



VELS



INSTITUTE OF SCIENCE, TECHNOLOGY
& ADVANCED STUDIES (VISTAS)
(Deemed to be University under section 3 of UGC Act, 1956)
NAAC ACCREDITED WITH 'A' GRADE

MBA

LOGISTICS & SHIPPING

MANAGEMENT

Curriculum and Syllabus

(Based on Choice Based Credit System)

Effective from the Academic year

2018-2019

Department of M.B.A

School of Management Studies

COURSE OBJECTIVE:

- To describe the fundamentals of Management, significance, scope of management, levels of manager, functions of a manager and basics of organizational behavior.
- To discuss the development of management thought
- To examine and analyze the behavior of individuals and groups in organizations by understanding the concepts of learning, attitudes & perceptions.
- To understand about the organizational structure, its types, decentralization and delegation of the authority.

COURSE OUTCOMES: (Employability)

At the end of the course, the students will be able to:

- CO – 1 : Assess the fundamentals of organizational behavior and OB Model
- CO – 2 : Analyze the behavior of individuals and groups in organizations
- CO – 3 : Describe the concept of leadership, communication, power and conflict resolution
- CO – 4 : Demonstrate the dynamics of organizational change.
- CO – 5 : Identify the major issues in business ethics and corporate social responsibility.

UNIT I INTRODUCTION TO MANAGEMENT 12

Introduction to Management and Organizational Behavior: Concept of Management, Applying Management theory in practice, Evolution of management thought, Management process and Functions – Managerial Roles – OB Model – Contributing disciplines of OB – MBO

UNIT II INDIVIDUAL PROCESS IN ORGANIZATIONS 12

Individual Processes in Organizations: Foundations for Individual Behavior – Learning - Attitudes and Job satisfaction – Personality and values – Perception - Motivation and Organizational performance. Contemporary theories of motivation.

COURSE OBJECTIVE:

- To acquaint the student with the applications of Statistics and Operations Research to business and industry
- To help them to grasp the significance of analytical techniques in decision making.
- To test on the application of Operations Research to business related problems.

COURSE OUTCOMES: (Employability)

At the end of the course, the students will be able to:

- CO – 1 : Formulation a Linear programming problem.
- CO – 2 : Solve the formulation of Linear programming.
- CO – 3 : Evaluate the initial solution for Transportation Model.
- CO – 4 : Evaluate the solution for Assignment Problem.
- CO – 5 : Minimize the waiting hours of simultaneous projects undertaken.

UNIT I LINEAR PROGRAMMING 12

Operations Research – Linear programming (LP) – Formulation – Graphical Solutions – Simplex Method – Duality Concepts – Sensitivity Analysis – Using Excel solver to solve LP Problems

UNIT II TRANSPORTATION AND ASSIGNMENT 12

Transportation Model – Initial Solution: North West Corner Rule, Least Cost Method, Vogel's Approximation method – Assignment Problem.

UNIT III NETWORK MODELS 12

Network Models – Shortest Path Problem: PERT & CPM – Maximum Flow Problem – Minimum Spanning Tree

UNIT IV GAME THEORY 12

Game Theory – Game – Zero-sum games and Non-zero sum games – Pure & Mixed Strategy – Maximin–Minimax Principle – **Dominance Property**.

UNIT V

STATISTICS

12

Introduction – Descriptive Statistics – **Hypothesis Testing** – T-test – Analysis of Variance – Linear Regression.

TOTAL: 60 HOURS

TEXT BOOKS:

2. Tulsian, P. C., Vishal Pandey, Quantitative Techniques – Theory and Problems, Pearson Publications, 2006.
3. Sankar P. Iyer, Operations Research, Tata McGraw-Hill Education, 2008

REFERENCE BOOKS:

4. Hamdy A. Taha, Operations Research-An introduction, Pearson Education, 8th Edition / Prentice Hall of India, 2007.
5. A. Ravindren, Don T. Phillips and James J. Solberg, Operations Research Principles and Practice, John Wiley and Sons, 2nd edition, 2000.

COURSE OBJECTIVE:

- The study the concept of Managerial Economics by applying a series of basic economics principles.
- To gain knowledge on issues related to optimal pricing strategies, demand forecasting, and optimal financing, appropriate hiring decisions, and investment decisions, among others, can be successfully tackled with managerial economic tools.
- To analyse how to incorporate a global perspective to their managerial economics box of tools.

COURSE OUTCOMES: (Employability)

At the end of the course, the students will be able to:

- CO – 1 : Define the basic elements of managerial economics aspects of the firm.
- CO – 2 : Discuss the demand analysis decisions methods as to forecasting.
- CO – 3 : Apply the managerial decision functions of the firm.
- CO – 4 : Examine and elaborate the basic theories related to business practices.
- CO – 5 : Appraise on the decision as to environment and given

UNIT I INTRODUCTION 12

Introduction to Managerial Economics – Nature and scope of macroeconomics – Incremental principle – equimarginal principle – some decision rules – The risk and uncertainty theory – optimization techniques – Baumol’s sales maximization – least-cost combination.

UNIT II DEMAND DECISIONS 12

Demand Decisions – Demand analysis – elasticity of demand – demand forecasting – types & methods of demand forecasting – trend projection method – least square method of demand forecasting limitations & uses

UNIT III OUTPUT DECISIONS 12

COURSE OBJECTIVE:

- To think in a new and more creative way when analyzing or forecasting financial information.
- To introduce new tools common to financial statement analysis and how to use them in practical applications.
- To understand how financial statement information can help solve business problems and increase the ability to read and understand financial statements and related information.

COURSE OUTCOMES: (Employability)

At the end of the course, the students will be able to:

- CO – 1 : State the importance of common accounting standards
- CO – 2 : Estimate Budgeting and Financial Reporting
- CO – 3 : Prepare financial statements through ratio analysis.
- CO – 4 : Analyze financial reports of financial instruments, mutual funds,
- CO – 5 : Analyze cash flow and fund flow statement

UNIT I**INTRODUCTION****12**

Introduction to Management Accounting-Need and Importance — Accounting concepts & conventions – Accounting Standards - Overview of IFRS and GAAP. Mechanics of Accounting: Double entry system of accounting, journalizing of transactions; ledger posting and trial balance, preparation of final accounts, Profit & Loss Account, Balance Sheet.

UNIT II**ANALYSIS OF FINANCIAL STATEMENTS****12**

Analysis of financial statement: Ratio Analysis- solvency ratios, profitability ratios, activity ratios, liquidity ratios, market capitalization ratios; Common Size Statement; Comparative Balance Sheet and Trend Analysis of manufacturing, service & banking organizations.

