

**GOVERNMENT COLLEGE(A)**  
**RAJAHMUNDRY**  
**DEPARTMENT OF COMMERCE**  
**ACADEMIC YEAR 2024-25**  
**B.B.A LOGISTICS MANAGEMENT**  
**SYLLABUS**

## FUNDAMENTALS OF LOGISTICS

Semester I	Course Type Domain	Code L21C03	Hours 45	Credits 3	Version 2021-22
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**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

**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

Unit	Topics
I	Introduction to Logistics: History of Logistics Need for logistics- Cost 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
III	Global Logistics - Global Supply Chain - Organizing for Global Logistics-Strategic Issues in Global Logistics - Forces driving Globalization- Modes of Transportation in Global Logistics Barrier 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	a) Warehouse: Warehouse-Meaning, Types of Warehouses Benefits of Warehousing. b) Transportation-Meaning; Types of Transportations, efficient transportation system and Benefits of efficient transportation systems. c) Courier/Express-Courier/Express-Meaning, Categorization of Shipments, Courier Guidelines, Pricing in Courier - Express Sector for international and domestic shipping. d) E-Commerce-Meaning, Brief on Fulfillment Centers, Reverse logistics in e-commerce sector, Marketing in e-commerce and future trends in e-commerce.
V	a) EXIM: Brief on EXIM/FF&CC, Multi-modal transportation, brief on customs clearance, bulk load handling and brief on trans-shipment. b) Supply chain. c) Cold chain. d) Liquid Logistics. e) Rail Logistics.

**Text & Reference Books:**

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.

**MATERIALSMANAGEMENT**

Semester I	CourseType Domain	Code L21C06	Hours 60	Credits 4	Version 2021-22
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**COURSEOBJECTIVES:**

- To help Student 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 student to become effective professionals

**LEARNINGOUTCOMES:**

- 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 functions. -Supply Chain Management -Objectives-Components, Tradeoff 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-Material handling and storage systems,-Principles of Materials Handling system – Safety issues

**Text & Reference Books:**

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&DISTRIBUTIONOPERATIONS**

Semester I	Course Type Domain	Code L21C07	Hours 45	Credits 3	Version 2021-22
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**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 their real-life situation
- To enhance their ability and professional skills
- To Understand the contemporary Practices in the Industry

Unit	Topics
I	Introduction to Warehouse – Significance of Warehouses – Types of Warehouses – Broad functions in a warehouse – warehouse layouts – equipment requirement in warehouse. Strategic Aspects of Warehousing.
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 – Put away list and its need – storage location codes and its application.
III	Procedure to Prepare Warehouse dispatches – Procedure to develop Packing list/Dispatch note – Packing – Importance 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.

**Text & Reference Books:**

- Course Material Prepared by LSC
- 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
- Warehouse Management: A Complete Guide to Improving Efficiency and Minimizing Costs in the Modern Warehouse – III Edition – Gwynne Richards

**RAIAMA HENDRAVARAM**  
**IB.B.A LOGISTICS.SEMESTER-II**  
**(For admitted Batch 2024-**  
**2025)DSC3B: Enterprise Resource**  
**Planning**

**Unit-I:** Introduction: technology Overview of enterprise systems - Evolution - Risks and benefits - Fundamental technology - Issues to be considered in planning design and implementation of cross functional integrated ERP systems.

**Unit-II:** ERP Solutions and Functional Modules: Overview of ERP software solutions - Small, Management, and large enterprise vendors solutions, BPR and best business practices - Business process Management, Functional modules.

**Unit-III:** ERP Implementation: Planning Evaluation and selection of ERP systems - Implementation lifecycle - ERP implementation, Methodology and Framework - Training - Data Migration - People Organization in implementation - Consultants, Vendors and Employees.

**Unit-IV:** Post Implementation: Maintenance of ERP - Organizational and Industrial impact; Success and Failure factors of ERP Implementation.

**Unit-V:** Emerging Trends on ERP: Extended ERP systems and ERP add-ons - CRM, SCM, Business analytics - Future trends in ERP systems - web enabled, Wireless technologies, cloud computing.

**References:**

1. Alexis Leon, ERP demystified, second Edition Tata McGraw-Hill, 2008.
2. Sinha P. Magal and Jeffery Word, Essentials of Business Process and Information System, Wiley India, 2012
3. Jagan Nathan Vaman, ERP in Practice, Tata McGraw-Hill, 2008
4. Alexis Leon, Enterprise Resource Planning, second edition, Tata McGraw-Hill, 2008.
5. Mahadeo Jaiswal and Ganesh Vanapalli, ERP Macmillan India, 2009
6. Vinod Kumar Gragand N.K. Venkitakrishnan, ERP - Concepts and Practice, PHI, 2006.
7. Summer, ERP, Pearson Education, 2008

**FREIGHT FORWARDING (OCEAN & AIR CARGO)**

Semester II	Course Type Domain	Code L21C10	Hours 45	Credits 3	Version 2021-22
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**COURSE OBJECTIVES:**

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

Unit	Topics
I	Introduction to EXIM, Freight forwarding and custom clearance – types of custom clearances – 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.
II	Multimodal transportation - Vendor management - bulk load handling - brief on transshipment - 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
III	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 roles. - Containers; Pallets; Palletization; Fumigation - Letters of Credit and payment Terms. Etc. - computer and its application in internal systems of documentation.

