, E & Hepworth, M.T., Environmental Encyclopaedia, Jaico Publishing House, Mumbai, 2001.

	Apprenticesnip-based OG Degree Programme in Logistics - Collaborative Programme of LSC
	FUNDAMENTALS OF LOGISTICS
S	Temester Course Type Code Hours Credits Version 2021-22
To o beco To o	SE OBJECTIVES:LEARNING OUTCOMES:develop competencies and knowledge of students to ome logistics professionals rient students in the field of Logistics elp Students to understand Fundamentals of Logistics• Students will be able to apply the Basic knowledge of Logistic in the real-life situation • This subject will enable them to enhance their ability an professional skills in Logistics
Jnit	Topics
	Introduction to Logistics: History of Logistics Need for logistics- Cost and Productivity, cost saving & Productivity improvement. Logistics Cos reduction in logistics cost, benefits of efficient Logistics, Principles of Logistics, Technology & Logistics -Informatic Logistics optimization. Listing of Sub-sectors of Logistics
	Logistics and Customer Service - Definition of Customer Service Elements of Customer Service-Phases in Custome Service-Customer Retention - Procurement and Outsourcing - Definition of Procurement/Outsourcing - Benefits Logistics Outsourcing - Critical Issues in Logistics Outsourcing
	Global Logistics - Global Supply Chain - Organizing for Global Logistics-Strategic Issues in Global Logistics - Forc driving Globalization - Modes of Transportation in Global Logistics Barriers to Global Logistics - Markets ar Competition - Financial Issues in Logistics Performance - Integrated Logistics - Need for Integration - Activi Centres in Integrated Logistics. Role of 3PL&4PL.
	<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 efficie transportation systems.</li> <li>c) Courier/Express - Courier/Express-Meaning, Categorization of Shipments, Courier Guidelines, Pricing</li> </ul>
	<ul> <li>Courier - Express Sector for international and domestic shipping.</li> <li>E-Commerce - Meaning, Brief on Fulfillment Centers, Reverse logistics in e-commerce sector, Marketing e-commerce and future trends in e-commerce.</li> </ul>
	<ul> <li>a) EXIM: Brief on EXIM/FF &amp; CC, Multi-modal transportation, brief on customs clearance, bulk load handling ar brief on trans-shipment.</li> <li>b) Supply chain.</li> <li>c) Cold chain.</li> <li>d) Lincid Leadation</li> </ul>

- d) Liquid Logistics.
- e) Rail Logistics.

- 1. Course Material Prepared by LSC
- 2. 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.
- 3. Vinod V. Sople (2009) Logistic Management (2nd Edn.) Pearson Limited.
- 4. Logistics Management for International Business: Text and Cases, Sudalaimuthu & Anthony Raj, PHI Learning, First Edition, 2009.
- 5. Fundamentals of Logistics Management, David Grant, Douglas M. Lambert, James R.Stock, Lisa M. Ellram, McGraw Hill Higher Education, 1997.
- 6. Logistics Management, Ismail Reji, Excel Book, First Edition, 2008.

**PRINCIPLES OF MANAGEMENT** 



business situation

• To enhance their managerial ability and professional skills

- To develop competencies and knowledge of students to become effective professionals
  To orient students on recent changes and development in the
- To orient students on recent changes and development in the field of management
   To belo Students to understand basis Drinsiples and concents
- To help Students to understand basic Principles and concepts of Management