UNIT III**FUNDS FLOW AND CASH FLOW ANALYSIS****12**

Fund Flow Analysis: Meaning – uses – Preparation of Fund Flow Statement. Cash Flow Analysis (as per Accounting Standard 3): Meaning – uses – Preparation of Cash Flow Statement.

UNITIV CAPITAL BUDGETING AND MARGINAL COSTING 12

Capital budgeting – meaning – steps – different types of investment decisions - Different methods – Payback, Net Present Value, Internal rate of return, Profitability index, Average rate of return – Capital rationing Marginal costing – Cost Volume Profit analysis – Break Even analysis – Applications of marginal costing

UNITV BUDGETING AND FINANCIAL REPORTING 12

Budgeting – Different types of budgeting – Cash budget – Flexible budget. Financial reporting – Concepts – users, Objectives of financial reporting – Qualitative characteristics of information in financial reporting – basic problems of disclosure – Role of SEBI in IFRS – Statutory disclosures in IFRS – Corporate reporting practices in India- Challenges in financial Reporting

TOTAL: 60 HOURS

TEXT BOOKS:

1. R.S.N.Pillai & Bagavathi – Management Accounting, Chand & Co. Ltd., New Delhi, 6TH edition 2002.
2. T.S.Reddy & Y.Hari Prasad Reddy – Financial and Management Accounting, Margham publications, 12TH edition 2004.

REFERENCE BOOKS:

1. M.Y.Khan & P.K.Jain – Management Accounting, Tata McGraw Hill publishing company Ltd., 10th edition 2004.
2. R.Narayanaswamy – Financial accounting – A Managerial Perspective, Prentice Hall India Ltd., New Delhi 5th edition, 2014.
3. Paresh Shah Basic Financial Accounting for Management, Oxford Publications, 3rd edition, 2007

COURSE OBJECTIVE:

- To create the knowledge of Legal perspective and its practices to improvise the business.
- To describe the nature and classes of contracts.
- To identify the elements needed to create a contract.
- To read, interpret the various act related to business, property and business.
- To identify the rights related to copyrights and patents.

COURSE OUTCOMES: (Employability)

At the end of the course, the students will be able to:

- CO – 1 : Draft a simple employment contract
- CO – 2 : Arrange the basics elements of contracts and classifications of contract
- CO – 3 : Improve their awareness and knowledge about functioning of local business.
- CO – 4 : Improve their awareness and knowledge about functioning of global business.
- CO – 5 : Gather knowledge on evolution of business enterprises

UNIT I	INTRODUCTION	12
Legal Aspect of Business: Introduction to Business Laws- Business Management and Jurisprudence; structure of the Indian Legal Systems: sources of Law; Manager and Legal System		
UNIT II	LEGAL ASPECTS	12
Fundamentals of contract laws- Formation of Contracts;- Principles of Contract Laws-Legality of Object Consideration; Performance of contract-Discharge of contract- breach of contract-Quasi contracts.		
UNIT III	CONTRACT MANAGEMENT	12
Contract Management-Special Contracts-Laws of Agency; Principal-Agent Problem-Bailment, Pledge, Guarantee and Indemnity-Sales of Goods- Principles of Sales of Goods.		
UNIT IV	TRANSFER OF OWNERSHIP & PROPERTY	12

Transfer of Ownership& Property–Performance of contract–Consumer Protection Laws–Law relating to Business Organizations–Partnership Trusts– Company form of organization.

UNITV

COPYRIGHTS & TRADEMARKS

12

Protecting the property of Business–Copyright, Trademark, secret, Geographical Indications– Alternate Dispute resolutions.

TOTAL: 60HOURS

TEXT BOOKS:

2. N.D.Kapoor, Elements of Mercantile Law, S.Chand& Sons,2013
3. P.P.S.Gogna, Mercantile Law, S. Chand & Co. Ltd., India, Fourth Edition,2008.
4. Dr. Vinod, K. Singhanian, Direct Taxes Planning and Management,2008.
5. Richard Stim, Intellectual Property- Copy Rights, Trade Marks, and Patents, Cengage Learning,2008.

REFERENCE BOOKS:

1. Balachandran V., Legal Aspects of Business, Tata McGraw Hill,20
2. Daniel Albuquerque, Legal Aspect of Business, Oxford,20
3. Ravinder Kumar– Legal Aspect of Business. – Cengage Learning, 2ndEdition-2011.

COURSE OBJECTIVE:

- To study the communication skills
- To apply it in practical business situations, written exercises & e-mails and letters: Re-writing and re-framing of sentences are being delivered.

COURSE OUTCOMES: (Skill Development)

At the end of the course, the students will be able to:

- CO – 1 : Recall the basics of communication and its process, elements and importance.
- CO – 2 : Evaluate the effectiveness of revising, checking and proof reading the messages.
- CO – 3 : Discuss the concept of Etiquette and significance of Interviews
- CO – 4 : Identify different types of letters to make effective internal and external correspondence
- CO – 5 : Evaluate the effectiveness of revising and checking the messages.

UNIT I INTRODUCTION 12

Fundamentals of Communication, Business Communication, The Communication Model, Communicating in teams, Overcoming the Barriers to Communication. Just-A-Minute Presentation Workshop-Jam Feedback and overcoming Glossophobia-Presentation-1 (Planning & Preparing)

UNIT II OVERVIEW 12

Non-verbal communication, Introducing the 7 Cs of business writing – Candid, Clarity, Complete, Concise, Concrete, Correct and Courteous, Writing business messages, The Stages in writing, Pre writing, Writing and Post writing.

UNIT III REVISING AND CHECKING MESSAGES 12

Revising to improve the content and sentence structure, Avoiding redundant phrases and words, Proof-reading to correct grammar, spelling, punctuation, format, and mechanics, Evaluating whether the message achieves its purpose.

UNIT IV EMAIL WRITING 12

COURSE OBJECTIVE:

- To introduce the essential concepts necessary to make effective use of the computer.
- To understand what a computer can do, how it works, and how it can be used to create documents using word processing and spreadsheet applications for personal and business use.

COURSE OUTCOMES: (Employability)

At the end of the course, the students will be able to:

CO – 1	: Describe the fundamentals of computer.	CO – 1
CO – 2	: Explain the basics of hardware and software.	CO – 2
CO – 3	: Identify different components of hardware systems .	CO – 3
CO – 4	: Discuss about the word processing using Microsoft Word.	CO – 4
CO – 5	: Demonstrate working with Spreadsheets using Microsoft Excel.	

UNIT I INTRODUCTION TO BASICS 12

Internet Basics, Internet Safety, **Hardware/Software Basics**.

UNIT II IDENTIFY COMPONENTS OF A HARDWARE SYSTEM 12

Identify Components of a Hardware System, Cables and Assembly. Application vs. Operating Software, File Management **Word Processing**.

