

BBA (Maritime Logistics)- Curriculum Structure

	Semester I	Course Type	Teaching Hours	Credits	Max. Marks
1	English	Non domain	45	3	100
2	Business Statistics	Non domain	45	3	100
3	Financial Accounting	Non domain	45	3	100
4	Principles of Management	Non domain	45	3	100
5	Word & Presentation Tools- Practical	Non domain	60	2	100
6	Communicative English- Practical	Non domain	60	2	100
7	Introduction to Maritime Logistics	Domain	60	4	100
	Total		360	20	700
	Semester II				
1	Organisational Behaviour	Non domain	45	3	100
2	Elements of Economics	Non domain	45	3	100
3	Quantitative Techniques	Non domain	45	3	100
4	Data Analysis using Spreadsheet- Practical	Non domain	60	2	100
5	Warehouse & Materials Management	Domain	60	4	100
6	Port & Terminal Management	Domain	45	3	100
7	ICD & CFS Operations	Domain	60	4	100
	QP				
	Total		360	22	700
	Semester III				
1	Cost and Management Accounting	Non domain	60	4	100
2	Marketing Management	Non domain	45	3	100
3	MIS for logistics	Non domain	60	4	100
4	Supply Chain Management	Non domain	45	3	100
5	International Business	Non Domain	60	4	100
6	Coastal & Inland water transportation	Domain	45	3	100
7	Freight Forwarding	Domain	45	3	100
	Total		360	24	700
	Semester IV				
1	Human Resources Management	Non domain	45	3	100
2	Environmental Studies	Non domain	45	3	100
3	EXIM policies and procedures	Domain	60	4	100
4	Total Quality Management	Domain	60	4	100

5	Maritime Business Law	Domain	60	4	100
6	Advanced Maritime Logistics	Domain	45	3	100
7	Port Inland Connectivity	Domain	45	3	100
	QP				
	Total		360	24	700
	Semester V				
1	Allied course 1	Domain	60	2	100
2	Allied Course 2	Domain	60	2	100
3	Apprenticeship I	Domain	1008	22	400
	Total		1128	26	600
	Semester VI				
1	Allied Course 3	Domain	60	2	100
2	Allied course 4	Domain	60	2	100
3	Apprenticeship II	Domain	1008	22	400
	Total		1128	26	600
	QP				
	List of Allied Courses (MOOC) SEM V				
1	Maritime Freight	Domain	60	2	100
2	PPP in Port Sector	Domain	60	2	100
3	Documentation of Exports and Imports	Domain	60	2	
	SEM VI				
1	Marine Insurance	Domain	60	2	100
2	Port Based Industrialisation	Domain	60	2	100
3	Multimodal Transportation	Domain	60	2	

Course & Credit Distribution

Semester	Domain		Non Domain		Total	
	Courses	Credits	Courses	Credits	Courses	Credits
I	1	4	6	16	7	20
II	3	11	4	11	7	22
III	2	6	5	18	7	24
IV	5	18	2	6	7	24
V	3	26	-	-	3	26
VI	3	26	-	-	3	26
Total	17	91	17	51	34	142

Domain courses- 17- 50%

Non Domain courses- 17- 50%

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Awards of Certificates

Year	Non Domain (credits)	Domain (credits)	QP	Completion of Semester	Award
1	27	15	1	2	Diploma
2	24	24	1	4	Advanced Diploma
3	-	54	1	6	Degree
Total	51	93	3		

Language- English Semester-1 Paper-1

Semester 1	Course Type Non Domain	Code	Teaching Hours 45	Credits 3	Max. Marks 100
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Course Objectives

- To build proficiency in writing, reading and speaking in English language.

Learning Outcomes

- To improve the four language skills - listening, speaking, reading and writing
- To enhance their vocabulary and grammar components
- To improve their pronunciation bridging the gap between the native and non-native speakers
- To be aware of social values incorporated in the prescribed texts which discuss happiness, boredom, parenthood, old age, cell phone abuse, procrastination, etc.,
- To relish the literary 'flavours' through prose, poetry, short stories, and drama.
- To equip themselves for employment and entrepreneurship in future
- To evolve as a potent, confident and successful person in the competitive world

Units	Topics
I	Google Guys (Extract) – Richard L Brandt Happiness 101 – Geeta Padmanabhan Structured Procrastination – John Perry. The Refugee – K.A. Abbas The Lion and the Lamb – Leonard Clarke
II	The Blind Pedlar – Osbert Sitwell An Old Woman – Arun Kolatkar No Sentence – Anjum Hassan The Solitary Reaper – William Wordsworth Gift – Alice Walker
III	A Garden So Rich – Christie Craig The Umbrella Man – Roald Dahl The Bird – Amar Jalil The Fortune Teller – Karel Capek The Postmaster – Rabindranath Tagore
IV	A Boy Who Stopped Smiling – Ramu Ramanathan While the Auto Waits – O' Henry The Cell Phone Epidemic – Claudia I. Haas The Death Trap – 'Saki' (H.H. Munro)

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	The Dear Departed: A Comedy in One-Act – Stanley Houghton
V	Seeking and Giving Information Being Informal Expressing Ability, Possibility Etc.

Textbooks & Suggested Readings:

1. Chandrlekha Rao et al., (2016), Spring Part One, Emerald Publishers, Chennai.
2. Usha Saikumar et al., (2017), Panorama, Emerald Publishers, Chennai.
3. Bhaskaran Nair et al., (2016), Reflections, Cambridge University, New Delhi.

Business Statistics Semester-1 Paper-2

Semester 1	Course Type Non domain	Code	Teaching Hours 45	Credits 3	Max. Marks 100
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Course Objectives

- 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
- Emphasis is placed upon learning statistical concepts through common business problems.
- Gain conceptual and working knowledge of Business Statistics and use it in the applications of business.
- Enable the student to use introductory level of Transportation and queuing theory.
- Learn the methods of solving problems on basic concepts and analytical business statistical model

Learning Outcomes

Units	Topics
I	Data collection - Collection and Presentation of Data - Statistical data - Primary and Secondary; Methods of collection of Primary data- Preparation of Questionnaire; Presentation of Data - Textual, Tabular and Diagrammatic form (Line chart, Bar chart, Pie chart, Histogram, Frequency polygon and Ogive); Frequency distribution.
II	Measures of Central Tendency - Measures of Central Tendency - Mean (A.M., G.M., H.M.), Median, Mode - different properties; Partition values - Quartiles, Deciles, Percentiles; Partition values from Ogives.
III	Measures of Dispersion - Range, Quartile Deviation, Mean Deviation, Standard Deviation - their coefficients; Comparing consistency
IV	Correlation and Regression Analysis: -Methods of Studying Correlation- Pearson Correlation- Spearman's Rank Correlation- Concurrent Deviation- Regression Analysis: Equation of Regression Lines- Method of Least Squares- Time series.
V	Index Number -Index Number - Construction, Price and Quantity index numbers, Laspeyres', Paasche's, Edgeworth- Analytical 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.

Textbooks & Suggested Readings:

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



Financial Accounting Semester-1 Paper-3

Semester 1	Course Type Non domain	Code	Teaching Hours 45	Credits 3	Max. Marks 100
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Course Objectives

- To familiarize students with the mechanics of preparation of financial statements, understanding corporate financial statements, their analysis and interpretation.

Learning Outcome

- Apply fundamental accounting concepts, principles and conventions
- Record basic accounting transactions and prepare annual financial statements for a sole proprietorship business.
- Record accounting transactions on the dissolution, amalgamation, and sale of partnership firms.

Units	Topics
I	Accounting Concepts and Conventions: Meaning, objectives and scope of Accounting, Generally Accepted Accounting Principles (GAAP) -Meaning – Concepts and Conventions-Accounting Transactions-Double Entry Book keeping, Journal- rules of Debit and Credit, Ledger- rules regarding Posting, Preparation of Trial Balance-Cash Book- Preparation of simple cash book – two columnar cash book – three columnar cash book.
II	Accounting for Sole Trading Concern: Preparation of Final Accounts of a Sole Trading Concern–Trading account – Profit and Loss account and Balance sheet - Adjustments -Closing Stock, Outstanding and Prepaid items, Depreciation, Provision for Bad Debts, Provision for Discount on Debtors, Interest on Capital and Drawings - Preparation of Receipts and Payments Account, Income & Expenditure Account and Balance Sheet of Non Trading Organizations (simple problems). Classification of errors – Rectification of errors–Preparation of Suspense Account. Bank Reconciliation Statement (Only simple problems).
III	Depreciation Accounts: Depreciation- Meaning, Causes, Types - Straight Line Method- Written Down Value Method (Change in Method excluded)–Insurance Claims–Average Clause (Loss of stock only). Branch Accounts–Dependent branches–Stock and debtor’s system–Distinction between wholesale profit and retail profit Independent branch (foreign branches excluded).
IV	Final Accounts- Issue of shares and Debentures-Variety Kinds-Forfeiture-Reissue-Underwriting of shares and debentures. Redemption of preference shares and debentures- Purchase of Business-Profits prior to incorporation. Preparation of company final Accounts-Company balance sheet Preparation-Computation of Managerial Remuneration. Valuation of goodwill and shares.
V	Financial Statement Analysis- Analysis and Interpretation of Financial Statement- Nature, Objectives, Tools- Methods– Comparative Statements, Common Size statement and Trend analysis. Funds flow and Cash flow statements. Ratio Analysis - Interpretation, benefits and limitations.

