

Date: 11<sup>th</sup> October, 2022

To,

The Principal,

Tuljaram Chaturchand College of Arts, Science and Commerce,

Baramati,

**Subject:** Request to approve the syllabus of F.Y. B.Voc SEM-II Retail Management and PG

Diploma in Supply Chain Management.

Respected Sir,

With reference to the above-mentioned subject, I would like to request you to approve the syllabus of various subjects under Retail Management and Certificate course. The meeting of the Board of Studies, B.Voc Retail Management was held on Thursday 06<sup>th</sup> October, 2022 at 10.00 am to design and frame the syllabus of First Year (SEM-II) and PG Diploma in Supply Chain Management. In this meeting all the members thoroughly discussed the each content and finalized the syllabus of F.Y. B.Voc (SEM-II) Retail Management and PG Diploma in Supply Chain Management.

I therefore request you to approve the syllabus of Retail Management and PG Diploma in Supply Chain Management.

Thank you.

Prof. Mahesh S. Phule Chairman, Board of Studies, B.Voc Retail Management



# **Resolutions Passed in the Board of Studies Meeting**

Date: 06<sup>th</sup> October, 2022

The meeting was held on Thursday 06<sup>th</sup> October, 2022 at 10.00 am to design and frame the syllabus under the Board of Studies, Retail Management. The following resolutions were passed in the meeting with majority.

- 1. In this session it was resolved that Computer fundamentals practical subject need some modification as per current scenario.
- 2. After the discussion it was resolved that the syllabus should be accepted after making necessary modifications in the syllabus and also adding some practical oriented decisions.
- After the discussion it was also resolved that in this syllabus need some corrections in Legal Aspects of Business and Principles of Management, Business Communication Skills-II.
- 4. After the discussion on Post Graduate Diploma in Supply Chain Management, it was resolved that we can introduce this PGDM from next academic year 2023-2024.
- 5. After the finalized-PGDM course it was resolved that this course will focusing on Entrepreneur & Job creation.

Prof. Mahesh S. Phule Chairman, Board of Studies, B.Voc Retail Management



# **Minutes of the Meeting**

Date: 06th October, 2022

The meeting of Board of Studies in B. Voc. Retail Management members was scheduled on 06<sup>th</sup> October, 2022 at 10.00 am to discuss and decide the various issues as mentioned in the agenda.

Prof. Mahesh Phule, Co-Ordinator of Retail management presided the meeting. As a chairman of the meeting Prof. Mahesh Phule welcome all the members and briefed about the purpose of the Board of Studies Meeting to the members present were there in short explained the agenda to be discussed in the meeting. He also discussed about the importance of the first meeting of the board. All the board members discussed agenda of the meeting as per the sequence and gave their valuable suggestions. The proceeding of the meeting is given below:

- 1. Prof. Mahesh Phule proposed the subject of syllabus of the B. Voc Retail Management for first year. The entire member discussed the syllabus of various subjects of Semester II for the academic year 2022-223. The members of the meeting discussed all the subjects' one by one in thorough manner and provided their valuable suggestions wherever required. And also discuss on PGDM in Supply Chain Management course. Before start of meeting, we discussed and inform BoS member about student suggestions and feedback regarding syllabus.
  - a) Prof. Sudhir Taware gave their valuable suggestions to necessary changes in the subject of Business Communication Skills-II by adding preparing for interview component in should be include in this subject
  - b) Prof. Dr Nandkumar Kadam sir has suggested in Principles of management subject rearrange some points like attitude point.
  - c) Prof. Dr. Maruti Kumbhar & Dr. Nandkumar Kadam has suggested to change in subject Legal aspects of business make addition of Partnership act, Sales of Goods act
  - d) Prof. Dr. Kishor Lipare suggested that in Retail Management change name of Management Services to Customer Services.
  - e) Prof. Sudhir Taware discussed about Investment Management & Innovation Management should be included in syllabus.
  - f) Prof. A.G. Bapat have supported us by valuable suggestions. After the discussion it was agreed that the syllabus and PGDM in Supply Chain Management should be accepted after making necessary modifications in the syllabus.
- 2. Prof. Mahesh Phule also proposed the subject of design allotment for the First Year B. Voc. Retail Management SEM-II. All the committee members discussed the subject in the meeting and gave their opinions about it.
- 3. Syllabus satisfaction survey was conducted and student suggested that in computer subject we must have practical approach for this syllabus.