UNIT III MICROSOFT WORD 12

Microsoft Word, Terminology , Word Basics , Editing , Helpful Word , Features , Formatting Literacy at the keyboard Word Processing – Microsoft Word – Continued, Formatting , Document Commands, Mail Merge , **Spreadsheets** .

UNIT IV MICROSOFT EXCEL 12

Microsoft Excel, Terminology Excel Basics, Formatting Worksheets, Organizing the Worksheet , Formulas/Functions Spreadsheets – Microsoft Excel – Continued , Formulas/Functions, Continued , Sorting, Filters, and Templates , Charts , Presentations .

UNITV MICROSOFT POWERPOINT 12

Microsoft PowerPoint , Terminology , Design Guidelines , PowerPoint Basics , Design Templates/Fonts, Presentations – Continued ,Group & Individual PowerPoint Projects , Databases – Microsoft Access Terminology, Access Basics, Creating/Modifying Forms, Finding/Ordering Data (Queries & Filters) , **Creating Reports.**

TOTAL: 60 HOURS

TEXT BOOKS:

1. Turban Rainer and Potter – Introduction to Information Technology, John Wiley & Sons, 2005.
2. Richard D Gitlin, Jeremiah F Hayes, Stephen B Weinstein, Data Communications Principles, Springer, 1992

REFERENCE BOOKS:

1. William Stallings, Data and Computer Communications, Prentice Hall, 2007
2. Behrouz A. Forouzan, DeAnza College, Data Communications and Networking, McGraw-Hills, 2007
3. N.D. Birrell, M.A. Ould, A Practical Handbook for Software Development, Cambridge University Press, 1988
4. Sanjay Saxena, A first course in computers, Vikas Publishing House Pt. Ltd. 2000

The objective of this course is to take the best teaching learning resources to all to create a levelled platform.

To make use of the Indian massive online to the aspiring youth of India

- The students will select a MOOC course from the Swayam platform.
- They will spend 2 hours per week undergoing this practical MOOC course under the guidance of a faculty.
- Every course will have a minimum of 8 to a maximum of 12 assignments depending on the duration of the course.
- Assignments will be submitted as per the requirements of the course.
- The marks scored in the assignments will be taken for internal assessment marks.
- The students will appear for a final practical exam conducted by VISTAS.

COURSE OUTCOMES: (Skill Development)

- CO – 1 : Understand the latest developments in the field of study
- CO – 2 : Explain the students with latest information about the field of study
- CO – 3 : Apply the skills in the business world
- CO – 4 : List the various skills gained through this course
- CO – 5 : Summarize the concepts for application

SEMESTER II

COURSE OBJECTIVE:

- To understand the environmental impact of our own business operations and to help the clients and business partners achieve their environmental ambition.
- To study the foreign exchange acts, terms and the export policies to deal with the global environmental business.

COURSE OUTCOMES: (Employability)

At the end of the course, the students will be able to:

- CO – 1 : Explain the concept of International Trade and mode of payment.
- CO – 2 : Discuss important opportunities and challenges in the international environment.
- CO – 3 : Identify the risk involved in the International Trade.
- CO – 4 : Summarize various terminologies related to INCO terms.
- CO – 5 : Assess the issues involved in developing economies.

UNIT I FOREIGN TRADE 12

Introduction to foreign trade - Foreign Trade in India - International Marketing / International Monetary System - Mode of Payment in International Trade - Letter of Credit - meaning - L.C - Foreign Exchange Market - Nature and Functions.

UNIT II RISK MANAGEMENT 12

Risk Management - FEMA (Foreign Exchange Management Act) importance and role of FEMA - provisions - INCO Terms - UCPDC (Uniform Customs Procedure Document Credit) - importance - role and provisions.

UNIT III EXPORT POLICY 12

Introduction to the export policy - meaning - role - Export Policy and Organization for Export - Export Promotion - the concept of - Export Processing and Special Economic Zones - role and importance - advantages (EPZ & SEZ).

UNIT IV ECONOMIC ENVIRONMENT 12

Framework of Economic environmental analysis-the factors- **Economic and Social development**- Role of infrastructure in development-significance-Sustainability and development-Logistics as a carrier of Globalization

UNIT V GLOBALIZATION 12

Globalization and its impact in development-Logistics - a strategy for **sustainable global development**-Micro Environmental factors-their issues for Logistics with economic/social relevance of the factors.

TOTAL: 60 HOURS

TEXT BOOKS:

1. Richard M. Hodgets & Fred Luthans, "International Management", TMH, 6th Edition, 2006

REFERENCE BOOKS:

2. Michael R. Zinkota, Ilkka A Ronkainen, Michael H. Moffet, "International Business Thomson", Southwestern, 10th Edition, 2002.
3. John D. Daniels & Lee H. Radebaugh, "International Business", Pearson Education-3th Edition, 2006.

COURSE OBJECTIVE:

- To understand the basics of market, marketing, marketing environment and business environment and its domain knowledge.
- To understand the core concepts in marketing concepts, critical thinking, problem solving and Analysis

COURSE OUTCOMES: (Employability)

At the end of the course, the students will be able to:

- CO – 1 : Relate the corporate function of marketing.
- CO – 2 : Outline the macro and micro environment in the company's marketing function.
- CO – 3 : Differentiate the consumer and institutional buyer behaviour.
- CO – 4 : Compare and contrast goods and services.
- CO – 5 : Define the target segments for the products

UNIT I INTRODUCTION 12

Understanding the term Marketing-Importance of Marketing-Scope of Marketing-Core Concepts-Company Orientation toward marketplace-Marketing and Customer Value-Marketing Environment-Micro and Macro Environment.

UNIT II CONSUMER MARKETS 12

Consumer Markets: Model of Consumer Behavior, Seven Os Structure, Factors Affecting Consumer Behavior, Stages in the Adoption Process, Industrial Markets -Characteristics, Industrial Buyer Behavior, Service Marketing-Characteristics-Marketing Strategy.

UNIT III MARKET SEGMENTATION 12

Market Segmentation: Levels and Bases for Segmentation, Segmenting Consumer Markets, Business Markets, Market Targeting -Evaluating Market Segments -Product Positioning for competitive advantage, Positioning Strategies.

UNITIV MARKETING PROGRAMME 12

Marketing Programme: Decisions Involved in Product, Branding, Packaging, Product Extension Strategies - Product Line and Product Mix Decisions, **New Product Development**, Product Life Cycle. Pricing Products, Strategies, Distribution -Channels, Channel Management Decisions, Promotion Mix - Advertising, Sales Promotion, Public Relations, Personal Selling, Promotion Decisions, Place.