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Classification of ratios - Liquidity, profitability, turnover, capital structure and leverage.
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Textbooks & Suggested Readings:

1. Maheshwari S N, Suneel K Maheshwari & Sharad K Maheshwari (2014) Financial Accounting, Vikas Publishing House Pvt. Ltd. Noida.
2. Maheshwari S.N. & Maheshwari S.K, Corporate Accounting, Vikas Publication, New Delhi
3. Jain S.P & Narang K.L (2014) Financial Accounting, Kalyani Publishers, New Delhi
4. Shukla & Grewal. (2011) Advanced Accounting, S. Chand, New Delhi.
5. Gupta R.L.& V.K. Gupta. Advanced Accounting, Sultan Chand, New Delhi.
6. Tulsian P.C. (2013) Financial Accounting, Dorling Kindersley (India) Pvt. Ltd. New Delhi
7. Parthasarathy. S. And Jaffarulla, A. Financial Accounting.
8. Reddy T.S.&Murthy. (2012) Financial Accounting, Margham Publications, Chennai.

Principles of Management Semester-1 Paper-4

Semester 1	Course Type Non domain	Code	Teaching Hours 45	Credits 3	Max. Marks 100
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Course Objective

- This course aims to introduce fundamental management concepts to beginners and outlines the functions of a manager

Learning Outcomes

- The beginners will be able to apply concepts learned to the role of a manager and hence understand the scope of their specialisations better

Units	Topics
I	Definition- Functions, Process, Scope and Significance of Management- Nature of Management- Managerial Roles- Management and Administration- Evolution of Management Thought, Approaches- Scientific Management- Functions of Management- Values and Ethics in Management- Social responsibility of business
II	Planning - Nature, Scope, Objective and Significance of Planning, Elements and Steps of Planning, Types of Plans- Decision Making- programmed and non-programmed decisions
III	Organizing - Organizing Principles, Span of Control, Line and Staff Relationship, Authority, Delegation and Decentralization. Effective Organizing, Organizational Structures, Directing- Effective Directing, Supervision, Communication- Channels and Barriers, Effective Communication.
IV	Controlling - Elements of Managerial Control, Control Systems, Management- Control Techniques, Effective Control Systems. Coordination Concept- Principles and Techniques of Coordination, Concept of Managerial Effectiveness.
V	Modern Management Techniques: concepts of Business Process Re-Engineering, Business Outsourcing, Benchmarking, Kaizen, Six Sigma, Knowledge Management, Just in Time Management, Total Quality Management.

Textbooks & Suggested Readings:

- L M. Prasad; (2010) Principles of Management; Sultan Chand & Sons.
- Stephen P Robbins (2009) Fundamentals of Management: Essential Concepts and Applications. 6th edition, Pearson Education
- Harold Koontz; Heinz Weihrich, (2015) Essentials of Management: An International Innovation and Leadership Perspective. 10th edition, McGraw Hill



Word & Presentation Tools- Practical Semester-1 Paper-5

Semester 1	Course Type Non domain	Code	Teaching Hours 60	Credits 2	Max. Marks 100
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Course Objectives

- To introduce the student to the Word & Presentation tools and its applications and there by empowering him to utilize – 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

Units	Topics
I	Windows2000-workingwithwindows– moving formation within windows arranging Icons Saving Window settings. MS Office Basics – Creating document – entering text-Selecting text giving instructions-Usingtoolbars-Menucommands-Keyboardsshortcuts-SavingfilesOpening Documents – Manipulating Windows – simple Editing- Printing Files.
II	Word Basics – Using Auto text – Using Auto Correct Word editing technique finding and replacing text – Checking spelling – using templates-formatting – Formatting with styles creating tables- - Designing Titles and subtitles – Watermark- Page border- Header & Footer – Mailings..
III	Power Point basics- Working in outline view- using a design template- Merging presentations in Slider sorter 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 Merger Operation and Preparing labels. -Prepare the document in newspaper column layout.
V	MS POWER POINT-Practical: Prepare a PowerPoint presentation with at least three slides for department Inaugural Function- Draw an organization chart with minimum three hierarchical levels-Design an advertisement campaign with minimum three slides-Insert an excel chart into a power point slide.

Textbooks & Suggested Readings:

1. Office 2000 Complete Reference by Stepher L. Nelson.
2. PC Software for window made simplex by R.K Taxali – Tata McGraw Hill Publishers Pvt. Ltd.,



Communicative English- Practical Semester-1 Paper-6

Semester 1	Course Type Non domain	Code	Teaching Hours 60	Credits 2	Max. Marks 100
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Course Objectives

- To develop written and verbal communication skills for effective business communication.
- To identify various communication skills involved in the business organization.
- To develop business communication skills among the students.
- To improve language skills - reading, writing and listening.

Learning Outcomes

- Expose learners to variety of texts to interact with them.
- Capability to increase learners to visualize texts and its reading formulas.
- Develop critical thinking.
- Develop a more humane and service-oriented approach to all forms of life around them.
- Improvement in their communication skills for larger academic purposes and vocational purposes.
- Critical participants in their everyday business life.

Units	Topics
I	Introduction to Business Communication-Characteristics of Effective Organizational Communication Basic Forms of Communication-Process of Communication-Principles of Effective Business Communication-7 C's.
II	Academic Vocabulary and English for Business-Creative Writing Critical Thinking: Introduction to critical thinking – Benefits - Barriers – Reasoning –Arguments - Deductive and inductive arguments – Fallacies - Inferential Comprehension Critical thinking in academic writing - Clarity - Accuracy – Precision – Relevance.
III	Business letters – layout of Business letters - types - Business enquiries and replies – offers – quotations – orders – complaints and adjustments – collection letters – circular letters – status enquiries- EmailWriting-theProcessofWritingEMails,breakingitDown– ThePAIBOTechnique, StructuringanE-Mail–TheT's– Introduction,BodyandConclusion,EffectiveSubjectlines,Salutation and Signing off- Teleconferencing, video conferencing.
IV	Communication in Business Environment: Business Meetings, Notice, Agenda, Minutes - Press Releases - Corporate Communication: Internal and External, Group Discussion, Seminars, Presentations. - Reporting of Proceedings of a meeting. Office Memorandum, Office Orders, Press Release-Listening: Active listening–Barriers to listening– Listening and notetaking–Listening to Announcements – Listening to news on the radio and television.



V	Reports and Presentations -Business reports and Proposals, Format, visual aids and contents, Oral Business presentations. -Job Application and Resume Writing.
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Textbooks & Suggested Readings:

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 & Flatley M V, Basic Communication Skills for empowering the internet generation, Tata McHill, 2009.
6. Sharma R C & Mohan K, Business Correspondence & Report Writing, TMH, 2009.

Introduction to Maritime Logistics

Semester-1

Paper-7

Semester 1	Course type Domain	Code	Teaching Hours 60	Credits 4	Max. Marks 100
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Course Objectives

- To familiarize the student with basic concept of Logistics
- To develop knowledge specifically on Maritime Logistics
- To expose the student to logistics based development

Learning Outcomes

- Student will be able to understand importance of prudent logistics in business.
- Subject will enable them to enhance their skills in basic logistics planning

Units	Topics
I	Logistics: History and Evolution – Objectives – Elements – activities – importance - modes of Transportation- Role of Logistics - Meaning of derived demand- management - Strategic role of logistics- model – process – activities
II	Achievement of competitive advantage through logistics Framework – Integrated Logistics Management. Outsourcing Logistics: Reasons – Third party logistics provider - Fourth party Logistics providers- (4PL) – Role of logistics providers.
III	Role of logistics managers in strategic decisions - Strategy options, Lean strategy, Agile Strategies & Other strategies - Customer Expectations from Logistic Service Provider - Logistics Strategy
IV	Maritime Logistics - Elements of Maritime history of India - Advantages- Economies of scale - – Major Shipping routes- Ports of the world- Major shipping lines-Major and Non-Major ports of India-Port infrastructure- Employment in Logistics-
V	Sagarmala- Modernisation of Ports -New Port Developments in India-Port based development --Coastal communities-Sustainability aspects in Port and shipping Operations- Port based Employment

Textbooks & Suggested Readings:

1. LSC course material
2. Satish C. Ailawadi and Rakesh Singh: Logistics Management, Prentice-Hall of India Pvt Ltd., New Delhi, 2005.
3. Sagarmala-Website



Organisational Behaviour Semester-2 Paper-1

Semester II	Course type Non Domain	Code	Teaching Hours 45	Credits 3	Max. Marks 100
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Course Objectives

- Understand individual behaviour in organizations, including diversity, attitudes, job satisfaction, emotions, moods, personality, values, perception, decision making, and motivational theories.
- Understand group behaviour in organizations, including communication, leadership, power and politics, conflict, and negotiations.