Unit	Торіся
I	Management: Nature, Definition, Characteristics and Scope of Management - Management as a Science or Art or Profession- Contemporary Issues and - Levels of Management-Skills of a manager- Roles of a manager-Manger Vs Entrepreneur-Challenges in Management of 21st Century
11	Planning: The Process of Planning, Objectives, Policy and Procedures, Forecasting and Decision Making-Strategic Planning – meaning and process MBO – meaning, process and requirements for implementation;
ш	Organisation Design and Structure
	Organisation – Meaning; Process; Principles; Organisation structure – Determinants and forms: Line and staff, project, matrix and committees; Formal and Informal Organisation; Departmentation –Span of Control – Authority, Responsibility and Accountability; Delegation –Process; Principles; Centralisation and Decentralisation –Degree of decentralisation-Delegation and decentralisation
IV	Staffing and Directing:
	Staffing - Manpower Planning-Recruitment and Selection - Training and Development- Performance Appraisal
	Directing-Principles-Theory X & Y- Motivation and Behaviour- Theories of Motivation- Maslow's theory and Herzberg theory, Leadership: Styles and Theories
V	Controlling & Decision making Ethics in the contemporary management and corporate social responsibility; Macro and Micro environmental factors of business-Controllable and uncontrollable factors, SWOT analysis and 7s model of analysis- Decision Making –Types of decisions; Process; Significance; Limitations; –Models-Programmed and non-programmed decisions

- 1. L M Prasad, Principles and Practices of Management, Himalaya Publishing House
- 2. Rao, P.S. Principles of Management, Himalaya Publishing House.
- 3. Rao, V.S.P. & Krishna, V. H. Management: Text and Cases, Excel Books
- 4. Sharma, R.K & Gupta, S.K. Business Management (3rd edition), New Delhi: Kalyani Publishers.

BUSINESS	STATISTICS
Semester Course Type Code I General L21C05	Hours 60  Credits Version 2021-22
<ul> <li>COURSE OBJECTIVES:</li> <li>This course aims at aiding the students in reaching a level of increased competence in business statistics and expands understanding of the applications of statistical concepts in business.</li> </ul>	<ul> <li>LEARNING OUTCOMES:</li> <li>Gain conceptual and working knowledge of Business Statistics and use it in the applications of business.</li> <li>Learn the methods of solving problems on basic concepts and analytical business statistical model.</li> </ul>

and queuing theory.

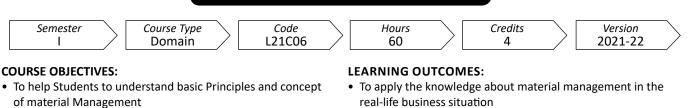
• Enable the student to use introductory level of Transportation

• Emphasis is placed upon learning statistical concepts through common business problems.

Topics
Data collection and Measures of Central Tendency :
Collection and Presentation of Data - Statistical data – Primary and Secondary; Methods of collection of Primary data; Presentation of Data – Textual, Tabular and Diagrammatic form (Line chart, Bar chart, Pie chart, Histogram, Frequency polygon and Ogive); Frequency distribution.
Measures of Central Tendency – Mean (A.M., G.M., H.M.), Median, Mode – different properties; Partition values – Quartiles, Deciles, Percentiles; Partion values from Ogives.
Measures of Dispersion – Range, Q.D., M.D., S.D. – their coefficients; Comparing consistency; Different properties.
Moments, Skewness and Kurtosis – Moments about an arbitrary number; Central Moments; Relation between central and non-central moments up to 4th order 2 3 and – coefficients.
Correlation Analysis: Methods of Studying Correlation for Grouped and Ungrouped Frequency Distribution.
Regression Analysis: Equation of Regression Lines for Grouped and Ungrouped Frequency Distribution, Standard Error Estimate.
Index Number – Construction, Price and Quantity index numbers, Laspeyres', Paasche's, Edgeworth-Marshall's, Fisher's method, Relative methods, Tests of index number formulae: Time and Factor reversal tests, General index number, Chain base index number, Cost of living index number (CLI), Uses of CLI and its applications, Uses and limitations of index numbers
Analysis of Time Series - Components of a time series, Adjustment in time series, Measurement of trend by moving average and least squares methods (linear and quadratic trends), Measurement of seasonal variation by simple average method, Forecasting, De-seasonalisation.
Transportation and Assignment Problems Nature and scope of transportation and allocation models, different methods for finding initial solution - N-W Corner Rule, Least Cost Method and VAM. Unbalanced TP, Test for optimality – MODI method, AP a variant of Transportation model, Hungarian method, Restricted Assignment problems.
Queuing Theory – Models – Simple Problem – Introduction to simulation
Probability and Sampling: Probability theory – concept and approaches; Probability rules – addition and multiplication theorem, Binomial, Poisson and Normal Distribution and their applications. Sampling – Purpose and Methods of Sampling, Merits and limitations of Sampling.