UNITV MARKETING RESEARCH 12

Marketing Research and Control: Marketing Research – Course Objectives: & Scope – Research designs – research procedure – data types & sources, sampling techniques, analysis & reporting. **Demand Measurement and Sales Forecasting Methods**, Estimating Current and Future Demand. Annual Plan Control, Efficiency Control, Profitability Control and Strategic Control, Marketing Audit, Online Marketing. Ethics in marketing.

Case study: Marketing strategy Implementation; Market Segmentation / Targeting / Positioning; Product Levels, Pricing

TOTAL: 60 HOURS

TEXT BOOKS:

1. Philip Kotler and Kevin Lane Keller, Marketing Management, PHI 14th Edition, 20 2. KS Chandrasekar, “Marketing management-Text and Cases”, Tata McGraw-Hill-Vijaynicole, First edition,2010.
2. Lamb, Hair and McDaniel, Marketing, 8th Edition, Thomson Learning, 2005, RajanSaxena, Marketing management, TMH, 2006.

REFERENCE BOOKS:

1. Keith Blois, Marketing, Oxford University Press,2005.
2. Ramaswamy V.S. Namakumari S, Marketing Management - The Indian Context, Macmillan India Ltd,2006.

COURSE OBJECTIVE:

- To analyze, plan, implement and controlling the physical flows of materials and finished goods from point of origin to the point of consumption.
- To discuss efficient operations of logistics and develop strategy to reach goals of cost reduction and enhance customer service
- To identify the role of effective supply chain management for collaborative planning
- To discuss the importance of warehouse management & inventory control
- To identify the criteria and measure Supply chain & Logistic performance

COURSE OUTCOMES: (Employability)

At the end of the course, the students will be able to:

- CO – 1 : Discuss about the importance of logistics & its role in the Indian Economy.
- CO – 2 : Summarize various activities of logistics to satisfy the end Customers
- CO – 3 : Analyze functional activities of supply chains that process the flow of products
- CO – 4 : Describe the importance of collaborative planning among supply chain partners
- CO – 5 : Appraise the strategies that can be taken to manage inventories.

UNIT I OVERVIEW OF LOGISTICS: 12

Meaning & Significance of Logistics -Role of Logistics in Economy/Business -Functions of the Logistics system-In-bound and Out-bound logistics – Components of Logistics Management.

UNIT II SUPPLY CHAIN MANAGEMENT 12

Introduction to Supply chain management - Definition, objectives -functions of Supply chain and drivers—Managing demand and supply-Lack of supply chain coordination and the Bullwhip effect –Obstacle to coordination—Managerial levers—Building partnerships and trust—Continuous

replenishment and Vendor managed inventories – Collaborative planning, Forecasting and Replenishment.

UNIT III INVENTORY AND WAREHOUSING 12

Demand forecasting—Strategic sourcing--Inventory management-Concept and Types of Inventory, Functions of Inventory-Elements of Inventory Costs, Inventory Management – vendor development –Vendor Inventory-warehouse-Warehousing Functions—Types—Site Selection—Layout Design.

UNIT IV LOGISTICS ADMINISTRATION 12

Trends of Logistics & Supply Chain Management, Logistics Service Provides (LSP), Supply chain integration -Role of 3 PL and 4 PL- Order Fulfillment-Financial Flow in Supply Chain, Reverse Logistics design and management- Logistics information system.

UNIT V LOGISTICS & SUPPLY CHAIN PERFORMANCE 12

Measuring Supply chain & Logistic performance - Financial issues in Logistics - Logistics and Customer Service- Customer Retention. Integrated IT solutions for Logistics and Supply Chain – Customer relationship management – Internal supply chain management – Supplier relationship management.

TOTAL: 60 HOURS

TEXT BOOKS:

1. Douglas W Lambert, “Fundamentals of Logistics Management, 10th Edition, 2003

REFERENCE BOOKS:

1. Pramod Rao, “Logistics Management”, 11th Edition, 2007.
2. John W Langford, “Logistics: Principles & Applications”, 8th Edition, 1995.
3. Martin Christopher, “Logistics & Supply Chain Management”, 9th Edition, 2010.

COURSE OBJECTIVE:

- To explain business/services in maritime technology and logistics within the country and abroad.
- To understand the clientele safe reliable efficient and economic shipping services.
- To understand Maritime Geography, Geography of Trade-Ports, Airports, Law of Carriage of goods by Sea, Arbitration, Ship Sale and Purchase-Financing Purchase and Valuations.

COURSE OUTCOMES: (Employability)

At the end of the course, the students will be able to:

- CO – 1 : Discuss the basics of maritime business.
- CO – 2 : Illustrate why sea transport is used.
- CO – 3 : Describe about the various measurements based on stowage, volume of ships.
- CO – 4 : Develop ethics in maritime business
- CO – 5 : Analyze different types of ocean liners.

UNIT I INTRODUCTION TO MARITIME BUSINESS 12

Introduction to Maritime Business, Reasons for Sea Transport, Supply of Ships, Ship Registration, Ship Classification, The Ship- Tonnage and Load Lines, Ship measurement based on volume, Stowage, Types of Ships, Practitioners in Maritime Business-Chartered Ship Brokers, Ethics in Maritime Business, Types of Fraud.

UNIT II LINERS 12

Liners- brief history, Role significance Conferences and Freight Tariffs, Liner Consortium Agreements-Alliances-Liner documentation, Liner Agency, agency role- Agent's duties and agent; Risks.

UNIT III CONTAINERISATION 12

COURSE OBJECTIVE:

- To explore the fundamental concepts of managerial economics, the production functions and the cost functions.
- To have a sound knowledge of the factors affecting the demand and supply of shipping cycles and cost analysis and pricing in shipping.

COURSE OUTCOMES: (Employability)

At the end of the course, the students will be able to:

- CO – 1 : Review the fundamental concepts of managerial economics.
- CO – 2 : Compare and contrast demand and supply analysis.
- CO – 3 : Examine the structure of the shipping industry
- CO – 4 : Appraise the shipping market structure.
- CO – 5 : Evaluate the supply and demand of shipping.

UNIT I FUNDAMENTAL CONCEPTS 12

Managerial Economics- Meaning, Nature and Scope, Business Decision Making - Role of Managerial Economist, Fundamental concepts of Managerial Economics, Demand Analysis - meaning, determinants and types of demand, Elasticity of demand.

UNIT II SUPPLY ANALYSIS 12

Supply Analysis- Meaning and Determinants- production decisions, Production functions, Isoquants, Expansion path- Cobb-Douglas function. Cost Concepts, Cost-Output relationship, Economies and Diseconomies of scale, Cost functions, Market structure- Characteristics, Pricing and Output decisions - methods of Pricing - Differential Pricing, Government intervention and pricing.