4. As there was no any other issue so the meeting was concluded by vote of thanks given by Mr Amruta Bapat.	s.
Prof. Mahesh S. Phule Chairman, BOS, Retail Management	



# Autonomous

# **Course Structure for F.Y.B.Voc Retail Management**

Semester	Paper Code	Subject Name	No. of Credits
	UBRM111	Business Communication -I	4
	UBRM112	Principles of Management-I	4
I	UBRM113	Managerial Economics	4
1	UBRM114	Introduction to Retailing	6
	UBRM115	Retail Sales Management	6
	UBRM116	Principles of Consumer Behavior-I	6
II	UBRM121	Business Communication Skills-II	4
	UBRM122	Principles of Management-II	4
	UBRM123	Legal Aspects of Business	4
	UBRM124	Fundamental of Computer	6
	UBRM125	Retail Management-I	6
	UBRM126	Retail Sales Management-II	6

Semester	Paper Code	Subject Name	No. of Credits
III	UBRM231	Business Accounting	4
	UBRM232	Retail Banking - I	4
	UBRM233	Principles of Marketing	4
	UBRM234	Internship	6
	UBRM235	Retail Store Operations-I	6
	UBRM236	Store Layout and Design	6
IV	UBRM241	Basics of Cost Accounting	4
	UBRM242	Retail Banking-II	4
	UBRM243	Principles of Finance	4
	UBRM244	Internship	6
	UBRM245	Retail Store Operations-II	6
	UBRM246	Service Marketing	6

Semester	Paper Code	Subject Name	No. of Credits
	UBRM351	Marketing Research	4
	UBRM352	Bank Finance	4
V	UBRM353	Human Resource Management	4
V	UBRM354	Internship	6
	UBRM355	Material & Logistics Management	6
	UBRM356	Retail Store Operation-III	6
VI	UBRM361	Marketing Management	4
	UBRM362	Retail Financial Services	4
	UBRM363	Entrepreneurship Development	4
	UBRM364	Internship	6
	UBRM365	E-Commerce & Digital Marketing	6
	UBRM366	Retail Store Operation-IV	6

Class : F.Y. B. B.Voc (RM) SEM-II

Paper Code: UBRM121

Paper : II Title of Paper: Business Communication Skill - II

Credit : 4 No. of lectures: 60 Hours

# A) Learning Objectives:

- 1) To know about business etiquettes.
- 2) To understand the communication strategies.

# **B) Learning Outcomes:**

The main outcome of this course is to acquaint students of communication strategies and business etiquette.

(15)

#### UBRM121/ BUSINESS COMMUNICATION SKILL - II (60 Hours)

#### **TOPICS/ CONTENTS:**

#### UNIT 1: RESUME WRITIMG

Introduction, Five Steps for Building a Good Resume Content: What to Include, What not to Include, Composition and Editing Resume Format Specifications, On-line, Electronic, and Scannable Resumes Most Popular Formats, Essentials of Cover Letter Resume Writing Tips, Activities- Practical Applications

#### UNIT 2: INTERVIEW BASICS (15)

Introduction, An Overview of Interviewing Behavioral Interviewing Essentials, Technical and Professional Knowledge in Interviews, Common Questions, Interview Checklist, Activities- Mock Interviews

#### UNIT 3: PLANNING FOR INTERVIEW (15)

Introduction, Essentials of Interview Preparation, Avoiding Interviewing Mistakes, Essential Preparing for Interview, Practical.

# UNIT 4: PREPARING FOR INTERVIEW FROM EMPLOYER PERSPECTIVE (15)

Introduction, Pre-interview Preparation, Preparation During the Interview Post Interview Process, Essential preparation for The Phone Interview Activities

#### **Reference Books:**

- 1. AshaKaul (1999), "Business Communication", Prentice Hall of India, New Delhi.
- 2. Chaturvedi P. D. & Chaturvedi Mukesh (2012), "Managerial Communication", Pearson, Delhi.
- 3. Madhukar R. K. (2005), "Business Communication", Vikas Publishing House Pvt. Ltd., New Delhi.
- 4. Mamoria C. B. &Gankar S. V. (2008), "Personnel Management", Himalaya Publishing House, Mumbai.
- 5. NawalMallika (2012), "Business Communication", Cengage Learning, Delhi.
- 6. Rajendra Pal & Korlahalli (2007), "Essentials of Business Communication", Sultan Chand & Sons, New Delhi.