- 1. Gupta and Gupta, Business Statistics. (Sultan Chand & Sons: New Delhi).
- 2. Chandan, J. Statistics for Business Economics. (Vikas: New Delhi)
- 3. Sharma, Shenoy and Srivastava, Quantitative Analysis for Managerial Decision Making,

MATERIALS MANAGEMENT



- To orient students on contemporary development in the field of material management
- To develop competencies and knowledge of students to become effective professionals
- real-life business situation
- · Understand the contemporary practices followed in the field of Materials Management
- To enhance their managerial ability and professional skills

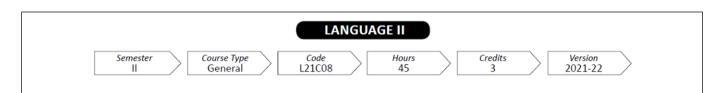
Unit	Topics
Ι	Introduction: Materials Management - Evolution, Importance, Scope and Objectives- Interface with other functionsSupply Chain Management -Objectives- Components , Trade off Customer Service & Cost. Supply Chain Analytics.
II	Purchasing: purchasing and procurement activities under Materials management- Purchasing Methods- Purchasing and quality Assurance- Purchase Cycle – governmental purchasing practices and procedures - Negotiation & Bargaining – Vendor relations
111	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

#### Apprenticeship-based UG Degree Programme in Logistics - Collaborative Programme of LSC WAREHOUSING & DISTRIBUTION OPERATIONS Semester Course Type Code Hours Credits Version Domain L21C07 2021-22 45 3 Т COURSE OBJECTIVES: **LEARNING OUTCOMES:** • To develop competencies and knowledge of students to • To apply the Basic knowledge of Warehousing and distribution centre operations in the real-life situation become Warehouse professionals • To help Students to understand Warehousing and distribution To enhance their ability and professional skills To Understand the contemporary Practices in the Industry centre operations • To orient students about contemporary practices followed in Warehousing & Logistics Unit Topics L Introduction to Warehouse– Significance of Warehouses - Types of Warehouses - Broad functions in a warehouse warehouse layouts - equipment requirement in ware house. Strategic Aspects of Warehousing. Receiving of Goods - Advanced shipment notice (ASN)- Goods Receipt Note(GRN) -Stages involved receipt of Ш 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- Put away list and its need - storage location codes and its application. Procedure to Prepare Warehouse dispatches - Procedure to develop Packing list / Dispatch note - Packing - Importance ш of proper packing-Packing materials -Packing machines -Reading labels- quality parameters in packing-Significance of Quality parameters in packing- Cross docking method - Situations suited for application of cross docking IV Distribution – Definition – Significance of Physical Distribution(Need & Importance) – Channels of distribution -Factors affecting distribution. -Study on emerging trends in warehousing sector.

 V Warehouse Safety Rules and Procedures: The safety rules and 'Procedures to be observed in a Warehouse -Hazardous cargo – Procedure for Identification of Hazardous Cargo - Instructions to handle hazardous cargo . safety data sheet - Health, Safety & Environment - safety Equipment's and their uses - 5S Concept on shop floor.

- 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



#### Learning Outcome:

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- To learn to make communication effective.
- To identify, observe and understand appropriate forms of communication.
- To demonstrate the ability to engage in group communication.
- To engage in communication with an audience.
- To develop communication skills for employability.