Learning Outcomes

- Enable the students how to apply the concepts of planning, organizing, executing/leading and controlling for effective management
- Application of Concepts of organizational behaviour to enhance organizational effectiveness

Units	Topics
I	Focus and Purpose- Definition, need for and importance of organizational behaviour – Nature and scope – Framework – Organizational behaviour models– Theories – Learning – Types of learners – The learning process – Learning theories – Organizational behaviour modification.
II	Individual Behaviour- Personality – types – Factors influencing personality - perception, learning, attitudes inter-personal behaviour
III	Group Behaviour -Group and inter-group behaviour- Formal and Informal Groups, Group Norms, Group Cohesiveness, Group Behaviour and Group Decision – making.
IV	Leadership and Motivation- Leadership-nature, styles and approaches, development of leadership including laboratory training. Power and Authority – Definition of Power – Types of Power- Motivation-theories and Morale.
V	Organisational Dynamics- Conflict Management- Organisation Health, Development and Effectiveness. Management of culture, Cross Cultural Management-Management of change

Textbooks & Suggested Readings:

1. Organizational Behaviour by L.M. Prasad
2. Stephen P. Robins, Organisational Behaviour, PHI Learning / Pearson Education
3. Business Organization and Management by Bhushan Y.K.
4. Fred Luthans, Organisational Behaviour, McGraw Hill,
5. Udai Pareek, Understanding Organisational Behaviour, 2nd Edition, Oxford Higher Education, 2004.



Elements of Economics Semester 2 Paper2

Semester II	Course type Non domain	Code	Teaching Hours 45	Credits 3	Max. Marks 100
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Learning Objective:

- To enable the students to understand the principles of Economics to undertake business decisions

Learning outcomes

- Achieve the competence to identify the key elements of demand and supply model and use the model to critically analyse the real world examples
- Develop the capability to understand the types of costs, production processes and the market structure in which the economy operates
- Describe and analyse the economy using the concepts of national income and other macroeconomic concepts

Units	Topics
I	Fundamentals of Economics- Introduction to Economics- Four Big questions of Economics- Micro and macroeconomics- Trade off and opportunity cost- Types of Demand- Law of demand and elasticity- Types of elasticity (Demand, income and cross elasticity)- Law of Supply and Market Equilibrium
II	Analysis of Production and Cost- Production Possibility Frontier- Production Function- Economies of Scale- Types of Costs- Average costs- Marginal Cost- Break Even Analysis
III	Market Structure- Perfectly Competitive Market- Monopoly- Duopoly- Oligopoly- Cartels- Price Determination
IV	National Income and its Measurement-GDP- GNP- NDP- NNP- Methods of Measuring National Income- Importance and Limitations of GDP- HDI- Gross National Happiness
V	Macroeconomic Concepts- Inflation- its meaning, characteristics and types- Deflation- Stagflation- Significance of Budgeting- Revenue Receipts and expenditure- Capital Receipts and expenditure- Fiscal Policy and Monetary Policy- Balance of Payments and Balance of Trade- Foreign Exchange Market

Textbooks & Suggested Readings:

- Ghosh B.N., (2011), Managerial Economics and Business Decisions, Ane Books, New Delhi.
- Ghosh B.N., (2011), Foundations of Managerial Economics, Ane Books, New Delhi.
- Samuelson Paul And Nodhaus William, (2010), Economics, McGraw Hill Education New Delhi.

4. Mankiw Gregory, (2012), Principles Of Microeconomics, Cengage Learning, Ohio, USA.
5. Maheshwari Yogesh, (2005), Managerial Economics, Prentice Hall India, New Delhi.
6. Koutsoyiannis A, (2008), Modern Microeconomics, Palgrave Macmillan, UK.

Quantitative Techniques Semester -2 Paper- 3

Semester II	Course type Non Domain	Code	Teaching Hours 45	Credits 3	Max. Marks 100
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Course Objectives

- To familiarize the student with the use of quantitative techniques in managerial decision-making.

Learning Outcomes

- Understand various quantitative & statistical methods
- Understand data and draw inference from data
- Calculate and interpret statistical values by using statistical tool (correlation & regression)
- Demonstrate an ability to apply various statistical tool to solve business problem

Units	Topics
I	Probability and Sampling -Probability theory – concept and approaches; Probability rules – addition Analytical and multiplication theorem, Binomial, Poisson and Normal Distribution and their applications Sampling – Purpose and Methods of Sampling, Merits and limitations of Sampling.
II	Statistical inference—testing of hypothesis—procedure— Developing Null and Alternate Hypothesis– Type I and Type II errors – Z-test and T-test – F test- Chi-Square test
III	Statistical Quality Control: Introduction; Sources of Variations; Statistical Process Control Methods; Control Charts; Acceptance Sampling; Advantages of Statistical Quality Control.
IV	Introduction to Operations Research: Applications of OR- Objective Function- Constraints- Maximisation and Minimisation Problem- Graphical Method and Simplex Method
V	Transportation and Assignment Problems: Nature and scope of transportation and allocation Analytical models, different methods for finding initial solution - N-W Corner Rule, Least Cost Method and VAM. Unbalanced TP

Textbooks & Suggested Readings:

1. David M. Levine: Business statistics
2. S.P. Gupta; Statistical methods
3. Frederick. S. Hillier, et al. Operations Research, McGRaw Hill India, New Delhi

Data Analysis Using Spreadsheet Semester -2 Paper 4

Semester II	Course type Non domain	Code	Teaching Hours 60	Credits 2	Max. Marks 100
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Course Objectives

- This course is designed with the view of making the student skilful at
- Performing data analysis using spreadsheet (MS Excel).
- Creating pivot tables from a range with rows and columns in Excel.

Learning Outcomes

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

Units	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 /Un-hiding Columns & Rows, Inserting & Deleting Columns & Rows, Cell, Address of a cell, Components of a cell – Format, value, formula, Use of paste and paste special Functionality Using Ranges. Using Ranges, Selecting Ranges, Entering Information into a Range, Using AutoFill.
III	Creating Formulas, Using Formulas, Formula Functions – Sum, Average, if, Count, max, min, Proper, Upper, Lower, Using AutoSum, Advance Formulas Concatenate, Lookup, Lookup, Match, Count if, Text, moving between Spreadsheets, Selecting Multiple Spreadsheets, Inserting and Deleting Spreadsheets Renaming Spreadsheets, Splitting the Screen, Freezing Panes, Copying and Pasting Data between Spreadsheets, Hiding, Protecting worksheets.
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	Linking Worksheets and Workbooks, Importing & Exporting Data-PivotTables, Creating PivotTables, manipulating a PivotTable, Using the PivotTable Toolbar, Changing Data Field, Properties, displaying a PivotChart, Setting PivotTable Options, Adding Subtotals to PivotTables Spreadsheet Tools, Making Macros, Recording Macros, Running Macros, Deleting Macros.

Textbooks & Suggested Readings:

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

Warehouse and Materials Management Semester 2 Paper 5

Semester II	Course type Domain	Code	Teaching Hours 60	Credits 4	Max. Marks 100
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Course Objective

- To develop competencies and knowledge of students to become effective professionals.
- To orient students on recent changes and development in the field of material management
- To help Students to understand basic Principles and concept of material Management
- To develop competencies and knowledge of students to become Warehouse professionals.
- To orient students in the field of Logistics.
To help Students to understand Warehousing and distribution centre operations

Learning Outcomes

- Students will be able to apply the knowledge about material management in the real-life business situation.
- Students will be able to apply the knowledge about material management in the real-life business situation.
- This subject will enable them to enhance their managerial ability and professional skills.
- Students will be able to apply the Basic knowledge of Warehousing and distribution centre operations in the real-life situation.
- This subject will enable them to enhance their ability and professional skills.

Units	Topics
I	Introduction to Warehousing Concepts -Role of warehouse-types of warehouse warehouse location- Need for warehousing- Supply chain trends affecting warehouse -Warehouse functions- Role of warehouse manager
II	Warehouse process: e-commerce warehouse- Receiving and put away- Warehouse process – pick up Preparation-Receiving - Pre-receipt - In-handling - Preparation - offloading - Checking - Cross-docking - Quality control - Put-away - Pick preparation - Pick area layout - Picking strategies and equipment -order picking methods - Warehouse processes-replenishment to dispatch- - Value adding services – Indirect activities - Stock management - Stock or Inventory counting - Perpetual inventory counts - Security - Returns processing – Dispatch.
III	Inventory Management and Warehouse Management System- Inventory Management –Functions of Inventory - Classification of Inventory- Methods of Controlling Stock Levels- Always Better Control (ABC) Inventory system Warehouse Management Systems (WMS) - choosing a WMS-the process implementation- cloud computing- Warehouse Layout-Data collection-space

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	calculation-aisle width- finding additional space.
IV	Storage and Warehousing Information system- Storage Equipment: storage option - shuttle technology - very high bay warehouse - warehouse handling equipment - vertical and horizontal movement – Automated Storage/ Retrieval System (AS/RS)-specialised Equipment- Technical advancements- Resourcing a warehouse- warehouse costs- Types of cost - Return on Investment (ROI) - Charging for shared-user warehouse service - Logistics charging methods Warehousing Information System (WIS)- Performance management- outsourcing decisions.
V	Material Handling and Warehouse safety- Material handling- Product movement- concept- costs-product load activity—dispatch activity-unload activity-control device-impact of the computer technology- automatic identification-issues and trends in product transport--Packaging - Pallet – Stretch wraps - Cartons – Labelling- Health and safety- Risk assessment - Layout and design - Fire safety- Slips and trips - Manual handling - Working at height - Vehicles – Forklift trucks - Warehouse equipment legislation. Warehouse safety check list- Warehouse Environment- Energy production - - Product waste - waste disposal – Hazardous waste- Sustainable Warehouse Management.