**Text & Reference Books:**

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 CD ROM], 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 II	Course Type Domain	Code L21C11	Hours 60	Credits 4	Version 2021-22
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**COURSE OBJECTIVES:**

- To develop competencies and knowledge of student to become Forecasting and inventory management professionals
- To orient students in the field of Forecasting and inventory management
- To help Student 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
I	Forecasting: Meaning–Need-Types of forecasts–Demand Forecasting-Types of Demand Forecasting–Importance-Demand planning v/s Forecasting-Sources of demand-Supply chain dynamics
II	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).
III	Inventory: Purpose of Inventory--Types 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
IV	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

**Text & Reference Books:**

- 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 & Forecasting”, Graceway Publishing Company 3rd edition.
- 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, Anebooks India, Chennai Further Reading Source
- Simchi-Levi, David, “Designing and Managing Supply Chain”, Tata McGraw Hill, 3rd Edition, 2007.
- David E Mulcahy, “Warehouse Distribution and Operations Handbook, McGraw Hill, 6th Edition, 1993.

**SURFACE TRANSPORTATION**

Semester II	Course Type Domain	Code L21C12	Hours 45	Credits 3	Version 2021-22
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**COURSE OBJECTIVES:**

- To help students 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- intermodal transport -verification of carriers and drivers -transit rules
II	Transportation Optimisation-Documentation for transportation-GST-EWay bill 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
III	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

**Text & Reference Books:**

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

**WORD & PRESENTATION TOOLS-**

Semester III	Course Type General	Code L21C19	Hours 60	Credits 4	Version 2021-22
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**COURSE OBJECTIVES:**

- To introduce the student to the Word & Presentation tools and its applications and thereby empowering him to utilize e-sources for upgrading their knowledge base.
- To introduce the students with some basic tools and applications which will enable them in e-communicating 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

Topics	
I	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 toolbars – Menu commands – Keyboard shortcuts – Saving files Opening documents – Manipulating Windows – simple Editing – Printing Files.
II	Word Basics – Using Autotext – Using AutoCorrect Word editing technique finding and replacing text – Checking spelling – using templates – formatting – Formatting with styles creating tables.
III	PowerPoint basics – Working in outline view – using a design template – Merging presentations in Slides or in view applying templates – Adding graphs – adding organization Charts.
IV	MS-Word-Practical Type the text, check spelling and grammar bullets and numbering list items, align the text to Left, right justify and centre. – Prepare a job application letter enclosing your Bio-Data – Perform Mail Merge Operation and Preparing labels. – Prepare the document in newspaper column layout.
V	MS POWERPOINT-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.

**Text & Reference Books:**

1. Office 2000 Complete Reference by Stepher L. Nelso n.
2. PC Software for window made simple by R.K Taxali – Tata Mc Graw Hill Publishers Pvt. Ltd.,

## MIS FOR LOGISTICS

Semester III	Course Type Domain	Code L21C15	Hours 60	Credits 4	Version 2021-22
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**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.

**Text & Reference Books:**

Course Material Prepared by LSC

KENNETH C.L., JANEP.L., & RAJANISH DASS (2001) Management Information System-Managing the Digital Firm. Pearson Education: New Delhi.

RAVI, K., & ANDREW, B. W. Frontiers of Electronic Commerce. Pearson Education: New Delhi.

KENNETH, C.L., & JANEP, L. (2001) Essentials of MIS. Prentice Hall India: New Delhi.

SADAGOPAN, S. (2003) Management Information System. Prentice Hall India: New Delhi.

EFF, O.Z. (2003) Management Information Systems. Vikas Publishing House Pvt. Ltd.: New Delhi.

## LINERLOGISTICS

Semester III	Course Type General	Code L21C21	Hours 45	Credits 3	Version 2021-22
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**COURSE OBJECTIVES:**

- To develop competencies and knowledge of students to liner logistics professionals
- To orient students in the field of Logistics
- To help students 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 the irability 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 (Breakbulk) vessels future vessel developments ,economy of scale, shipboard handling equipment.
II	Cargoes & cargo equipment – Dangerous goods IMO special goods, cargo handling 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-modals - Growth in world trade unitization; container dimensions, types of container other container expressions container inventory, owning, leasing meeting the demand for container 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.

**Text & Reference Books:**

1. Course Material Prepared by LSC
2. Ship Operation Management, Fujita, N.H. Publisher, 1974.
3. Ship Operation Management, Bertrams Publication, 2010.
4. Handbook of Ship Calculations, Construction and Operation, Charles H. Hughes, Wexford College Press, 2008.
5. Ocean Shipping- Elements of Practical Steamship Operation, Robert Edwards Annin, Thompson Press, 2010.