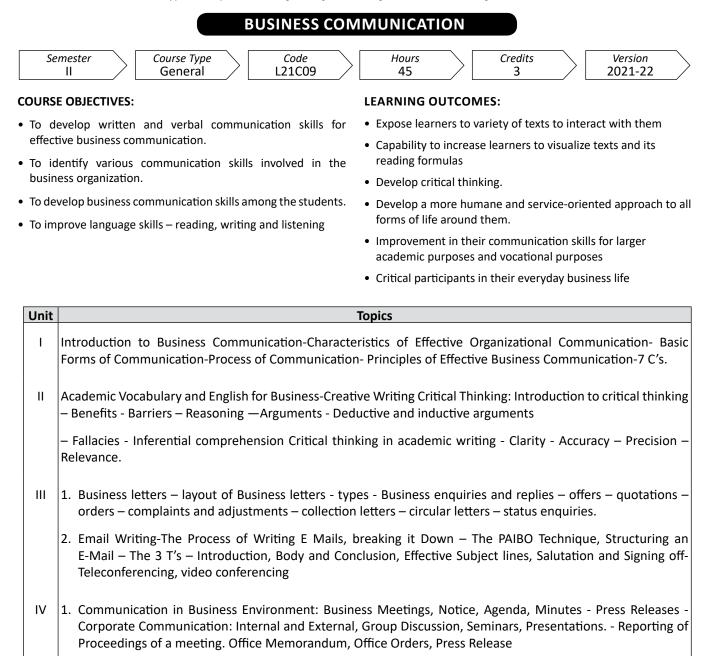
#### Learning Objectives:

- To develop an understanding of grammar used in oral and written communication.
- To sensitize the learners to norms of etiquettes and develop professional communication skills
- To understand and engage in various forms of oral communication.
- To develop the ability to synthesize and draft written communication.(to be worded better)
- To enhance the skill of communicating appropriately in a written form.

Unit	lopics
I	Module 1: Language
	Direct & Indirect Speech, Active & Passive Voice, Degrees of Comparison, Conditionals, Use of important
	figures of speech in language: Simile, Metaphor, Personification, Onomatopoeia & Hyperbole
11	
	Module 2: Communication at Workplace
	Organizational Communication (Added)
	Levels of Communication in an Organization: Vertical, Horizontal & Diagonal
	Ways of communicating in different situations: Reflecting the mood in communication, Terminologies used
	in the Logistics industry.
	Basic Etiquettes: Phone Etiquettes, Cubicle Etiquettes, Email Etiquettes, Meal Etiquettes
	Module 3: Speaking
	Barriers in Communication, Ice Breakers, Public Speaking, Interviews, Extempore, Analyzing great
	speeches, (Elements that make it great)
IV	Module 4: Written Communication
	Statement of Purpose, Questionnaire/ Interviews, Note Making, Business Proposal,
	Essay Writing: Argumentative (300 words), Emphasis on structure and form - pattern of IELTS)
	Usage of Punctuations
v	
•	Module 5: Reading
	Unseen Comprehension & Note Making, Idioms, Proverbs, Abbreviations, Homonyms
VI	Module 6: Practicals
VI	
	Introducing Oneself, Debate, Speech on Current Affairs, Conducting an interview with an industry
	professional (documenting the interview with a report and a vlog)

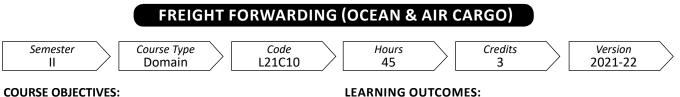
Text & Reference Books (Language I & II)

- Courtland L. Bovee, John V. Thill, Abha Chaterjee 'Business Communication Today', 10th Edition, Pearson Publication
- Krishna Mohan & Meenakshi Raman, 'Advanced Communicative English' Tata McGraw Hill Education Private Limited, New Delhi.
- Er. A.K.Jain, Dr. Pravin S.R.Bhatia & Dr. A.M. Sheikh, 'Professional Communication Skills', S.Chand Publishing, New Delhi.
- Benjamin, James (1993), 'Business and Professional Communication
- Dr. R.K. Gupta, 'Personality Development & Presentation', Ritu Publication, Mumbai.
- S. Chand, 'Professional Communication Skills', S. Chand Publication, New Delhi.
- R.C. Bhatia 'Business Communication'
- R.K.Madhukar 'Business Communication'