Class : F.Y. B. B.Voc (RM) SEM-II

Paper Code: UBRM122

Paper : II Title of Paper: Principles of Management - II

Credit : 4 No. of lectures: 60

- A) Learning Objectives:
- 1) To know about basics principles of management
- 2) To understand the organization system
- **B)** Learning Outcomes:

The main outcome of this course is to get the perfect knowledge of organization system.

# **UBRM122/ PRINCIPLES OF MANAGEMENT – II**

**(60 Hours)** 

# **TOPICS/ CONTENTS**

#### UNIT 1: BEHAVIOR OF PEOPLE AT WORKPLACE

(12)

- 1.1 Evolution of OB.
- 1.2 Defining, scope and importance of organizational behavior.
- 1.3 Relationship between OB and the individual.
- 1.4 Theoretical framework (cognitive, behavioristic and social cognitive).
- 1.5 Limitations of OB.

#### **UNIT 2: INDIVIDUAL PROCESS & BEHAVIOR**

(18)

- **2.1 Attitude:** Importance of attitude in an organization, Right Attitude, Components of attitude, Relationship between behavior and attitude, Developing Emotional intelligence at the workplace, Job attitude, Barriers to changing attitudes
- **2.2 Motivation:** Definition & Concept of Motive & Motivation, The Content Theories of Motivation (Maslow's Need Hierarchy & Herzberg's Two Factor model Theory), The Process Theories (Vroom's expectancy Theory & Porter Lawler model), Contemporary Theories-Equity Theory of work motivation.

2.3 **Leadership:** Concept of Leadership, Styles of Leadership, Trait Approach, Contingency Leadership Approach, Contemporary leadership, Meaning and significance of contemporary leadership, Concept of transformational leadership, Contemporary issues in leadership, Success stories of today's Global and Indian leaders.

#### UNIT 3: INTERPERSONAL PROCESS AND BEHAVIOR

(10)

- 3.1 **Foundations of Group Behavior:** The Meaning of Group & Group behavior & Group Dynamics, Types of Groups, The Five -Stage Model of Group Development
- 3.2 **Managing Teams:** Why Work Teams, Work Teams in Organization, Developing Work Teams, Team Effectiveness & Team Building.

#### **UNIT 4: ORGANIZATION SYSTEM**

(20)

- 4.1 **Organizational Culture:** Meaning & Definition of Organizational Culture.
- 4.2 Creating & Sustaining Organizational Culture.
- 4.3 Types of Culture (Strong vs. Weak Culture, Soft vs. Hard Culture & formal vs. Informal Culture).
- 4.4 Creating Positive Organizational Culture.
- 4.5 Concept of Workplace Spirituality.
- 4.6 **Organizational Change:** Meaning, definition & Nature of Organizational Change, Types of Organizational change, Forces that acts as stimulants to change.

## **Reference Books:**

#### 1 Text Books

Organizational Behavior by Robins

Organizational Behavior by Nelson & Quick

Organizational Behavior by Fred Luthans

Organizational Behavior by Stephen Robins, Timothy Judge, NeharikaVohra

Class : F.Y. B. B.Voc (RM) SEM-II

Paper Code: UBRM123

Paper: II Title of Paper: Legal Aspects of Business

Credit : 4 No. of lectures: 60

# **TOPICS/CONTENTS:**

#### **UNIT 1: THE INDIAN CONTRACT ACT 1872:**

**(20)** 

- 1.1 Meaning of Business Law, Essential elements of Valid Contracts,
- 1.2 Contracts of Indemnity & Guarantee, Contingent Contract, Quasi Contract, Discharge of contract,
- 1.3 Breach of contract-Meaning & remedies, Agency Creation of Agency Agent and Principal (Relationship/rights), Types of agency.
- 1.4 Shop Act: What is Shop Act License?, Shop Act License in India, Premises Regulated by the Shop and Establishment Act in India, Benefits of Shop Act License in India, Aspects Regulated by the Shop Act, Is Shop Act mandatory in India?, What documents are required for Shop Act Maharashtra?, Shop Act Licence, Shop Act Login, Shop Act Registration, Shop Act license documents, Shop Act license online Maharashtra.

#### **UNIT 2: THE NEGOTIABLE INSTRUMENT ACT, 1881:**

(10)

- **2.1 The Negotiable Instrument Act, 1881**: Negotiable Instruments Meaning, Characteristics, Types. Parties, Holder and holder in due course, Negotiation and Types of Endorsements, Dishonour of cheques,
- **2.2 Labour Law Act:** Meaning and definition of Labour law, history of Labour law, Elements of Labour law, Objective of Labour law and Principles of Labour law.