UNIT III STRUCTURE OF SHIPPING INDUSTRY 12

Structure of Shipping Industry- Oligopoly and Perfectly competitive Shipping markets, Factors affecting Demand & Supply of Shipping, Shipping cycles, Cost analysis in shipping- Fixed costs,

Variable costs – Concept of opportunity cost, The demand for Shipping- Derived Demand, Elasticity of Demand, Demand Measurement, Effect of Substitution, Freight Rate mechanism

UNITIV SUPPLY OF SHIPPING 12

Supplyofshipping-FactorsinfluencingtheSupplyofShipping-Tonnage,NumberandFlagofships, Productivity and Supply trends of shipping industry - surplus tonnage/ active fleet/ short runsupply, measuring elasticity of supply

UNITV PRICING OF SHIPPING SERVICES 12

Pricing of Shipping Services- Determination of equilibrium pricing in various segments, Forecasting – Concept of Freight Futures and Options

TOTAL: 60 HOURS

TEXT BOOKS:

1. Martin Stopford, “Maritime Economics”, Taylor & Francis e-library, 10thEdition,1997.
2. KevinCullinane,“InternationalhandbookofMaritimeEconomics”,EdwardElgarPublishing Ltd, 9thEdition,2011.

REFERENCE BOOKS:

1. Varshney. R.L. &Maheshwari. “Maritime Economics”, (Prentice Hall of India), 10thEdition, 2008.
2. Mr. Wayne .k. Talley, “The Blackwell companion to Maritime Economics”, Rutledge, Th Edition, 2014.

COURSE OBJECTIVE:

- To describe the introduction of Multimodal Transportation management and its various distribution models
- To discuss in detail through understanding of various tariffs applicable in sea/air/rail/road/pipeline transportation.

COURSE OUTCOMES: (Employability)

At the end of the course, the students will be able to:

- CO – 1 : Describe the various issues in multimodal transportation.
- CO – 2 : Rephrasing about the multimodal and intermodal transportation.
- CO – 3 : Using the freight costing and pricing.
- CO – 4 : Monitoring the air transport and IATA.
- CO – 5 : Constructing the various aspects air cargo transport.

UNIT I MULTI MODAL TRANSPORTATION 9

Multimodal transportation - Introduction, growth and components, Physical multi modal operations – Interrelationship of transport mode, Specialised container equipments – FCL, LCL and Customs facilitation.

UNIT II MULTIMODAL TRADE ROUTES 9

Multimodal trade routes – factors affecting Mode and Route choices, Multimodal transport operators – Types of Vessel Operators –Other provisions through Transport services.

UNIT III CORPORATE STRUCTURES AND PRICING 9

Corporate structures in Multimodal Transport, System required by the Transport Operar, Transport Pricing-Modern Freight Tariffs, Meeting the Demand-Tracking the Container Fleet.

UNIT IV RAIL AND AIR 9

Rail Transport- Railway networks, Air Transport- Airline Schedule Planning, IATA, Maritime industries.

UNIT V

CONTRACT

9

International contract of sale-Bill of Lading-Clauses-Way bills-Identity of Carrier-Liability and Insurance-Paperless Trading, Indian Multimodal Act- 1993,Conventions related Multi modal transport-Cargo liability conventions, Conventions relating Dangerous Goods-Cusms conventions- Statutory Regulations and Restrictions-National and International restrictions on the movement of goods-W.

TOTAL: 45 HOURS

TEXT BOOKS:

1. K. V. Hariharan, Containerisation, Multimodal Transport & Infrastructure Development In India, Shroff Publishers and Distributors Pvt. Ltd, 6th Edition, 2014
2. Hariharan K. V., A Textbook on Container & Multimodal Transport Management, Shroff Publishers and Distributors Pvt. Ltd, 1st edition, 2002.
3. K.V.Hariharan, Text Book On Container & Multimodal Transport Management, Pearson Education, 2002.

REFERENCE BOOKS:

1. Jotin Khisty C and Kent Lall B, Transportation Engineering: An Introduction, Prentice Hall International, 3rd edition 2002.
2. Hutchinson B.G, Principles of Urban Transport Systems Planning, McGraw-Hill Book Company (latest edition), 2013.

COURSE OBJECTIVE:

The internship module aims to provide the student with:

- A practice-oriented and 'hands-on' working experience in the real world or industry, and to enhance the student's learning experience.
- An opportunity to develop a right work attitude, self-confidence, interpersonal skills and ability to work as a team in a real organisational setting.
- An opportunity to further develop and enhance operational, customer service and other life-long knowledge and skills in a real world work environment.
- Pre-employment training opportunities and an opportunity for the company or organisation to assess the performance of the student and to offer the student an employment opportunity after his/her graduation, if it deems fit.

COURSE OUTCOMES: (Employability)

At the end of the course, a student will be able to

CO – 1: Understanding the application of knowledge and skill sets acquired from the course and workplace in the assigned job function/s.

CO – 2: Applying real life challenges in the workplace by analyzing work environment and conditions, and selecting appropriate skill sets acquired from the course.

CO – 3: Create critical thinking and problem-solving skills by analyzing underlying issue/s to challenges.

CO – 4: Understanding the ability to harness resources by analyzing challenges and considering opportunities.

CO – 5: Understanding appreciation and respect for diverse groups of professionals by engaging harmoniously with different company stakeholders.

SEMESTER III

COURSE OBJECTIVE:

- To make student able to build an understanding of the fundamental concepts of ERP systems, their architecture, and working of different modules in ERP. Students will also be develop and design the modules used in ERP systems, and can customize the existing modules of ERP systems.
- To understand and able to build an understanding of the fundamental concepts of ERP system.
- To learn ERP architecture, and working of different modules in ERP.
- To comprehend to create and plan the modules utilized in ERP frameworks, and can redo the current modules of ERP frameworks.

COURSE OUTCOMES: (Employability)

At the end of the course, the students will be able to:

- CO – 1: Understand the technical aspects of ERP systems.
- CO – 2: Analyze the module in distinguishing the characteristics of ERP software
- CO – 3: Evaluate the concepts of reengineering and how they relate to ERP system implementation.
- CO – 4: Application of typical functionality in an ERP system.
- CO – 5: Evaluate the ERP implementation packages

INTRODUCTION**12****UNIT I**

Introduction to ERP, Evolution of ERP, Reasons for the growth of ERP, Scenario and Justification of ERP in India, Evaluation of ERP, Various Modules of ERP, Advantage of ERP.

UNIT II OVERVIEW OF ENTERPRISE**12**

An overview of Enterprise, Integrated modules, Business Process Mapping for ERP Module Design, Organizational Environment and its selection for ERP Implementation.