- Listening: Active listening Barriers to listening Listening and note taking Listening to announcements Listening to news on the radio and television.
- V 1. Reports and Presentations -Business reports and Proposals, Format, visual aids and contents, Oral Business presentations.
  - 2. Job Application and Resume Writing

- 1. R.C. Bhatia. Business Communication.
- 2. R.K. Madhukar. Business Communication.
- 3. Shraf Ravi. Effective Technical Communication.
- 4. Marilyn Anderson, Pramod K Nayar and Madhu Chandra Sen. Critical Thinking,
- 5. Lesikar R.V & Flately M V, Basic Communication Skills for empowering the internet generation, Tata-McGraw Hill, 2009. 2.
- 6. Sharma R C & Mohan K, Business Correspondence & Report Writing, TMH, 2009.



- 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
1	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 – Regulations pertaining to custom clearance – different modes of freight forwarding — process of freight forwarding.</li> </ul>
II	Multimodal transportation - Vendor management - bulk load handling - brief on transhipment - DG handling - customer acquisition and management - Customs clearance procedure - Documents and its importance - Stages of Documentations process and procedures DO's and DON'T's while handling different documents during Custom Clearance
- 111	Operation Procedures of Freight Forwarding - The procedures for Pre-Operating Checks and Operational checks to be performed for every shipment /consignment - 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.
IV	Cargo handling, INCO terms and terminologies used in Cargoes - Different Types of Cargoes for transportation– Importer and exporter Code (IEC), The registered PAN based Business Identification Number received from the Directorate General of Foreign Trade - 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 rolesContainers; Pallets; Palletization; Fumigation - Letters of Credit and payment Terms. Etc computer and its application in internal systems of documentation.

- 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.

# FORECASTING AND INVENTORY MANAGEMENT

Semester	Course Type	Code	Hours	Credits	Version
	Domain	L21C11	60	4	2021-22

#### COURSE OBJECTIVES:

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

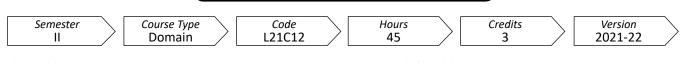
#### LEARNING OUTCOMES:

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

Unit	Topics
1	Forecasting: Meaning –Need -Types of forecasts –Demand Forecasting- Types of Demand Forecasting-
	-Importance - Demand planning v/s Forecasting-Sources of demand-Supply chain dynamics
п	Sales and Operations Planning- Goals and objectives of S&OP -Collaborative Planning-Types
	-Collaborative planning, forecasting and replenishment- Cyclic decomposition techniques. Short- term forecasting techniques- Technology Forecasting and Methodologies: Role of Technology Information Forecasting and Assessment Council (TIFAC).
111	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
ı٧	Codification – Classification – Methodology–Requirement of codes – Coding Structure and Design
	-Advantages - International Codification - Right Quantity - Economic Ordering Quantity -Costs associated with Inventories- Models in logistics
v	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

- 1. Course Material Prepared by LSC
- 2. Sunil Chopra and Peter Meindl, Supply Chain Management Pearson Education Asia, 3rd edition, 2007
- 3. Chaman L Jain, "Fundamentals of Demand Planning & Forecasting", Graceway Publishing Company 3rd edition.
- 4. Operations Research Concepts, Problems & Solutions- Kapoor V.K.-Sultan Chand & Sons/2017- 978-81-8054-854-3 (TC-532)
- Vijay Kumar Khurana, 2007, Management of Technology and Innovation, Ane books India, Chennai Further Reading Source 5. Simchi-Levi, David, "Designing and Managing Supply Chain", Tata McGraw Hill, 3rd Edition, 2007. 6. David E Mulcahy, "Warehouse Distribution and Operations Handbook, McGraw Hill,6thEdition, 1993.