## **UNIT 3: THE CONSUMER PROTECTION ACT, 1886:**

(12)

- 3.1 The Consumer Protection Act, 1986, Unfair & Restrictive Trade Practices,
- 3.2 Dispute Redressal Forums District, State & National Forum, Composition, Jurisdiction, Powers, Appellate Authority. Information Technology Act, 2000, Digital Signature, Electronic Governance,
- 3.3 Electronic Records E Contracts, E Business models, E Commerce & Security, Cyber Crimes. **Intellectual Property Laws** Understanding of concepts of patents, copyrights, trademarks, and designs.

# **UNIT 4: RIGHT TO INFORMATION ACT., 2005:**

(10)

4.1 Right to Information Act, 2005: Meaning, Objectives, Nature, and scope of Right to Information Act, 2005- Public Authorities and their obligations, Public Information Commissioner & their duties, Legal provisions relating to right to information, Procedure for obtaining Information under this Act, Penalties.

# **UNIT 5: SALE OF GOODS ACT:**

(08)

**5.1 Sale of Goods Act:** Meaning of Sale of goods act, Objectives of Sales of Goods Act, Types of goods as per sale of goods Act.

Class : F.Y. B. B.Voc (RM) SEM-II

Paper Code: UBRM124

Paper : I Title of Paper: Fundamental of Computer

Credit : 6 No. of lectures: 90

# A) Learning Objectives:

- 1) To know about basics computer knowledge
- 2) To understand the MS-Office

# **B)** Learning Outcomes:

The main outcome of this course is to acquaint students of basics of

computer and how to implement in retail management.

# **UBRM124 / FUNDAMENTAL OF COMUTER**

**(90 Hours)** 

#### **TOPICS/ CONTENTS:**

## UNIT 1: ASSIGNMENT BASED ON MS OFFICE WORD.

(30)

- a. Text Manipulation Change the font size and type aligning and justification of text Underlining the text Indenting the text
- b. Usage of Numbering, Bullets, Footer and Headers Usages of Spell check and Find and Replace
- c. Table and Manipulations Creation, Insertion, Deletion (Columns & Rows) and usage of Auto Format.
- d. Picture Insertion and alignment.
- e. Creation of documents using templates Creation of templates.
- f. Mail Merge concepts.
- g. Copying text and picture from Excel.

Any relevant assignments based on syllabus

#### UNIT 2: ASSIGNMENT BASED ON MS OFFICE EXCEL

(15)

- a. Type the data in excel worksheet and save it as first.xls
- b. Type the data in excel worksheet and save it as second.xls.
- c. Enter the data and save it in grade.xls
- d. Using grade.xls to perform the various formatting operations
- e. Generates an average report based on the data in excel worksheet.

Any relevant assignments based on syllabus.

#### **UNIT 3: MS Office Power Point**

(30)

## 4.1 Assignment based on MS Office Power Point.

- a. Create a PowerPoint presentation adding the guidelines for each slide
- b. Create a PowerPoint presentation using custom animation effects.
- c. Create a PowerPoint presentation Adding a piece of clip-art

- d. Create a PowerPoint presentation with Add a sound to entrance effect.
- e. Any relevant assignments based on syllabus.

# UNIT 4: ASSIGNMENT BASED ON MS OFFICE PUBLISHER. (15)

- a. Setup an outlook Express E-mail Account
- b. Insert E-mails Attachments and restore your outlook Express E-mail.
- c. Take a backup of Emails and E-mail Account in Outlook Express.
- d. Setup a Second outlook Express Account.
- e. Add a Signature to all out going E-Mail.

Any relevant assignments based on syllabus.

#### **Reference Books:**

- 1. Absolute Beginner's Guide to Computer Basics by Michael Miller
- 2. Fundamental of Computers by AkashSaxena, Kratika Gupta
- 3. Fundamentals of Information Technology, Alexis and Mathew
- 4. Computers Today, Donald H. Sanders.