UNIT III ERP AND RELATED TECHNOLOGIES**12**

ELECTIVE COURSES – LOGISTICS & SHIPPING

18EMBL31

COMMERCIAL GEOGRAPHY

4 0 0 4

COURSE OBJECTIVE:

- To understand the clientele safe reliable efficient and economic shipping services.
- To understand Maritime Geography, Geography of Trade-Ports, Airports, Law of Carriage of goods by Sea, Arbitration, Ship Sale and Purchase-Financing Purchase and Valuations

COURSE OUTCOMES: (Employability)

At the end of the course, the students will be able to:

- CO – 1 : Explain the basics of commercial geography.
- CO – 2 : Summarize the various natural resources in the world
- CO – 3 : Indicate the geographical environment and commerce.
- CO – 4 : Clarify the various classification of resources
- CO – 5 : Estimate the geographical factors that affect international trade.

UNIT I

COMMERCIAL GEOGRAPHY

12

Definition of commercial geography and its branches - Geographical Environment and Commerce –
World trade pattern in major commodities - Meaning, nature & Use of Resources - Classification of Resources.

UNIT II

COMMODITIES

12

Geographical factors affecting International trade - India's foreign trade of commodities -
Characteristics of commodities and their origin, type of transportation used for movement to ports -
Port Infrastructure for commodities.

UNIT III

INDUSTRIES

12

Role of Industries in Economic Development - Factors of Industrial Location - Major Industries in

COURSE OBJECTIVE:

- To provide the participants with a good knowledge of airfreight operations, services and management that can support them in various business functions and roles such as operations, customer service, account management and sales.
- To create awareness about the Air Cargo management.
- To provide general information or a framework on the setup of air cargo processes, for business.

COURSE OUTCOMES: (Employability)

At the end of the course, the students will be able to:

- CO – 1 : Learn about the airports and aircrafts.
- CO – 2 : Representing the role of a custodian in air cargo.
- CO – 3 : Know about the various IATA and ICAO airport and airline codes.
- CO – 4 : Judging the roles of GSSA and the GHA.
- CO – 5 : Learn about the various aspects air cargo transport.

UNIT I AIR PORTS AND SHIPMENT 9

Ground Handling Agencies - Air Craft - Advantage of Air shipment - Economics of Air Shipment - Sensitive Cargo by Air shipment - Do's and Don'ts in Air Cargo Business

UNIT II AIR CARGO 9

Air Cargo Console - Freight of Air Cargo - Volume based Calculation of Freight - Weight based Calculation of Freight - Import Documentation - Export Documentation

UNIT III AIRWAY BILLS 9

Airway Bills - FIATA - IATA - History of IATA - Mission of IATA - Price setting by IATA - Licensing of Agencies - Sub Leasing of Agencies - freight carriers by scheduled freight tonne kilometers flown

COURSE OBJECTIVE:

- To describe about Dry cargo ships, flag of convenience, Baltic Exchange, Ship brokers, Trading-Letter of Credit-MarketReporting,
- To know the methods of Ship Employment-Firm offer and CharteringContracts.
- To study the nature and characteristics, main places of origin and appropriate trade routes of other importantcargoes.
- To be aware of Geography of World Trade, Trading Restrictions, Port Restriction, disputes and ProfessionalIndemnity.
- To know the basic dimensions, design and construction details including decks,holds, hatches, derricks, winches, cranes and specialised cargo handling gear.

COURSE OUTCOMES: (Employability)

At the end of the course, the students will be able to:

- CO – 1 : Describe the fundamental differences between dry bulk cargo ships
- CO – 2 : Describe the differences in the types of ships employed in dry cargo trade;
- CO – 3 : Describe the basic dimensions, design and construction details
- CO – 4 : Describe the terminology of measuring ships including dimensions, actual tonnages
- CO – 5 : Describe what information is contained in capacity

UNIT I**DRY CARGO SHIPS****9**

Introduction-DryCargoShips-TypesOfShips,SafeWorkingLoad,Self-Trimming,Tweendeckers, Cargo Stowage, Cargo Gear, Air Draft, Lash - Dry Cargo Ship Tonnages, Load Lines, Dimensions And Cargoes - Tonnage-Displacement Tonnage-Deadweight-Dwat-Dwcc, Plimsoll - Lines-Grain Capacity-Bale Capacity, And Types Of Cargoes - Freight Markets And Market Practice, Baltic Exchange, Charterer, Ship Owners, Flag Of Convenience, Agency Agreement-Operators-Ship Brokers,Trading-LetterOfCredit-MarketReporting-MethodsOfShipEmployment-FirmOffer,

Chartering Contracts - List Of Voyage Charter Party Clauses, Elements Of Voyage Charter Party, List Of Time Charter Party Clauses, Bareboat Charter - Factors In Selecting Ships, Cargoes And Chartering Alternatives

UNIT II FINANCIAL ELEMENTS OF CHARTER PARTIES 9

The Market Functioning, Market Indices, Role Of Brokers, Market Reports And Agreements - Dry Bulk Market Factors: Trade, Vessel Demand, Vessel Supply, Earnings, And Vessel Prices Financial Elements Of Charter Parties, Dead Freight - Bill Of Lading-Bunkers, Laytime – Laytime Definition For Charter Parties 2013, Calculation Of Laytime, - List Of Very **Important Decisions** - Voyage Estimating - Itinerary-Cargo Quantity-Expenses-Income-Demurrage Trades, Despatch Trades, Port Charges,BillOfLadingAndCargoClaims,**FunctionsOfB/L,ElementsOfB/L**,TypesOfB/L,B/L AtLoadingPort-B/LAtDischargingPort,HagueRules,Hague-VisbyRules,HamburgRules, Rotterdam Rules, Carriage Of Goods By Sea- Seaworthiness - Himalaya Clause

UNIT III SAFETY CERTIFICATES AND SURVEYS 9

Waybills-Insurance-Cargo Damage, Safety Certificates - Loadline Certificates/Cargo Gear Certificate-**Maritime Declaration Of Health Certificate** -Surveys And Inspections, Charter Parties, **Time Charter**, Delivery Owner’s Agent-Agent’s Influence Upon Charter, Port Agent’s Role In Charter Party Negotiations/Implementation.Time Counting, Importance Of Time-Notice Of Readiness, Demurrage & Dispatch, Statements Of Facts &Timesheets-Stoppages, Operations - Arrangement And Supplying Of Services On Behalf Of Principal, Cargo-Ship- Crew Repatriation, Desertion, Mail.Charter Party And Cargo Claims, Charterer’s Duties, Rights, Jurisdiction.