Text Books & Suggested Readings:

1. Gwynne Richards (2014) Warehouse Management: A Complete Guide to Improve Efficiency and Minimizing Cost In The Modern Warehouse. The Chartered Institute of Logistics And Transport, Kegan Page Limited.
2. Edward Frazzle (2002) World Class Warehousing and Material Handling. Tata Mcgraw-Hill Publication: New Delhi.
3. James A Thompkins & Jerry D Smith (1998) The Warehouse Management Handbook. Tompkins Press.
4. David E. Mulchy & Joachim Sidon (2008) A Supply Chain Logistics Program for Warehouse Management. Auerbachian Publications.



**Port and Terminal Management
Semester-2
Paper-6**

Semester II	Course type Domain	Code	Teaching Hours 45	Credits 3	Max. Marks 100
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Course Objectives

- To provide basic knowledge on the functioning of the Port.
- To develop knowledge in good management practices in Port
- To Orient the student to leverage port efficiency to improve logistics.

Learning Outcomes

- Student will develop understanding of Port infrastructure facilities and functioning.
- Student will understand how the functioning of port contributes to overall logistics efficiency.

Units	Topics
I	Port-Main functions of a Port-Types of Port -Port Infrastructure- Port Equipment-Cargo types – container- Liquid- Bulk- Break bulk- Port Channel – Draft-mooring- Anchorage
II	Port Operations- Berths and terminals- Services rendered in a Port – pre-shipment planning- stowage plan and on-board stowage- yard planning- Transport movement planning- developments in container/cargo handling- IMDG- safety- security.
III	Storage yards- Rail sidings- Rail operations – Stevedoring- Layout and working of container terminals. Port system and sub systems, Value added service- bunkering- Ballast water management
IV	Factors affecting choice of a port– Productivity parameters and factors determining productivity. Measuring and evaluating – performance and productivity – Ease of Doing Business initiatives in India.
V	Port Organization-Service Port- Tool Port-Land Lord Port- Captive berths- Introduction to Public Private Partnerships in Ports –Port ownership in Indian scenario- Acts regulating ports in India. Responsibilities of port trusts, growth and status of ports in India- Pricing of Port services- TAMP guidelines- cost plus method- normative method.

Textbooks & Suggested Readings:

1. LSC course material
2. Patrick M. Alderton (2008) Port Management and Operations. Informa Law Category, U.K.
3. World Bank. 2007, Port Reform Tool Kit. World Bank, Washington.
4. Institute of Chartered Ship Broking (2015) *Port and Terminal Management*, London.



**ICD and CFS Operations
Semester-2
Paper-7**

Semester II	Course type Domain	Code	Teaching Hours 60	Credits 4	Max. Marks 100
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Course Objectives

- To provide basic knowledge on the functioning of the CFS and ICDs.
- To develop knowledge in good management practices in CFS and ICDs

Learning Outcomes

- Student will develop understanding of CFS and ICDs infrastructure facilities and functioning.
- Student will be able to understand basics of effective functioning of ICDs and CFSs and also Dry ports.

Units	Topics
I	CFS – Role and Functions- Receipt and dispatch/delivery of cargo/ Stuffing and stripping of containers/ Transit operations by rail/road to and from serving ports/ Customs clearance / Consolidation and desegregation of LCL cargo/ Temporary storage of cargo and containers / Reworking of containers / Maintenance and repair of container Units-
II	The physical movement of cargo in or out of a Container Freight Station - Stuffing, sealing and marking of containers for labelling and identification - Storage of containers
III	Ordinary sorting and stacking of containers pre or post shipment- Preparing containers internal load plan- Customs activities in CFS- Use of Buffer yards in CFS-Manpower in CFS- Charges for services- Marketing of CFS
IV	ICD - Role and Functions- Operations carried out in ICD- Customs activities in CFS- Man power in ICD- Rail carriers – CONCOR and private Rail Operators- Improving the service quality in ICD
V	Dry Ports- Inland Ports- Movement of cargo from/to Land locked Areas- Operations proposed in Dry Ports- Factors for successful functioning of Dry Ports- Free Trade Areas- SEZ

Textbooks & Suggested Readings:

1. LSC course material
2. RAMA GOPAL, C. *Export Import Procedures – Documentation and Logistics*, New Age International Publishers, New Delhi.



Cost and Management Accounting Semester -3 Paper-1

Semester III	Course type Non domain	Code	Teaching Hours 60	Credits 4	Max. marks 100
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Course Objectives

- To make students understand the various costing techniques applied in different industries to ascertain the cost of products and services.

Learning Outcomes

- Student will be able to apply costing techniques in different types of industries.
- Student will be able to apply costing techniques in business decisions.
- Understand and use the basic concepts of costing and costing systems in their professional life.
- Integrate cost accounting with financial accounting for management decision-making.

Units	Topics
I	Types of Costing-Cost Accounting: Meaning, definition, objectives, nature and scope. Cost analysis, concepts and Classifications, Cost Ascertainment /Product Costing - Installation of costing systems, Cost centres and Profit centres, Cost Concepts for Control and Decision making. Cost sheets, tenders and quotations - Reconciliation of cost and financial accounts. Job / Order Costing, Batch Costing and Contract Costing- Activity Based Costing (ABC).
II	Direct Materials, Labour, Expenses and Overheads Costing- Material purchase control, Level, aspects, need and essentials of material control. Stores control - Stores Department and Inventory Management. Labour cost – meaning and classification – Accounting and Control of labour costs. Direct Expenses – meaning, nature, collection, classification and treatment of direct and indirect expenses - Overheads - Classification, Allocation, Apportionment and Absorption.
III	Marginal Costing-Marginal costing - difference between absorption costing and marginal costing (excluding decision making) – Profit Planning – Cost Volume Profit (CVP) analysis-Profit/volume ratio and its significance – Break-Even Analysis- Margin of Safety - Break Even Chart.
IV	Budget and Budgetary Control- Meaning - establishing a system of Budgetary Control – Budgets and budgetary control-Meaning, objectives, merits and demerits-Types of Budgets - Preparation of Sales Budgets – Production Budgets - Cash Budget - Fixed and Flexible budgets, Master budget - Zero based budgeting (ZBB)- Programme and Performance budgeting
V	Standard Costing and Variance Analysis- Meaning and Definition 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.
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Textbooks & Suggested Readings:

1. Jain, S. P. & Narang, K. L. 2014 *Cost and Management Accounting*. 14th Edition, Kalyani publishers: New Delhi.
2. Tulsian, P.C. 2000 *Practical Costing*. Vikas Publications: New Delhi.
3. Saxena, V.L. & Vashisht 2014 *Advanced Cost & Management Accounting-Problems & Solutions*. Prentice Hall of India.
4. Reddy T. S & Hari Prasad Reddy 2014 *Cost & Management Accounting*. Margham Publications.
5. Ravi, M. K. 2011 *Cost Accounting and Management Accounting: Text and Cases*. 5th Edition, Taxman.
6. Arora, N., 2012 *Cost Accounting*. Vikas Publications: New Delhi.

Marketing Management Semester -3 Paper-2

Semester III	Course type Non Domain	Code	Teaching Hours 45	Credits 3	Max. Marks 100
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Course Objectives

- To emphasize the importance of the marketing function in an organization.
- To understand the core concepts right from deciding the segment till customer satisfaction
- To impart knowledge with respect to latest trends in Marketing, Marketing Mix, Social responsibility and ethical issues in Marketing Global Marketing approach.

Learning Outcomes

- Discuss the importance of macro and microenvironment in the company's marketing function.
- Differentiate the consumer and institutional buyer behaviour.
- Define the target segments for the product.
- Justify the importance of products, branding and new product development.
- Understand the importance of Channel of distribution.

Units	Topic
I	Marketing: Meaning and concepts of Marketing, Sales Concept, Marketing concept, Social Marketing concepts, Societal Marketing concept, Marketing Mix, 4 Ps of Marketing, Marketing Environment in India.
II	Consumer Behaviour & Market Segmentation- Consumer Behaviour – Factors influencing buying behaviour – consumer buying decision process – Buying motives - influences. Market segmentation – criteria - Bases of segmentation – benefits. Marketing research process: Defining research problem, research objective research techniques.
III	Product Planning & Development and Pricing: Product Planning & Development -Definition, Classification of Product, Stages of Product Life Cycle (PLC) and Factors affecting PLC.-Product Planning – Genesis and Importance of Product Planning in Marketing. -Product Development: Meaning, Principle of Product Development, Stages of New Product Development and Factors affecting development of New Products. Pricing-Meaning, Objectives, Price Policies and Strategies and Methods of fixing prices.
IV	Distribution Channel and Promotion: Distribution Channel- meaning, Types of Distribution channel- Direct & Indirect. Role of intermediaries and distribution channel management. Channel Management Decisions, Returns Management and Reverse Logistics. Promotion – elements of promotion mix- Advertising, sales promotion, personal selling and sales management. Public and customer relations, direct and online marketing, multilevel marketing- the new marketing model.