Class : F.Y. B. B.Voc (RM) SEM-II

Paper Code: UBRM125

Paper : I Title of Paper: Retail Management

Credit : 6 No. of lectures: 90

# A) Learning Objectives:

- 1) To know concept of retail business
- 2) To understand the visual merchandising in retail management

#### **B)** Learning Outcomes:

The main outcome of this course is to get practical knowledge to visit various malls

#### **UBRM125/ RETAIL MANAGEMENT**

**(90 Hours)** 

#### **TOPICS/CONTENTS:**

#### **UNIT 1: RETAILING IN INDIA**

(10)

- 1.1 Evaluation of Retail in India
- 1.2 Concept of Organized Retail
- 1.3 Challenges of rural retail management in India
- 1.4 Strategies to overcome challenges
- 1.5 Drivers of Retail Change in India

#### **UNIT 2: VISUAL MERCHANDISING**

**(20)** 

- 2.1 Concept, Features, Methods of Improving Visual Merchandising
- 2.2 Evolution of the function of Merchandising
- 2.2 **Product Display-** Compliance with Norms and guiding staff on display, Types of Product display, promoting products in store, up to date record of displays, standards for display,

changes in display reasons and actions, Estimation of area, accessories, quantities, Concept of Shelf Life.

2.3 **Slow or non moving stock Labeling** – Importance, , Display areas and methods, health, safety and hygiene requirements, Observation and Report writing

# 2.4 Practical:

- a. Preparing products for display estimating their quantities as per demand and other factor
- b. Labelling requirements, positioning, confirmation, visibility and safety
- c. Replacement of products and repositioning of products.
- d. Identification of purpose, content, style, equipment's and installation of display and design brief.
- e. Visual effects- colour, text, improving visual effects.
- f. Alternate merchandise identification, replacements deliverables and record keeping.

#### **UNIT 3: MANAGEMENT OF SERVICES**

**(20)** 

- 3.1 Introduction, strategies advantages for through customer services.
- 3.2 Customer service strategies, role of expectation, perceived service.
- 3.3 Bridging knowledge gap of customers.

#### **UNIT 4: MANAGEMENT OF RETAIL BUSINESS**

(20)

- 4.1 Introduction, retail market segmentation.
- 4.2 Types of retail market, retail strategy, strategies for market penetration.
- 4.3 Growth strategies, retail location, importance of location in retail.
- 4.4 Types of location, factors determining retail location.
- 4.5 Steps to choose the right retail location, measuring the success of location.

#### **UNIT 5: STORE SAFETY MANAGEMENT**

(20)

5.1 Assessment of Risks, Company Policy and Legal Requirements, Accidents and Emergencies, Evacuation Procedures, Reporting of Risk, Retail store safety checklist, Store/ warehouse safety procedure.

#### 5.2 Practical:

- a. Handling and reporting accidents and emergencies as per organizational policies and guidelines.
- b. Following health, safety guidelines laid down by government and organizations.
- c. Identification of risk related to work and timely communicating and mitigating the same.
- d. (Swayam Platform- MHRD Website)
- e. Case Study

#### **Reference Books:**

- 1. The Art of Retailing by A. J. Lamba
- 2. Retail Management; A Strategic Approach by Barry Berman, Joel R Evans-
- 3. Retailing Management SwapnaPradhan;

Class : F.Y. B. B.Voc (RM) SEM-II

Paper Code: UBRM126

Paper : II Title of Paper: Retail Sales Management - II

Credit : 6 No. of lectures: 90 Hours

# A) Learning Objectives:

- 1) To know about sales management in retail
- 2) To understand the concept of service

# **B)** Learning Outcomes:

The main outcome of this course is to acquaint students of sales management and service concept

#### **UBRM126/ RETAIL SALES MANAGEMENT - II**

**(90 Hours)** 

#### **TOPICS/ CONTENTS:**

# **UNIT 1: SALES MANAGEMENT**

(30)

- 1.1 Sales process, Helping customers with product identification and selection of right product.
- 1.2 Extend appropriate courtesy to customers during the sales process, Maintain prescribed levels of store.
- 1.3 Environmental and personal hygiene and ensure health and safety within the store environs and peripheral areas.
- 1.4 Pricing terms and agreements- customers acceptance, sales policies, modes of payments, credit lines.
- 1.5 Ensuring that customers fulfil their purchase process smoothly from start to billing by minimizing waiting times at different stages of the process. Conclude dealing with customers with appropriate and prescribed mannerisms. Goods and Inventory management.