UNIT IV CARGO DOCUMENTATION 9

LetterOfIndemnity,CollectingFreight,DischargingPortAgent,LegalPrinciplesOfCharterParties & Bills Of Lading Ng-Functions Of Bill Of Lading, Mate’s Receipt, Manifest. Port Community System (Pcs) And Ice Gate. List Of Documents And Certificates Be On Board, Statement Of Facts And Time Sheets , Port Agents And Law – Introduction, Practical Duties And Obligations, Noting Protest, P&I Associations, General Average, Relationships With Principals –**Disbursement Accounting,DivisionOfCosts,FinalDisbursementInvoice,OperationalAccounting,Office Organization.**

UNIT V GEOGRAPHY OF WORLD TRADE 9

TradingRestrictions,PortRestrictions,DisputesAndProfessionalIndemnity,P&I Clubs–**Alternate Dispute Resolution Methods** – Arbitration Mediation – Conciliation - Voylay Rules. &Fonasba-

LossesAndClaims–Do’sAndDon’tsOfACharteringManager-Afra–PostFixtureAspectsOf
Chartering – Charter Party Disputes: Voyage Charters – Arrived Ship; Lay- Time Calculations;
DeductionsFromFreight;ExceptedPeriods.TimeCharters–Off-HirePeriods;FinalVoyage;
Payments Of Hire; Bunkers; Performance Clauses

TOTAL: 45 HOURS

TEXT BOOKS:

1. Burke & Russell John, “International Logistics and Freight Forwarding”, 6th Edition, 2001.

REFERENCE BOOKS:

1. Victor Dover Shipping Industry, “Constitution & Practice”, Victor Dover, (Mac Donald & Evans), 8th Edition,2008.
2. Frank Worsford, “Freight Transport & Environment”, Frank Worsford,(Psychology Press), 9th Edition, 2008.

COURSE OBJECTIVE:

- To Acquire basic knowledge about Development of Liner Service, Liner versus Tramp Service
- To study the Cargo handling, Stowage Unitization and Containerization, Vessel loading and discharging process.
- To understand a general overview of Dangerous Goods(IMO),
- To learn the liner trade routes, major liner ports and liner operations,
- To Know about the developments in Freight Forwarding and NVOCC operations and their impact on Liner Trade.

COURSE OUTCOMES: (Employability)

At the end of the course, the students will be able to:

- CO – 1 : Describe the characteristics of **liner services** and their differences from **tramp services**.
- CO – 2 : Locate the main **liner trade routes** in the world
- CO – 3 : Classify of the basic differences between east/west and north/south trades.
- CO – 4 : Explain the different service options including round the world (RTW).
- CO – 5 : Distinguish the **different types of businesses** involved in the liner trades

UNIT I BACKGROUND AND DEVELOPMENT LINER TRADE 9

History of Liners, Liner trades and Tramp trades -Their evolution and development, The Development of Unitization and Containerization, Concepts of Liner trade, Liner operations, Vessel loading and discharging , Liner trade routes, Major Liner ports, Liner service options, Liner Trade – ship types - Tonnages, pseudo tonnages, Cargo measurements & capacities, Container ships, Types of container ships, Ro-Ro Barge carrying vessels, Refrigerated cargo ship, Conventional (Breakbulk) vessels, Future vessel developments, **Economy of scale**, Shipboard handling equipment.

UNIT II CARGOES, LINER CARGOES 9

Dangerous Goods-IMO special goods, Cargo handling and other methods of lifting cargo, Port handling equipment, Port terminals, Cargo stowage-stowage factors, unitization/multi-modalism /Containers, Container dimensions, Types of container and other container terminologies, Container inventory, Owning/Leasing, Meeting the demand for containers, Tracking the container fleet, Container control, FCLS, LCLS & ICDS, Container Freight Stations, Role of Ship's Officers & Ship's Agent, Liner Shipping operations - Accounting/ Budgeting/ Freight collection, Port disbursements.

UNIT III FREIGHT FORWARDING, NVOCCs 9

Evolution and Development of Freight Forwarding, Features of Freight Forwarding, Different modes of International freight-Advantages and disadvantages, Sea Freight and Air Freight Forwarding and International Freight Forwarding Networks. Insurance and Protection & Indemnity Clubs, Conferences, consortia, Alliances & Independent- Conference system, Monopoly investigations, Development of the conference system, Conference and Competition law, FMC, Mergers/ Takeovers / Container Consortia, Alliance around the world.

UNIT IV LAW OF CARRIAGE OF GOODS & DOCUMENT 9

Carriage of Goods by Sea Act, Use of Bill of Lading in Liner trade, Rules of Carriage of Goods, Hague-Visby Rules 1968, Hamburg Rules 1978, Rotterdam Rules 2009 and Multimodal Transportation of Goods Act 1992 (India), Bill of Lading documentary credits, Bill of Lading clauses, Printed clauses – Functions of Bill of Lading, Other forms of Bill of Lading, House Bill of Lading, Master Bill of Lading, Combined Transport and other Liner documents. Inland Transportation, CONCOR and other Container Rail Operators.

UNIT V THE EXCHANGE OF GOODS TRANSFER & LAW 9

Transfer of funds from country, Methods of payments in International trade, International contracts of sale, Documentary Credit, INCOTERMS, Legal aspects of the liner trades, The carrier insurance and the Carrier's liability for the cargo, Liabilities of the Agent, Legal aspects of the Bill of Lading, Cargo claims, General Average (GA), Security, ISPS code, Law of Agency, Conflict of Interest, Agent in the Port, Marketing and Sales function, General agency accounting, Principal's duties/ remuneration/ duration.

TOTAL: 45 HOURS

TEXT BOOKS:

1. Allen Edward Branch – Elements of Shipping (Routledge) 8th Edition, 2007

2. Mr. Jano Janson & Dan Shneerson- Liner Shipping Economics- Routledge, (MacMillan), (Mac Millan), 6th Edition, 1987
3. Mr. Burke & Russell John- International Logistics And Freight Forwarding, (Mac Millan), 8th Edition, 2001

REFERENCE BOOKS:

1. Containerisation, Multimodal Transport and Infrastructure Development in India (Shroff Publishers and distributors Pvt. Ltd.,)n 5th Edition, 2007
2. G. Raghuram, "Shipping Management – Cases & Concepts, (Mac Millan), 6th Edition, 2008
3. Victor Dover Shipping Industry, "Constitution & Practice", (Mac Donald & Evans), 6th Edition, 2010.

COURSE OBJECTIVE:

- To describe the law of agency, law of torts, ownership and
- To identify the process of registration of ships, laws legislation,
- To know the remedies for breach of contract and contract of guarantee.
- To study the international marine laws, marine insurance, marine acts.