## SURFACE TRANSPORTATION



#### COURSE OBJECTIVES:

- To help Students to understand basics of surface transportation including road and rail transport
- To develop competencies and knowledge of students to become transportation professionals
- LEARNING OUTCOMES:
- Students will be able to apply the knowledge of surface transportation in the real-life situation
- Enhancement of professional skills with regard to the field.

Unit	Topics
I	Introduction to surface transportation -Need - functions of transportations in logistics -Types of transportations metrics -various land transport carriers and their Load capacities - types of temperature-controlled carriers- inter modal transport -verification of carriers and drivers -transit rules
П	Transportation Optimisation -Documentation for transportation – GST – E Waybill Filing - Importance of consignment number -Transportation Telematics -Vehicle tracking system - GPS systems
	-Procedure for downloading and reading tracking data from devices -Probable reasons for delay or any issues during transit -Solutions - re-routing
	Organisation structure in a Transport organization- Incident management systems & Processes - hazmat goods rules -Importance of safety data sheet and labels -Procedure for Consolidation of consignments for optimal loads -Reporting discrepancies such as pilferages, loss or damage of goods in transit -Checking insurance and claims -steps to close deliveries.
IV	Benefits of efficient transportation systems-emerging trends in transportation sector-pricing in transportation sector-govt regulations on transportation in India. Safety procedures during transit and emergency response steps - List of good practices in driving.
v	Customer Management-Vendor coordination for return truck loads-DG Handling – features and facilities offered by railways – innovative schemes-facilities to popularize rail logistics in India

- 1. Course Material Prepared by LSC
- 2. J P Saxena, Warehouse Management and Inventory Control-Vikas Publication House Pvt Ltd, First Edition, 2003.
- 3. A Practical Guide to Logistics: An Introduction to Transport, Warehousing, Trade and Distribution -Jerry Rudd-Kogan Page publications
- 4. Management Guide to Efficient Money Saving Warehousing, Stephen Frey, Gower, 1982.
- 5. Kapoor Satish K., and KansalPurva, 'Basics of Distribution Management: A Logistical Approach', Prentice HALL of India

# HUMAN RESOURCES MANAGEMENT

Semester Course Type Code II General L21C13	Hours 45 Credits 2021-22 Version 2021-22			
COURSE OBJECTIVES: LEARNING OUTCOMES:				
<ul> <li>To develop competencies and knowledge of students to become Human resource management professionals</li> <li>Will be able to apply the basic knowledge of Human resource management in the real life situation</li> </ul>				

- To enable the students to know on Contemporary practices in HRM
- To orient students on Human resource management in the field of Logistics
- management in the real life situation
- Will get to know about the contemporary practices of the Industry
- It will enable them to enhance their ability and professional skills with regard to Logistics Industry

Unit	Торіся
I	Introduction to HRM -Functions - of HR Manager-Qualities for a HR Professional-Roles & Responsibilities of HR Professionals.
	Human Resource Planning-Objectives -HR Planning Levels-Process
II	Job Analysis - Introduction-Uses -Methods of collecting Job Analysis Data-Job Description and specification.
	Job Design-Meaning-Methods.
	Recruitment and Selection-Meaning-Objectives of Recruitment- Sources of Recruitment-Selection- Steps & Procedure in selection.
III	Employee Training and Development-Meaning-Steps in Training Process -Training Methods -Areas of Training- Training Evaluation
	Performance Appraisal-Meaning-Uses- Performance Appraisal Process-Performance Appraisal Methods-Pitfalls.
IV	Compensation and Benefits- Meaning- Objectives of Compensation and Employee Benefits
	Job Evaluation-Meaning- Process of Job Evaluation-Techniques of Job Evaluation -Types of Incentive Plans.
	Career Planning & Career Development-Meaning-Need for Career Planning & Career Development
V	Occupational Safety and Health-Causes of Safety and Health problems at the work Place- Provisions to prevent Accidents in the work place.
	Stress and Consequences on Employee Performance.
	Grievance Handling- Causes of Grievance-Effective Grievance Redressal and - Grievance Redressal Procedures.
	Disciplinary Action- Objectives - Forms -Disciplinary Procedure-Types of Disciplinary Actions.