**DATA ANALYSIS USING SPREADSHEET**

Semester  
IV

Course Type  
General

Code  
L21C23

Hours  
45

Credits  
3

Version  
2021-22

**COURSE OBJECTIVES:**

**LEARNING OUTCOMES:**

- This course is designed with the view of making the student skilful at effectively with help of Spread Sheet Support the E communication
- Performing data analysis using spreadsheet (MS Excel) Summarized data with data analysis, Pivot Tables, and Pivot Charts.
- Creating pivot tables from a range with rows and columns in Excel. applications. Work with charts and the drawing tools.  
:Import and export data from other applications.

Unit	Topics
I	Introduction to Excel, About Excel & Microsoft, Uses of Excel, Excel software, Spreadsheet 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
II	Selecting Columns & Rows, Changing Column Width & Row Height, Auto fitting Columns & Rows, 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 Auto Fill
III	Creating Formulas, Using Formulas, Formula Functions – Sum, Average, if, Count, max, min, Proper, Upper, Lower, Using Auto Sum, Advance Formulas Concatenate, Lookup, Match, Countif, 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
IV	Creating Charts, Different types of chart, Formatting Chart Objects, Changing the Chart Type, Showing and Hiding the Legend, Showing and Hiding the Data Table Data Analysis Sorting, Filter, Text to Column, Data Validation
V	Pivot Tables, Creating Pivot Tables, manipulating a Pivot Table, Using the Pivot Table Toolbar, Changing Data Field, Properties, Displaying a Pivot Chart, Setting Pivot Table Options, Adding Subtotal to Pivot Tables 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: 9781305 870727

## PORTTERMINALLOGISTICS

Semester IV	CourseType General	Code L21C22	Hours 60	Credits 4	Version 2021-22
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### COURSEOBJECTIVES:

- Todevelopcompetenciesandknowledgeof students to Port terminals logistics professionals
- Toorientstudentsinthe fieldofLogistics
- TohelpStudents tounderstandPortterminals logistics

### LEARNINGOUTCOMES:

- Students will be able to apply the Basic knowledgeof Port terminals Logistics in the real-lifesituation
- Thissubjectwillenablethemtoenhancetheir ability and professional skills in Logistics

Unit	Topics
I	Difference between Major and Minor Ports - Ports in India - Natural Harbours - New Ports to be developed in India - Major Ports of the World - Largest Port in the world - Port Officials and their roles - Role of Ports -WhoarePortusers
II	ContainerTerminals-PrivatisationofTerminals-ReasonforPrivatisation-MajorTerminal Operators in India -TerminalOperators oftheworld-Privatisationtheneedofthehour-Agreement betweenand existing Port Terminal and the new operator
III	Import Cycle - Export Cycle - Positions and Places in a Terminal- Facilities in a Terminal - ContainerMonitoringandstacking-CFSinsideaTerminal-ReasonsforCongestionofa terminal- decongesting theterminal-Windowsysteminaterminal.
IV	Major Port TrustAct - Port as acustodianof the cargo - Transit sheds- Cargo receivers -Wharfs and Berths -Variousberthsin aPort -MeaningofBerthRestrictions-Portequipment'sanddamage-Extra services - Berth reservation schemes
V	Port Tariff - Pilots and their duties - Tugs and its usage - Night navigations - Light Dues - Tariff Authoritiesof Major Port - Revision of rates- Port Trustees - Safety Procedures- Introduction of ISPS- DamagetoPortpropertybyships-Compensationandconfiscationofcargotoadjustdues

### Text&ReferenceBooks:

1. CourseMaterialPreparedbyLSC
2. MajorPortTrustAct–GovernmentofIndia
3. PortIndustryStatistics,AmericanAssociationofPortAuthorities
4. APMOLLORGuidebookonTerminal
5. DUBAIPORTAUTHORITIESManual

## MULTI-MODAL TRANSPORTATION

Semester IV	Course Type General	Code L21C27C	Hours 45	Credits 3	Version 2021-22
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### COURSE OBJECTIVES:

- Introduce Multi-modal and Inter modal Transport concepts.
- Explain Regulatory frame work 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 for development of seamless multi-modal transport.

Unit	Topics
I	Transportation Systems & Multimodal Transport – Concept of Multimodal & Intermodal Transport – introduction to Multimodal transport, the difference between Multimodal and Intermodal transport - Type of transport Modes – detail and characteristics of air, road, rail, water, pipelines, package carriers - Need, Aim and Key Issues of Multimodal transport.
II	How to organise Multimodal transport - Role of Containerisation in MMT - history, utility, types, ease of handling, cost Types of Multimodal transport – combined container transport, rolling Road & forwarding of trailers, RORO & LASH transport National Multimodal Transport Committee (NMTC) and Logistics Policy of India – key features and importance
III	Multimodal 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	Multimodal 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 neighbouring countries with a case study)

### TEXT BOOKS

1 Course Material Prepared by LSC

## SpecialisationModule–GroupC–CourseII

**COMMERCIALASPECTSOFTTRANSPORTATION**

Semester IV	CourseType General	Code L21C28C	Hours 45	Credits 3	Version 2021-22
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**COURSEOBJECTIVES:**

- To highlight vital part of commercial considerations in providing transport services for Freight and Passengers movement.
- 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.

**LEARNINGOUTCOMES:**

- 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 as 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