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V	Promotion & Marketing and Society: An overview, Advertising, sales promotion, personal selling and sales management. Public and customer relations, direct and online marketing, multilevel marketing-the new marketing model. Marketing and Society-Social responsibility and ethical issues in marketing. Global marketing program. The old and new economies. Demand side marketing. Legal issues in marketing. Marketing skills, Brand marketing skills, CRM. Marketing in Indian Context. Marketing in 21 st Century
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Textbooks & Suggested Readings

1. N. Rajan Nair, Marketing Management, Sultan Chand & Sons.
2. Ramasamy V.S. and Namakumary S, Handbook of Marketing Management, Macmillan.
3. Rajagopal, Marketing Management, Vikas Publishing House Pvt. Ltd.,
4. S. Jayachandran, Marketing Management, Excel Books.
5. Rajan Saxena, Marketing Management, TMH.



MIS for Logistics Semester 3 Paper 3

Semester III	Course type Non domain	Code	Teaching Hours 60	Credits 4	Max. Marks 100
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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

Units	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	Conceptual 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- IS types, 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	Knowledge management Systems- Business Analytics, Online Analytical Processing - Business Process and Project Management, Scorecards and dashboards-: - Architecture & IT design, System development, Software & Applications for management (Business software tools), Support system DSS. ERP modules -sales and Marketing, Accounting, Finance, Materials and Production management etc.

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Textbooks & Suggested Readings:

1. Course Material Prepared by LSC
2. Kenneth C. L., Janep. L., & Rajanishdass (2001) Management Information System- Managing the Digital
3. Firm. Pearson Education: New Delhi.
4. Vi, K., & Andrew, B. W. Frontiers of Electronic Commerce. Pearson Education: New Delhi.
5. Kenneth, C. L., & Janep, L. (2001) Essentials of MIS. Prentice Hall India: New Delhi.
6. Sadagopan, S. (2003) Management Information System. Prentice Hall India: New Delhi.
7. Eff, O.Z. (2003) Management Information Systems. Vikas Publishing House Pvt. Ltd.: New Delhi.

Supply Chain Management

Semester 3

Paper 4

Semester III	Course type Domain	Code	Teaching Hours 45	Credits 3	Max. Marks 100
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Course Objectives

- To impart knowledge relating to functions under Supply chain Management.
- To impart basic knowledge relating to strategies adopted by firms for increasing efficiency in supply chains.

Learning Outcomes

- Student will develop competency to understand the issues involved in chains and generate viable alternatives to solve.
- Subject will develop basic competency in network design

Units	Topics
I	Introduction to Supply Chain Management -Concept - Evolution and development - Difference - Role- Scope- Functions and Importance- Contemporary Manufacturing and Distribution Practices in Globalized Economy - Local and International Supply Chains - Benefits and Issues - Types of Supply Chains and examples
II	Strategic, tactical , operational decisions in supply chain -SCM building blocks-Supply Chain Drivers and Obstacles-International Logistics and Supply Chain Management-The Total Cost Concept and Logistics and SC Trade-Offs.
III	Key Supply Chain Business Processes: Planning - Sourcing - Producing - Distributing and Paying - Managing material flow and distribution - Distribution and Planning Strategy - Warehousing and Operations Management - Transportation Management - Inventory Management. Sourcing and Supplies Management, Outsourcing - Global Sourcing - Supply Chain Performance.
IV	Customer Service Management and Measurements - CRM -Manufacturing Logistics - Pricing Strategies - SCM Relationships - Third Party Logistics and Fourth Party Logistics - Case studies
V	SCM Network Design and Facilities Development - SCM Planning and Development Strategies - Supply Chain Uncertainties - Supply Chain Vulnerabilities - Supply Chain Coordination and Integration: Role of IT, Impact of Internet and E-Business-IT enabled SCM-Port led SEZ and supply chain- Cost advantages and competitiveness for exports.

Textbooks & Suggested Readings:

1. Martin Christopher. Logistics and Supply Chain Management
2. Sunil Chopra and Peter Meindal. Supply Chain Management



International Business Semester 3 Paper 5

Semester III	Course type Non Domain	Code	Teaching Hours 60	Credits 4	Max. Marks 100
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Objective Outcomes

To develop a basic understanding of globalisation of business, world trade and international treaties that regulate functioning of MNCs.

Learning Outcome

After this course, the learners understand the nuances of how businesses function in an international context and the dynamics that impact world trade.

Units	Topics
I	Introduction-Globalisation – Meaning - Globalisation of markets and production – The emerging global economy - Drivers of Globalisation–arguments for and against – trends in international trade. Differences between domestic and international business- Multinational Corporations - Organisation and structures, headquarters, and subsidiary relations in multinational corporations
II	International Business Environment-Cultural aspects, values and norms, social structure, religious and ethical systems, language, education, implications of cultural differences on business. International business environment, Political and legal factors, political systems, legal systems-Economic factors, the determinants of economic development.
III	International trade theories- Foreign Exchange Market-Functions, nature - the trading mechanism, exchange rate determination, balance of trade, stability of exchange rate, currency convertibility.
IV	WTO and Regional Integrations-GATT, the Uruguay round of negotiations. WTO, genesis and functions, the future of WTO. Regional Integrations, nature and levels of integration, arguments for and against regional integration- Trading Blocs – EU- European Union, ASEAN, APEC, NAFTA, SAARC, IMF, World Bank
V	International Business Strategies- Organising- Production-Marketing-HR and Finance- Risk & Negotiation strategies- Global supply chains-Emerging economies

Textbooks & Suggested Readings:

1. Charles W L Hill. And Arun Kumar Jain. International Business: competing in the global marketplace, Mc Graw-Hill.
2. John D. Daniels Lee H Radebaugh, International Business: Environments and Operations Addison Wesley.
3. Justin Paul – International Business – Prentice Hall of India.
4. Alan M. Rugman and Simon Collinson. International Business: Pearson Education Ltd. Prentice Hall

Coastal & Inland Water Transportation Semester-3 Paper-6

Semester III	Course type Domain	Code	Teaching Hours 45	Credits 3	Max. Marks 100
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Course Objectives

- To familiarize the student with advantages and trend of coastal shipping in India.
- To identify factors hindering growth of coastal shipping and Inland water movement of cargo in India.
- To orient the student towards strategy for modal shift to Coastal/Inland Water transport of cargo.

Learning Outcomes

- Student will understand issues in shifting of cargo transport to coastal and inland water mode
- Student will be able to identify conditions for cost effective and reliable movement of cargo through water mode.

Units	Topics
I	Coastal Shipping – Advantages-Growth trends in India- Impediments in the Growth- International trends- Indian Fleet- Captive Cargo- Potential Cargo- Distribution of Automobiles through Coastal- Issues of return Cargo-
II	Short Sea Shipping- Cost Aspects – Incentives - Aspects of level Playing Field with foreign lines - Cabotage- Measures to improve Coastal Tonnage- Potential of passenger movement
III	Inland Waterways- National Waterways of India - Road Connectivity to jetties - Cargo mobilization- Conditions for modal shift to water ways- Issues in Navigation- Infrastructure for inland waterways- issues in modal shift – Vessel management
IV	Inland waterways – India’s experience – Nature and quantity of Cargo movement - Initiatives- Performance of NWS- Comparison with other modes- creation of new waterways-
V	Inland Waterways – Learnings from International experience – EU initiatives- Marco polo Programmers-

Textbooks & Suggested Readings:

1. LSC course material
2. Web site : <http://iwai.nic.in/>

Freight Forwarding Semester-3 Paper-7

Semester III	Course type Domain	Code	Teaching Hours 45	Credits 3	Max. Marks 100
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Course Objectives

- To develop competencies and knowledge of students to become freight forwarding professionals.
- To orient students in the field of Logistics.
- 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.
- This subject will enable them to enhance their ability and professional skills.

Units	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– domestic and international freight forwarding networks – 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 - Documentation types and filing processes - Details of documents as per the format approved by the Customs -The requirement of documents for pre-shipment and requirement of documents for Import - 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. Regulations (EXIM/IATA/Countries)/COM based on permutations and combinations of weight vs volume.
IV	Cargo handling, INCOTermsandterminologiesusedinCargoes-DifferentTypesofCargoesfor transportation. Full Export and Import value of the cargo – Importer and exporter Code (IEC), The registered PAN based Business Identification Number received from the Directorate General of Foreign Trade - Different type of Cargo, Their quantity and value - Packaging requirement for the cargo during shipment from the shipper - Inspection procedure for the cargo while unloading - Basic Regulation pertaining to Cargo movement by Air, Sea, and Land. Climatic conditions of different routes in different seasons.