#### 1.6 Practical:

- a. Role Play on Consumer Behaviour- Identification of requirements, solving customer queries, guiding them to right place, courtesy to customer, social selling.
- b. Helping customer select the correct product, guiding them for sample the product as per business policy, supporting customer for smooth purchase procedure from decision to billing.
- **c.** Maintain prescribed levels of store, environmental and personal hygiene and ensure health and safety within the store environs and peripheral area

2.1 Monitor & Resolve Customer Service issues, Train staff in Customer Relationship, Train staff in Customer service problems, factors influencing the retail shopper.

#### 2.2 Practical:

- a) Understanding and solving customer problems as per organizational policies and guidelines.
- b) Communicating action taken on customer problems and timely communication to all.
- c) Identification of various options of solving customer queries with its pros and cons and adjusting to change.
- d) Understanding and focusing on How to improve customer service?

# **UNIT 3: BUILDING A STRONG BRANDS**

(20)

- 3.1Introduction, positioning of brand competition.
- 3.2 Brand identity, brand strength, brand quality, product life cycle and positioning.
- 3.3 **Practical:**
- a) Role play on marketing your brand identity

# **UNIT 4: MARKETING ETHICS**

**(20)** 

- 4.1 Introduction, principles of ethical marketing specific issues in marketing.
- $4.2~\mathrm{Role}$  of ethics in marketing, reasons of ethical marketing is an integral part of the life of an organization.
- 4.3 Responsibilities of seller.
- 4.4 Practical:
- a) Discuss in class specific issues in marketing ethics.

# **Reference Books:**

- 1. Retail Marketing by Dravid Gilbert-
- 2. Retailing George H, Lucas Jr., Robert P. Bush, Larry G Greshan
- 3. Retail Marketing Management SwapnaPradhan

# **Supply Chain Management**

# 1. Academic Course Structure:

# Semester- I

Paper Code	Course Title	No. of Credits
SCM-111	Supply Chain Management	04
SCM-112	Logistics Management	04
SCM-113	Export Import Management	04
SCM-114	Purchasing and Inventory Management	04
SCM-115	Enterprise Resource Planning	04
SCM-116	Total Quality Management	04

# **Semester-II**

Paper Code	Course Title	No. of Credits
SCM-211	Store Keeping and Warehousing	04
SCM-212	Supply Chain and Operations Management	04
SCM-213	Export Import Law Trade and Documentation	04
SCM-214	Technology Management	04
SCM-215	International Business	04
SCM-216	Shipping and Port Management	04
SCM-217	Project	02

Extra Mandatory Credits: 12 Credits

Semester	Course Title	No. of Credits
I	Ability Enhancement-Communication Skiils	02
II	Ability Enhancement-Communication Skiils	02

# SYLLABUS (CBCS) FOR PG DIPLOMA IN SUPLY CHAIN MANAGEMENT

Class : PGD-SCM (Semester- I)

Paper Code : SCM-111

Paper : I

Title of Paper : Supply Chain Management

Credit : 4 credits

No. of lectures : 60

# **Learning Objectives:**

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

- 1. To impart knowledge of Supply ChainManagement
- 2. To understanding to students on Supply ChainManagement
- 3. To understand relevance to today's business decision making.

# **Learning Outcomes:**

- 1. Fundamentals of Supply Chain Management.
- 2. Supply Chain Network Model for Business.
- 3. Making Transportation Decison in Pracice.

# Unit I: Introduction to Supply Chain Management

Introduction- Supply Chain -Supply Chain Management - Objective of Supply Chain Management - Importance of Supply Chain Management - Activities of Supply Chain Management - Decision Phases in a Supply Chain - Process View of Supply Chain- Linking Competitive (Business) and Supply Chain Strategies - Supply Chain Drivers -Barriers of Supply Chain Management -Scope of Supply Chain Activities - Marketing Mix Model. (15 L)

# Unit II: Designing the Supply Chain Network

Introduction - Role of Distribution Network -Factors Influencing Distribution Network Design-Design Options for a Distribution Network-E-business and its Impact Advantages of E-business-Disadvantages of E-business-Distribution Network Design in the Supply Chain-Factors Affecting Network Design Decisions-Supply Chain Model. (15 L)

# Unit III: Designing and Planning Transportation Network

Introduction-Transportation in Supply Chain- Importance of Transportation-Role of Transport in Supply Chain-Transportation Modes in Supply Chain-Transportation Infrastructure and Policies - Options for Transportation Network -Tailored Transportation-Trade-off in Transportation Design-Routing and Scheduling in Transportation-Making Transportation Decisions in Practice. (15 L)