COURSE OUTCOMES (Employability)

At the end of the course, the students will be able to:

- CO – 1 : Define the **development** of marine insurance and the shipping industry
- CO – 2 : Describe the **process** of Risk Management based on ISO 31000:2900.
- CO – 3 : Explain the **process** of purchasing marine hull insurance, marine cargo insurance
- CO – 4 : Examine underwriting considerations, premium rates, express warranties
- CO – 5 : Discuss the marine insurance claims processing

UNIT I SHIPPING LAWS 9

Types Of Contract Of Carriage – Indian Carriage Of Goods By Sea Act, 1856, - Carriage Of Goods By Road Act 2007 – Carriage Of Goods By Air Act – Carriage Of Goods By Indian Railways – Introduction Bill Of Lading — Introduction Multimodal transportation Of Goods – Multimodal Transportation Of Goods Act 1993 – **International Conventions**

UNIT II VARIOUS TYPES OF CONTRACTS 9

Laws – Law Of Torts – General Principle Of Law Of Torts – Types Of Torts And Remedies In Tort - Law Of Agency – Principal Agent Relationship – Indian Contract Act 1872 Important Provisions - **Contract Of Indemnity – Contract Of Guarantee** – Doctrine Of Frustration -

UNIT III LAW RELATING SHIPS 9

Registration Of Ships - **Ownership** – Ships Arrest / Liens / Mortgages - Admiralty Law – Alternate Dispute Resolution – Arbitration

UNITIV INTRODUCTION MARINE INSURANCE 9

Introduction Marine Insurance, International Marine Insurance **market-credit system**, Marine Insurance companies – Protection&Indemnity associations, Marine Insurance Act- 1906, Principle of insurance interest-Cargo Interests-Incidental Interest-Assignment.

UNITV MARINE INSURANCE POLICY. 9

Principle of Utmost Good Faith –Time&Voyage Insurances - Statutory Exclusions-Injury,Marine Insurance Policy-Insured Values-Franchises, Excesses&Deductibles,Measure of Indemnity- Total/Partial loss of Ship/Goods – Salvage&SalvageCharges,Subrogation-Letter of Subrogation- 3rdparty Liability-General Averages, Institute Cargo clauses-Institute War clauses- International Hull clauses-Exclusions-**Claim Provisions**.

TOTAL: 45 HOURS

TEXT BOOKS:

1. Simon Baughen, “Shipping law”, Institute of Chartered ShipBrokers,Routledge, 10th Edition, 2015.

REFERENCE BOOKS:

1. Bemire, “The Law Relating Marine Insurance”, Jain Book Agency, 6thEdition,2012.
2. Legal Principles in Shipping Business, (Institute of Chartered ShipBrokers).

COURSE OBJECTIVE:

- To be aware of the Customs laws related to Prohibitions on importation and exportation of goods.
- To know about Customs procedures and basics in customs clearance.
- To know about export policies and gain knowledge about various organization involving in export procedures.
- To learn the exemption practice from customs duty,
- To study the powers provisions and procedures of Customs authority

COURSE OUTCOMES: (Employability)

At the end of the course, the students will be able to:

- CO – 1 : Define the basics of customs clearance.
- CO – 2 : Describe about the various customs laws and prohibitions of goods in the customs laws
- CO – 3 : Explain about the customs duties.
- CO – 4 : Clarify the duties on various types of goods.
- CO – 5 : Express about customs clearance and payment of duty.

UNIT I OFFICERS OF CUSTOMS AND THEIR ROLES 9

History of Customs – World Customs Organization - Role of Central Board of Excise and Customs – Directorate General of Foreign Trade - Directorate General of Commercial Intelligence and Statistics (DGCI&S) - Customs Brokers Licensing Regulations - Preliminary - Definitions - Officers of Customs - Classes - Appointments - Powers of Officers - Entrustments of Functions of Board - Appointment of Customs Ports, Airports, Warehousing Stations - Power declare places be Warehousing Stations. Prohibitions on Importation and Exportation of Goods - Power Prohibit - Power of Central Government notify goods - Precautions betaken by persons acquiring notified Goods - Prevention or Detection of Illegal Export of Goods - Power of Central Government specify goods

COURSE OBJECTIVE:

- To familiarize with the functioning and management of warehousing and inventory operations.
- To gain in-depth knowledge in material requirement planning and costs associated with warehousing and accounting for inventories.

COURSE OUTCOMES: (Employability)

At the end of the course, the students will be able to:

- CO – 1 : Explain the basics of warehousing.
- CO – 2 : Demonstrate the various warehouse operations.
- CO – 3 : Analyze the various warehousing decisions.
- CO – 4 : Outline the various types of warehouses.
- CO – 5 : Apply the various costs involved in a warehouse.

UNIT I INTRODUCTION TO WAREHOUSING 9

Introduction to Warehousing -Types, Decisions and Operations, Selection of Location for a Warehouse, Layout of a Warehouse, Importance & Scope of Inventory Control, Types of Inventory, Inventory Control, Selective Inventory Control.

UNIT II WAREHOUSE OPERATION 9

Warehouse and Inventory Operations, Role of Warehouse in Distribution system, Using WMS for Managing Warehouse Operations. Basics, Documents, Receiving Scheduling, Unloading, Palletization, Stock Update, Location and Zone Management.

UNIT III ROLE OF INVENTORY MANAGEMENT 9

Importance of role of inventory, Inventory Management Systems, Replenishment of Inventory,

Forecasting Techniques, Selective Inventory Control, Economic Order Quantity, Safety Stocks, Inventory Management Systems - execution -Ratio Analysis on Inventory, Profit Margin.

UNITIV MATERIAL REQUIREMENT PLANNING 9

Costs associated with Inventories, **Material Requirement Planning, Accounting for Inventories**, Purpose of Inventory, Goods, Types of Goods, Finished Goods Inventories, General, Management of Inventory, Stocks Types of Stocks, Tracking the Paper Life.

UNITV INVENTORY 9

Work-in-Process Inventories, Finished Goods & Spare Parts Inventories, Multi-Echelon Inventory Systems, Spare Parts Inventories, **Use of Computers in Inventory Management** Evaluation of Performance of Materials Function, Criteria and methodology of evaluation.

TOTAL: 45 HOURS

TEXT BOOKS:

1. Sunil Chopra and Peter Meindl, Supply Chain Management Pearson Education Asia, 3rd edition, 2007

REFERENCE BOOKS:

1. Simchi-Levi, David, “Designing and Managing Supply Chain”, Tata McGraw Hill, 3rd Edition, 2007.
2. David E Mulcahy, “Warehouse Distribution and Operations Handbook, McGraw Hill, 6th Edition, 1993.

ELECTIVE COURSES – SUPPLY CHAIN

SEMESTER IV

18RMBL41

PROJECT WORK

PROJECT OUTCOMES: (Employability)

At the end of the project, the students will be able to:

- CO – 1 : Create and develop deep understanding of the interaction.
- CO – 2 : Analyze and solve problems on an executive level and demonstrating critical.
- CO – 3 : Design the general (core) management skills in the chosen area of specialization.
- CO – 4 : Design strategies to solve business problems and pursue opportunities.
- CO – 5 : Interpret a variety of ways to engage in experiential learning.