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V	Documentation of Freight Forwarding process as per timelines and requirements - Carting, unloading, Stacking, Loading; and Stuffing- Procedure for dealing with loss or damage to goods - Different P.G.A and their roles. Technical knowledge on Containers; Pallets; Palletization; Fumigation - The general reporting processes and time frames - Shipping line available for different routes - Letters of Credit and payment Terms- Details of the transport available in Different routes - Organization fees, charges structure and Organizational procedures - computer and its application in internal systems of documentation.
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Text & Reference Books:

- 1.Course Material Prepared by LSC

Human Resources Management

Semester -4

Paper-1

Semester IV	Course type Non Domain	Code	Teaching Hours 45	Credits 3	Max. marks 100
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Course Objectives

- To develop competencies and knowledge of students to become Human resource management professionals.
- To help Students to understand Human resource management.

Learning Outcomes

- Understand the financial impact of HRM activities on organizations.
- Understand the implications of increasing diversity and globalization for HRM processes.
- Students will be able to apply the Basic knowledge of Human resource management in the real-life situation
- This subject will enable them to enhance their ability and professional skills

Units	Topics
I	Introduction to HRM - Functions of HR Management - Qualities of HR Manager-Role of HR Executives International Human Resource Management - Concepts of IHRM Approaches to IHRM-Features of IHRM - Importance of IHRM - Factors affecting IHRM.
II	Human Resource Planning - Objectives of HR Planning-HR Planning at different Planning Levels- Conceptual Process of HR Planning Job Analysis and Design: Job Analysis Information - Uses of Job Analysis-Process of Job Analysis-Methods of collecting Job Analysis Data- Job Description. Recruitment and Selection-Recruitment Policy-Objectives of Recruitment- Selection Procedure-Essentials of Selection Procedure-Steps in Selection Procedure.
III	Promotion, Transfer, Job Rotation & Career Planning, Career Development-Need for Career Planning- Career Development-Suggestions for Effective Career Development; Performance Appraisal- Evaluation Process- Performance Appraisal Methods-Management by Objectives- Behaviorally Anchored Rating Scale-Pitfalls in Performance Appraisal-Use of Performance Appraisal.
IV	Employee Training and Development -Steps in Training Programmers - Training Evaluation- Areas of Training-Importance of Learning-Employee Training Methods-Evaluating Management Development Program Compensation Management-Process of Job Evaluation-Techniques of Job Evaluation- Advantages of Job Evaluation-Types of Incentive Plans-Employee Benefits-Objectives of Employee Benefits.
V	Occupational Safety and Health-Causes of Safety and Health problems at the workplace- Provisions to prevent Accidents in the workplace-Stress and Consequences on Employee Performance. Grievance Handling-Concept of Grievance-Causes of Grievance-Effective Grievance Redressal- Steps in Grievance Redressal Procedures. Discipline Action-Aims and Objectives of Discipline- Forms and Types of Discipline-Principles of Maintaining Discipline-Disciplinary Procedure-Types of Disciplinary Actions-Dismissal.

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Textbooks & Suggested Readings:

1. VSP Rao, Human Resource Management: Text and cases, First edition, Excel Books, New Delhi -2000.
2. Dr. R. Venkatapathy & Assissi Menacheri, Industrial Relations & Labour Welfare, Adithya Publications, CBE, 2001.
3. Robert L. Gibson and Marianne H. Mitchell, Introduction to Counselling and Guidance, VI edition, PHI,2

Environmental Studies Semester 4 Paper- 2

Semester IV	Course type Non Domain	Code	Teaching Hours 45	Credits 3	Max. Marks 100
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Course Objectives

- 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

- Understand 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.

Units	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.
II	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, marine pollution- thermal pollution- nuclear hazards.
III	Solid Waste Management: Municipal waste – Introduction, classification of solid waste, composition, 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.
IV	Non-Conventional energy sources: Introduction, renewable sources of energy: solar energy, wind energy, Energy from ocean,

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	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. Human population and environment. 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. Disaster management: floods, earthquakes, cyclone and landslides

Textbooks & Suggested Readings:

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.
3. Textbooks & Suggested Readings:
4. Clark R.S., Marine Pollution, Clarendon Press Oxford (TB)
5. Cunningham, W.P, Cooper, T.H. Gorhani, E & Hepworth, M.T., Environmental Encyclopaedia, Jaico Publishing House, Mumbai, 2001.
6. Erach Bharucha, Environmental Studies for Undergraduate Courses, UGC, New Delhi and Bharati Vidyapeeth Institute of Environment Education and Research, Pune

EXIM Policies and Procedures
Semester-4
Paper-3

Semester IV	Course type Domain	Code	Teaching Hours 60	Credits 4	Max. Marks 100
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Course Objectives

- To familiarise the student with EXIM policies.
- To develop Competency to effectively comply with policies and procedures.

Learning Outcomes

- Student will be able to understand the implications of international policies in EXIM trade.
- Subject will enable student to update on schemes and policies in EXIM trade and leverage appropriate benefits.

Units	Topics
I	Elements of International Trade: Features, Benefits, Advantages. Registration Formalities, Types of Exporters –Manufacturer/Merchant Exporter. Methods of exporting- Methods of entry into foreign market Classification of goods- Preparation for exports- Registration formalities- IEC Number- Import and export of restricted items- Commercial documents-Regulatory documents- Documents related to goods- Shipment related documents- Documents related to payments- Documents related to inspection- Excisable goods- Export contracts-
II	Exports: Processing of an Export Order: Quality Control, Pre-Shipment Inspection - Realizing Payment of Export Proceeds, Negotiation of Documents – SEZ, EOU, Deemed Exports. Imports: Preliminaries, Procedures, Policies - Documentation – Bill of Entry, Customs Formalities, Categories of Importers, Retirement of Import Documents. Excise Formalities
III	Method of receiving payment- Instrument of payment- Letter of credit- Pre-shipment finance- Post-shipment finance and credit in foreign currency- Negotiation of documents- Duty drawbacks-
IV	Pre-shipment procedures- Clearing and forwarding agents- The Central Excise and customs clearance procedure- Shipment of export cargo- Direct port entry- Customs clearance of import cargo- Coverages by ECGC- Cargo insurance- Processing of an export order. Documentation: Commercial and Regulatory Documents viz L/C, B/L, Shipping Bill, Invoice, Pricing Factors, Payment Terms – L/C, D/A, D/P. Sale Terms – FOB, CIF, C&F. Financing – Insurance- Marine, Credit, - Exchange Rate. Calculation of FOB, CIF and C&F Prices.
V	F.T.P.(Latest): Highlights. Export Incentives, Schemes, Assistance viz EPCG, Merchandise Exports Incentive Scheme (MEIS) -MDA, DBK, Institutional Frame Work – Export Promotion Organization viz., EPC, CB, DGFT- FIEO, ICA.

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Textbooks & Suggested Readings:

1. Government of India: Export – Import Policy
2. Dr. Khushpat S, Jain. Export Procedures and Documentation. Himalaya Publishing House
3. T.A.S. Balagopal. Export Management. Himalaya Publishing House
4. Dr. Francis Cherunilam. International Marketing (Text and Cases). Himalaya Publishing House

**Total Quality Management
Semester -4
Paper-4**

Semester IV	Course type Domain	Code	Teaching Hours 60	Credits 4	Max. Marks 100
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Units	Topics
I	Concept of Quality– Quality as customer delight–Quality as meeting Standards–Introduction to total Quality – Concept of total Quality Design, inputs, process and output – Quality as business performance – Attitude and involvement of top management
II	Quality Management – Fundamentals – Evolution and objectives – Planning for Quantity –Quality Process – Statistical Process Control (SPC)– Quality Assurance – Total Quality management.
III	S Q Quality Management System – ISO 9000 series – Techniques of TQM –5' Concepts – 7' tools – Cause –Effect Analysis stratification, Pareto diagram Histogram, Control charts (SQC) check sheet & Pie Chart-Scatter diagram (Theory Only).
IV	Bench marking – Essence of Bench Marketing–Benefits and Strategic Bench marking – Global Bench marking – Business Process Re-engineering.
V	Core competence and strategic alliance for ensuring quality – role of MNCS, in emergence of global quality – Barriers to TQM.

Textbooks & Suggested Readings:

1. Armond. V. Feigerbaum, Total Quality Control, McGraw Hill.
2. John Bark, Essence of TQM, PHI, Delhi.
3. Joel, E. Ross, Total Quality Management
4. Ron Collard, Total Quality, Jaico, Delhi
5. Willborn &T.C. Edwin Cheng, Global Management of Quality Assurance systems, McGraw Hill.
6. J.M. Juran, Juran On leadership for Quality–An Executive Hand Book.
7. ISO Manuals.



Maritime Business Law
Semester -4
Paper-5

Semester IV	Course type Domain	Code	Teaching Hours 60	Credits 4	Max. Marks 100
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Course Objectives

- To familiarize the student with Elements of Maritime Environment.
- To develop an understanding in elements of Maritime law

Learning outcomes:

- Students will develop competency to comply with legal principles in work.
- The student will be able to understand legal aspects in transactions.