#### Unit IV: Sourcing and Pricing

Introduction-Sourcing-In-house and Outsource -3PL and 4PL-Benefits of Effective Sourcing Decisions-Supplier Scoring and Assessment -Scoring Suppliers-Ranking Suppliers-Supplier Selection-Design Collaboration-Procurement Process-Sourcing Planning and Analysis-Pricing and Revenue Management for Multiple Customers -Perishable Products and Seasonal Demand. (15 L)

#### **References Book:**

1. Mohanty R.P, S.G Deshmuki "Supply Chain Management" Biztantra, New Delhi

# SYLLABUS (CBCS) FOR PG DIPLOMA IN SUPLY CHAIN MANAGEMENT

Class : PGD-SCM (Semester- I)

Paper Code : SCM-112

Paper : II

Title of Paper : Logistics Management

Credit : 4 credits

No. of lectures : 60

# **Learning Objectives:**

1. To know the Fundamentals of Logistics.

- 2. To understand Inventory Management in detail.
- 3. To know the freight Management and its availability.

**Learning Outcomes:** Studets will learn in detail basics of Inventory Management and Logistics Management includinf itsfreight management as well.

Unit I: Logistics and System Concept and Role of Logistics

Introduction - Logistics: A System Concept -Logistics Functions -Logistics Management - Objectives -Role of Logistics in the Supply Chain -Transport Corporation of India - Indian Road Freight Index -Catalysts for Outsourcing Trends -Benefits of Logistics Outsourcing - Third Party Logistics -Fourth Party Logistics -Career & Growth in Logistics and Supply Chain (15 L)

# Unit II: Inventry Management

Inventory Management and Supply Chain – Inventory is an Asset or Liability – Inventory Function – Inventory Functionality – Balancing Supply and Demand – Periodic Variation – Scales of Economics – Reasons for carrying Inventories - Inventory Related Cost – Inventorycost – Carrying cost Ordering cost -Inventory Controls- ABC Analysis - Case Study (15 L)

#### Unit III: Freight Management

Freight Management – Speed and Availability of service- Product Handling - Transportation Networks Point to Point – Multiple Delivery Point – Transhipment Point Hub and Spoke Network – Route Planning - Containerization – ISO Container – Types of Containers for shipping cargo -Logistical Packaging for Cars (15 L)

#### Unit IV: Logistics Management and Information Technology

Information Technology and Logistics – Customer and Centric Value Web Models – contemporary technologies – Automatic Identification Technology – Bar Code – Scanner – Radio Frequency Identification (RFID) – Radio Frequency Tags (RFT) – Domestic Cargo Documents – Consignment Note – Legal Issues concerning Export Documents – Bill of Lading – Cargo Insurance Policy – Bill of Exchange – Statutory Documents – Shipping Bill – Documents for claiming Export benefits – INCO Terms

#### **References Books:**

1. Bowersox, Closs, Cooper, Supply Chain Logistics Management, McGraw Hill.

- 2. Burt, Dobbler, Starling, World Class Supply Management, TMH.
- 3. Donald J Bowersox, David J Closs, Logistical Management, TMH
- 4. Pierre David, "International Logistics", Biztantra.
- 5. Sunil Chopra, Peter Meindl, Supply Chain Management ,Pearson Education, India.

# SYLLABUS (CBCS) FOR PG DIPLOMA IN SUPLY CHAIN MANAGEMENT

(w.e.f. June, 2022)

Class : PGD-SCM (Semester- I)

Paper Code : SCM-113

Paper : III

Title of Paper : Expot Import Management

Credit : 4 credits

No. of lectures : 60

# **Learning Objectives:**

1. To know the Export and Import Trade with their dateiled precedure.

- 2. To know thw Cargo Insurance and Fema concepts in detail.
- 3. To understand shipment of Export Cargo.

**Learning Outcomes:** Students will learn Export Import and its implication in detail.

# **Unit – I: Export-Import Trade**:

Establishing a Business firm – Importer Export Code Number – Aligned Documentation System (ADS) – Commercial Documents – Regulatory Documents – Documents related to Shipment – Shipping Bill – Mate's Receipt – Bill of Lading - Classification of Documents – Export Sales Contract – Types of contracts – Major Laws on Export Contracts – Elements in Export Contract. (15 L)

# Unit - II: Cargo Insurance and Fema:

Cargo Insurance – When and why to insure – How to insure – Types of Marine Insurance policies – Exchange Control – Main Provisionsof FEMA – Quality Control – Pre-shipment Inspection.