- 1. Gupta, S. K. (2011). Human Resource Management. First Edition, Kalyani Publishers, New Delhi,
- 2. Prasad, L. M. (2014). Human Resource Management. Third Edition, Sultan Chand & Sons, New Delhi,
- 3. Rao, P. S. (2019). Personnel and Human Resource Management. Fifth Edition, Himalaya Publishing House, New Delhi, India.
- 4. Tripathi, P. C. (2013). Human Resource Development. Fourth Edition, Sultan Chand & Sons, New Delhi,

# MANAGEMENT AND COST ACCOUNTING

Semester	Course Type	Code	Hours	Credits	Version
	General	L21C14	60	4	2021-22
	General		00		2021 22

**LEARNING OUTCOMES:** 

professional skills

 Students will be able to apply the Basic knowledge of Management and cost accounting in the real-life situation

• This subject will enable them to enhance their ability and

#### COURSE OBJECTIVES:

- To develop competencies and knowledge of students to become Management and cost accounting professionals
- To orient students in the field of Logistics
- To help Students to understand Management and cost accounting

Unit	Topics
I	Cost Accounting - Concept of Cost Centres - Cost Units - Classification of Cost – Overheads- Simple Cost Sheet – historical and estimated cost sheets Tenders and quotations - Contract costing- Activity based costing (ABC). Management Accounting: Meaning and Definition - Nature and Scope
	- Objectives of Management Accounting - Importance and Limitations - Management Accounting vs Cost Accounting.
II	Marginal Costing and Break even analysis:
	Marginal Costing and Cost-Volume-Profit (CVP) analysis: meaning, concept - assumptions and practical applications of Break-even analysis – decisions regarding sales mix - make or buy - limiting factor - export decision - plant merger - shut down of a product line- Du Pont Analysis.
III	Budgeting and Budgetary control:
	Budget and Budgetary Control: Meaning, - establishing a system of Budgetary Control - Preparation of Sales - Production - Cash Budget - Fixed and Flexible budgets, Master budget - Zero based budgeting (ZBB)-Performance budgeting
IV	Analysis of Financial Statements:
	Analysis and Interpretation of Financial Statements: Objects-importance-Types of financial analysis
	- Comparative statements - Common size statements, Ratio analysis - Preparation of Balance sheet using ratios Fund flow analysis: Fund flow statement-Preparation-Cash flow statement-cash flow analysis - Analysis of income statements of ports/shipping companies.
V	Standard Costing and Variance Analysis:
	Standard Costing and Variance Analysis: Meaning of Standard Cost- Relevance of Standard Cost for Variance Analysis – Significance of Variance Analysis – Computation of Standard Costs for Materials, Labour and Overhead Variances- Comparison between Budgeting and Standard Costing – Variance reporting- Responsibility Accounting – Meaning and Objects – types of Responsibility Centres- Management Reporting.

- 1. MAHESHWARI, S. N., (2013) Cost and Management Accounting. 14th edition
- 2. JAIN, S. P. & NARANG, K. L. (2014) Cost and Management Accounting. 14th Edition, Kalyani publishers: New Delhi.
- 3. TULSIAN, P.C. (2000) Practical Costing. Vikas Publications: New Delhi.
- 4. SAXENA, V.L. & VASHISHT (2014) Advanced Cost & Management Accounting- Problems & Solutions. Prentice Hall of India.
- 5. MAHESHWARI, S. N. (2014) Principles of Management Accounting. Sultan Chand & Sons.
- 6. MURTHY & GURUSAMY (2009) Management Accounting. Tata McGraw Hill: New Delhi.
- 7. REDDY T. S & HARI PRASAD REDDY (2014) Cost & Management Accounting. Margham Publications.



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