Units	Topics
I	Environmental, Legal and economic system-Marine and Coastal environment, Elements of conventions- IMO conventions - SOLAS – MARPOL-STCW- MMC- safety construction – fire protection & prevention – safety equipment – radio communication – safety of navigation – ISM code - IMDG code–prevention of operational pollution – oil cargo pollution – limitation of pollution following an incident- Port State Control - Director General of Shipping regulations and The Merchant Shipping Act and Amendments.
II	Law of Contract Law of Contract: nature of the contract- offer and acceptance, consideration, capacity of contract, free consent, Performance and discharge of contract, remedies for breach of contract-
III	Law of Agency and Bailment- definition of agent and principal, classification of agents – relationship of Principal and Agent- duties and liabilities of principal –delegation of authority, relations of principal with third parties and termination of agency. Bailment: Definition, rights and duties of bailor and bailee, termination of bailment. Contract of indemnity and guarantee- kinds of guarantee.
IV	Customs - Central Excise – Customs Law – Basic concepts – types of customs duties, Anti- Dumping duty, safeguard duty- GST – Scope of GST – service provider and service receiver- GST in logistic sector – Regulatory Authorities in Maritime Sector in India
V	Introduction to Indian Ports Act -Major Ports Act- TAMP- State Maritime Boards – Functioning- Statutes relating to Multi Modal Carriages

Textbooks & Suggested Readings:

1. LSC course material
2. Kapoor N D. Elements of Mercantile Law. Sultan Chand Sons

Advanced Maritime Logistics
Semester -4
Paper-6

Semester IV	Course type Domain	Code	Teaching Hours 45	Credits 3	Max. Marks 100
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Course Objectives

- To impart knowledge relating to container transactions and commerce
- To impart knowledge relating to international policies, norms and regulations in containerisation.

Learning Outcomes

- Student will be able to apply the basic knowledge of Containerisation in EXIM situations
- Subject will enable the student to enhance their ability and skills to comply with Regulations

Units	Topics
I	Container Ships - Terminal - Consideration of Container Terminal Planning- Container types – ISO Container Dimension by types - Features of Containerization – Container operators - Container Distribution
II	Stowage of containers in yard and in vessels- Cargo and Container handling equipment – Shore cranes – Yard cranes – IT enabled yard operations
III	Multi-Modalism Multi-modal Trade Routes - Evolution - Basic Intermodal System - Modal Interface – Advantages of Multi-modalism– Influencing Factors–Conventions Relating to Multimodal Transport Cargo Liability - Container Commerce
IV	IMO conventions for the containerized transport- SOLAS - - Dangerous Cargo - IMDG Code –Classes –Weight restrictions in containers– ISPS Code-MARPOL International Conventions relating to Bill of Lading - Hamburg Rule -
V	Introduction to Chartering: Chartering-Voyage Charter-Time Charter-Chartering Negotiations- Chartering and the internet- Charter Parties- Construction of voyage charter parties- Loading place and cargo-Loading rates-Lay days and cancelling date- Cost of loading and discharge- Time charter-The agents influence upon the charter- The port agents' role in charter party negotiations-

Textbooks & Suggested Readings:

1. LSC Course Material.
2. ICS .2011/12, Ship Operations and Management. London, UK.
3. HARIHARAN, K. V. (2002) A Text Book on Containerization and Multimodal Transport. Shroff Publishers and Distributors: New Delhi.

Port Inland Connectivity
Semester -4
Paper-7

Semester IV	Course type Domain	Code	Teaching Hours 45	Credits 3	Max. marks 100
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Course Objectives

- To familiarize the student with basic concept of cargo movement to the port by various modes.
- To develop knowledge on the financial and time advantages and disadvantages of various modes.

Learning Outcomes

- Student will be able to evaluate the comparative merits and demerits of various modes of movement of cargo to the port and identify optimum network of connecting to the port.

Units	Topics
I	Introduction to Road Transport System - Classification of vehicles, road network in India, road transport companies and their operation Integrated logistics provided by road transport companies. Documents and permits required in road transport system. Problems in road transport, regulatory authorities involved with road transport system Roadways and Safety bill 2015 and aspects related to Port connectivity.
II	Rail Transport Systems: Types of railway wagons, rake- Railway goods freight structure, operations. Railway goods service operations. Operations at a railway goods yard/siding. Operations and control in the railways. Organization of Indian railways- ICDs -CONCOR Private Rail Operators
III	Gate Access Operations in Ports - Role in DPD-DPE- Information system applications - GPS - RFID Liability and Claims following cargo damage- Conversion of Parking yards to processing zones.
IV	Cost Incidence in road and rail transport to/from the Port- Case studies from Chennai and JNPT.
V	Port connectivity in India- DFCs- Western and Eastern- Industrial Corridor- Port based economic clusters- Dry ports- Cold logistics

Textbooks & Suggested Readings:

1. LSC Course Material
2. Logistics of facility location and allocation / Dileep R. Sule (Marcel Dekker)
3. Logistics & supply chain management / Martin Christopher, 2011 (Prentice Hall Financial Times)



Maritime Freight (Allied Course – Option 1) Semester -5

Semester	Course type	Code	Teaching Hours	Credits	Max. marks
V	Domain		60	2	100

Course Objectives

- To familiarize the student with advanced concepts in optimizing costs in liner transport.
- To develop Knowledge of the linkage of various stakeholders engaged in liner logistics.

Learning Outcomes

- Student will be able to identify cost effective solutions in liner logistics.
- Will enable the student to evolve proper interaction matrix of activities suitable to each stakeholder.

Units	Topics
I	Structure of Shipping Industry - chartering –time- voyage- charter parties- bulk carriers, the ocean liner conference system, freight structure and practices, coordination, role of intermediaries – forwarding and clearing agents, freight brokers, stevedores and ship agents.
II	Determinants of Maritime Freight cost- Distances -Economies of Scale- Imbalances -Type and Value of goods – Port Characteristics- Competition- Mergers and acquisitions of Shipping Lines- Consortiums- Shipping cycles-
III	Bill of Lading- Commercial documents- Obligations- INCO Terms- volatility in ocean freights and measures to reduce the impact of Fluctuations-Marine Insurance for Hull, machinery and cargo- Maritime Legislations
IV	NVOC- LCL Consolidation- Feeder services- transshipments- major transshipment hubs of the world- requirement to be a transshipment hub.
V	Role and functions of Ship owner- carrier- steamer agent-main line operator- Feeder operator- - statutory authorities- immigration department- Mercantile Marine department- PHO- PGAs

Textbooks & Suggested Readings:

1. LSC course material.
2. ICS .2011/12, Ship Operations and Management. London, UK.

PPP in Port Sector (Allied Course- Option 2) Semester 5

Semester	Course type	Code	Teaching Hours	Credits	Max. marks
V	Domain		60	2	100

Course Objectives

- To familiarise the student with concepts in development of PPP projects
- To develop Knowledge of performance of PPP Projects in Port Sector

Learning Outcomes

- Student will be able to evaluate the reasons for success and failure in PPP projects will enable the student to understand sharing of risks and rewards in various formats of PPP.

Units	Topics
I	Public Private Partnership – Concept – Evolution- Characteristics - Benefits- Private sector Capital- Early PPP projects in Indian Port Sector.
II	Public Private Partnership – Degrees of Private involvement – Basic features of various models of PPP Including BOT – BOO- BOOT- DBF – DBFO – Concession Agreements- Sharing of Risks and Rewards.
III	Aspects of PPP- Transparency - Accountability – Fairness – Efficiency – Advantages- Focus on outputs - How PPPs make projects affordable- Faster project delivery – Allocation of Risks to the party best able to manage the risk - Asset Utilization, Social and Economic benefits, sustainable development, better compliance to regulation.
IV	Stages of development of PPP projects - Initial feasibility, Procurement phase, Construction phase, Operation phase- Factors that can lead to success of PPP projects - Political will – Government Commitment - PPP Champion - Clear output specification -Appropriate risk sharing - Performance management - Tariff in port services– Limitations in PPP.
V	Elementary Case studies of PPPs in Indian Port sector-NSICT - APMT

Textbooks & Suggested Readings:

1. LSC Course Material
2. JOSHI, R. N. (2013) Public Private Partnership in Infrastructure: Perspectives, Principles and Practices. Vision Books: New Delhi.



Documentation for Exports and Imports (Allied Course- Option 3)

Semester 5

Semester	Course type	Code	Teaching Hours	Credits	Max. marks
V	Domain		60	2	100

Course Objectives:

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

Learning outcomes:

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

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

Text & Reference Books:

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

Apprenticeship I Semester -5 Paper 3

Semester V	Course type Domain	Code	Hours 1008	Credits 22	Max. Marks 400
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Course Objectives

- To orient students in the practical field of Logistics.
- To make students perform freight forwarding and land transportation
- To develop competencies and skills of students to become Logistics professionals.

Learning outcomes:

- On completion of Apprenticeship, the Students will be able to perform the activities of freight forwarding, Land transportation and Logistics Terminals operations in the real-life situation.
- This on-the job training will enable them to enhance their ability and professional skills in Logistics.

Actual training will depend on the existing facilities available in the company. However, the company shall ensure that the broad skills defined against On-Job Training are imparted. In case of any deficiency in any in a single division/department, the company may impart the training in other divisions/departments.

Students in Apprenticeship would be assessed on the extent of skilling and aptitude gained by them during the Apprenticeship.

No.	Skill components to be covered during the Apprenticeship Training in Industry
I	<p>Freight Forwarding: Performing the various activities for Freight Forwarding on export and import cycle. Performing the various activities of cargo operations in Freight Forwarding area. Use the processes; sequence; time frames and compliances of different type of custom Clearance – Applying the correct procedure of the Freight Forwarding like filing; Examination; export order, stacking, loading, out of customs charge, post clearance processes; etc., – Plan for stuffing or cargo. (Which involves booking the container, take delivery order from shipping line, give it to transporter for both water and Air Cargo.) – Use the different documents available for Freight Forwarding. Prepare/Update documents for handling of cargoes – Process irregularities like damage/loss, etc., – Perform PGA processing or specific certificate of origin related processing – Prepare documents for Export and import processing including EDI filing – Maintain integrity and ethics in operations – Follow health, safety and security procedures – Verify GST invoices – Plan and arrange for cargo movement – Perform custom clearance field activities – Perform custom clearance office activities – Perform customs clearance supervisory activities – Feed data into ERP and analyses in courier hub.</p>



II	<p>Land Transportation: Perform Customer support activities like booking, tracking and claims processing – Follow loading and unloading procedure for various consignments – Understand the uses and limitations of various types of vehicles, transit rules and carry out the activities – Apply knowledge on the various routes and explore the various alternate routes to reach key destinations – Carry out various vehicle operations activities such as placement on time, keeping track of loading and unloading time, verifying material count, inspection of vehicle, etc- carry out the inspection process on the physical vehicle and safety check list – Cross verify the goods loaded/unloaded and signoff from the drivers</p>
	<p>Follow safety instructions while handling dangerous goods – Locate the missing items for reconciliation and preparation of detailed reports for the management – Complete closure of deliveries and prepare the vendor rating report – Undertake route planning and vendor coordination – Undertake gate operations. Arrange and track movement of consignment – Undertake transport data processing and analysis- coordinate with Internal and external employees – Maintain integrity and ethics in operations – Follow health, safety and security procedures-Verify GST invoices-Arrange and track movement of articulated trucks- Arrange and track movement of reefer vehicles – perform inbound/outbound documentation – Transport consolidation and consignment tracking – Transport consolidation and consignment tracking – Feasibility assessment and router optimization – Feasibility assessment and route optimization- Perform transport consolidation- Conduct feasibility assessment- Prepare EXIM documentation – Use telematics to drive efficiency.</p>



**Marine Insurance (Allied Course-Option 1)
Semester-6
Paper-1**

Semester	Course type	Code	Learning Hours	Credits	Max. Marks
VI	Domain		60	2	100

Course Objectives

- To impart the student with basic understanding of General Insurance and advanced knowledge of Marine Insurance.
- To familiarise the student with International Insurance Practices and Claim Procedures.

Learning outcomes:

- Student will develop a competency to arrange Prudent Insurance for cargo.
- Student will be able to initiate correct claim procedures.

Units	Topics
I	Introduction of Marine Insurances – Relevance of Principles of General Insurance to Marine- concept of insurable interest and utmost good faith Insured value- Assignment -INCOTERMS – Insurances of stock in Warehouses.
II	Inland Transit Insurance – Critical underwriting aspects – Documents associated with Marine Cargo Insurance – Types of Policies- Risks included and excluded-- Risk Management in Marine Cargo Insurance – Claim procedure for Inland Transit Claims - Survey processes
III	Insurance of EXIM cargo -Marine Cargo Clauses – ICC (A)– ICC (B) and ICC (C) Clause – General Exclusion – General Inclusions - Insurance of freight – Claim procedure for Marine Cargo Claims- Documents required to substantiate claims- Express and Implied Warranties - Subrogation
IV	Marine Insurance Broker's duties – General average and salvage – Insured value – Marine Insurance Act 1963 – Jettison – Limits of Liability for carriers-
V	Marine Hull & Machinery Insurances – Institute Clauses - War and strikes risk – Different types of Liability- Protection and Indemnity for ship owners and charterers

Textbooks & Suggested Readings:

1. LSC course material
2. IC 70 - Marine Hull insurance underwriting and claims
Published by Insurance Institute of India –2015
3. IC 60 - Marine Cargo insurance principles and underwriting
Published by Insurance Institute of India–2015



**Port Based Industrialisation
(Allied Course-Option 2)
Semester -6**

Semester	Course type	Code	Learning Hours	Credits	Max. Marks
VI	Domain		60	2	100

Course Objectives

- To develop competencies to identify opportunities of Port based Industrialization.
- To develop competency for evaluating the port based Industrial opportunities.

Learning Outcomes

- Students will be able to apply the knowledge to monitor the existing potential.
- The student will be able to reinforce the existing performance.

Units	Topics
I	Port infrastructure – Various kinds of Port infrastructure for specific cargo types – Port Infrastructure and shipping – Port Infrastructure and Development – Agriculture Supply Chain-
II	Sagarmala – Four pillars of Sagarmala – Port Modernization – Port connectivity – Port led Industrialization – Coastal Community’s Development-- Make in India - Competitive logistic cost – Transport of energy fuel.
III	De-bottle necking existing port- Capacity improvement at existing Port – New Ports, Highways – Railways – Pipeline – Multi Logistic Hubs – Case study of China and Dubai - Captive Jetties – Logistics Parks – Ship Building – Bunker sales – Cold Chain.
IV	Industrial Cluster – Industrial Corridors- Coastal Economic Zones – Coastal Tourism Development – Marine Fisheries Development – SEZ.
V	Cruise Shipping- Off shore services bunkering- Ship chandelling- infrastructure Processes –container maintenance and commerce- Automation and Employment- PGAs – Cross Docking - Destination Assembly Strategy.

Books for reference

1. LSC course material

Multimodal Transportation (Allied Course- Option 3) Semester -6

Semester	Course type	Code	Learning Hours	Credits	Max. Marks
VI	Domain		60	2	100

Course Objectives:

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

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

Learning outcomes :

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

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

TEXT BOOK S

1 Course Material Prepared by LSC



Apprenticeship II Semester – 6 Paper 3

Semester VI	Course type Domain	Code	Hours 1008	Credits 22	Max. Marks 400
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- To orient students in the practical field of Logistics
- To make students perform E-commerce, and Logistics terminals operations.
- To develop competencies and skills of students to become logistics professionals
- Students will be able to perform the activities of E-commerce, and Logistics terminals operations in the real-life situation
- This On the job training will enable them to enhance their ability and professional skills in Logistics

Actual training will depend on the existing facilities available in the company. However, the company shall ensure that the broad skills defined against On-Job Training are imparted. In case of any deficiency in any in a single division/department, the company may impart the training in other divisions/departments.

Students in Apprenticeship would be assessed on the extent of skilling and aptitude gained by them during the Apprenticeship

No.	Skill components to be covered during the Apprenticeship Training in industry
I	<p>E-Commerce:</p> <p>Allocate resource and streamline operations in E-Commerce- Process data and forecast demand. Maintain integrity and ethics in Operations- Follow health, safety and security procedures- Perform order processing. Perform reverse Logistics- Monitor inbound and outbound operations Business development and stakeholder relations- Execute category management- Reading various MIS-OMS, WMS and TMS to check. Generating customer accounts and creating order requests in the MIS as well as updating the Same- Coordinating with IT team, order request team, Accounts team, Inventory manager, vendors and delivery managers for different activities along the order Processing-Carry out the basic checks on products like product match, quantity match, tampering check, physical damage check, etc. prior to order processing. Developing daily and weekly reports. Plan and organize assigned work-Coordinate with customers, carriers, for timely pickup and ensuring high satisfaction of</p>

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	<p>the customer. Carryout the basic checks on products returned via reverse logistics like product match, quantity match, tampering check, physical damage check, etc. Carryout the scheduling activities like identifying carrier, making pickup plan and schedule, collecting customer feedback. Develop daily and weekly reports-classify and demarcate the products for re-use, re-manufacturing, recycling etc. based on product verification. Count the goods physically, accurately and track the reverse logistics shipments received daily</p>
<p>II</p>	<p>Port Terminals:</p> <p>Verify cargo and vessel Information-Perform cargo valuation and Certify-Survey containerized cargo and certify-Survey liquid bulk cargo and certify-Survey dry bulk cargo and certify-Verify EXIM documentation-Allocate resources and streamline operations in ports, ICD and CFS-Extract and analyze shipment information from IT system-Plan and familiarize repair and maintenance of containers- Handle hazardous goods Yard Planning and cargo handling- Collect vessel and cargo details and coordinate for smooth cargo movement-Perform stevedoring activities-Perform mooring activities.</p> <p>Perform signal man activities- Perform basic navigation-Perform mooring and rope work in vessel- Perform customs clearance field activities – Cargo Equipment Handler-Perform preventive and first-line maintenance of MHE at Ports-Operation of Rail mounted quay (RMQ) crane operate Grab ship unloader (GSU) Crane-Operate Rubber tyre gantry (RTG) crane-Operate reach stacker</p> <p>– Operate Rail mounted quay (RMQ) crane-Operate Grab ship unloader (GSU) crane-Operate Rubber tire gantry (RTG) crane-Operate reach stacker</p> <p>Operate and maintain conveyor belt-Operate and maintain pipeline-Operate port control systems and troubleshoot issues – Perform elementary ship and yard planning.</p>