(15 L)

# **Unit – III: Shipment of Export Cargo:**

Role of Clearing and Forwarding Agents –Essential Services – Optional Services – Central Exercise Procedure for clearance of cargo – Export under claim of Rebate of Duty – Procedure for Shipment of Export Cargo – Customs clearance for Export Cargo – Customs Clearance for Import Cargo.

(15 L)

**Unit – IV: Flow of Documents and Funds**: Documents required under Letter of Credit – Flow of Documents and Funds – Procedure and Documentation for Export Incentives – Import Licensing – Processing an Export Order – Presentation of documents for negotiation

(15 L)

# SYLLABUS (CBCS) FOR PG DIPLOMA IN SUPLY CHAIN MANAGEMENT

(w.e.f. June, 2022)

Class : PGD-SCM (Semester- I)

Paper Code : SCM-114

Paper : IV

Title of Paper : Purchasing and Inventory Management

Credit : 4 credits

No. of lectures : 60

# **Learning Objective:**

1. To gain the knowledge of possibilities of efficient optimization and management of operation in Purchasing and Inventory Management and also the ability to apply them in the enterprise reality to improve the overall efficiency of the firm.

**Learning Outcome**: Students will learn possibilities of efficient optimization and management of operation in Purchasing and Inventory Management and also the ability to apply them in the enterprise reality to improve the overall efficiency of the firm.

**UNIT I:** Purchase policy- Rate and Running Contract – Subcontracting- Systems Contract – Stockless purchase –Buying seasonal items – Forward Buying – Hedging – Purchasing Activities – Indent Status – A to Z of Purchase Order –Transportation – Incoming Inspection – Bill settlement – Documentation. (10 L)

UNIT II: Meaning of Right Price – Price Analysis – Determination of Right Price – Influencing Factors on Pricing – Classification of Pricing – Price Forecasting - Right Place – Purchase Budgets – Budgetary control – Need Identification Problems – Definition of lead time Elements- Cost Reduction and Lead time. (15 L)

**UNIT III:** Relevance of Good Supplier - Advantages of Good Relations – Prerequisites – Evaluation of Suppliers – The Buyers Role – Role of the Vendor – Relevance of Good Suppliers – Need for vendor evaluation – Goals of Vendor Rating – Advantages of Vendor Rating – Parameters of Vendor Rating.

(10 L)

UNIT IV: Role of Material Management – Classes of Material – Materials and Profitability – Profit Center Concept – Material Objective – Centralized Purchasing – Decentralizing – Delegation of Powers – Definition of Material Planning – Bill of Material – Material Requirement Planning –

Importance of Material Research- Definition Advantages of Materials Information System . (15 L)

**UNIT V:** Codification – Classification – Methodology–Requirement of codes – Coding Structure and Design –Advantages - International Codification – Cost and Consequences Right Quantity – Economic Ordering Quantity – Derivations of EOQ.

(10 L)

#### **Reference Book:**

1. Gopalakrishnan P.- Purchasing and Materials management - Tata McGraw Hill

# SYLLABUS (CBCS) FOR PG DIPLOMA IN SUPLY CHAIN MANAGEMENT

Class : PGD-SCM (Semester- I)

Paper Code : SCM-115

Paper : V

Title of Paper : Enterprise Resource Planning

Credit : 4 credits

No. of lectures : 60

# **Learning Objectives:**

1. To familiarize the students with ERP, ERP Module, SCM and CRM and its application in business related decisions.

**Learning Outcomes:** Students will learn ERP, ERP Module, SCM and CRM and its application in business related decisions in detail.

UNIT I: Overview of enterprise systems – Evolution - Risks and benefits - Fundamental technology
Issues to be consider in planning design and implementation of cross functional integrated ERP systems.
(15 L)

**UNIT II;** Overview of ERP software solutions- Small medium and large enterprise vendor solutions, BPR, Business Engineering and best Business practices - Business process Management. Overview of ERP modules -sales and Marketing, Accounting, Finance, Materials and Production management etc (15 L)

**UNIT III** Planning Evaluation and selection of ERP systems-Implementation life cycle – ERP implementation, Methodology and Frame work- Training – Data Migration. People Organization in implementation-Consultants, Vendors and Employees-Case studies.

(10 L)

**UNIT IV** Maintenance of ERP- Organizational and Industrial impact; Success and Failure factors of and ERP Implementation -case studies. (10 L)

UNIT V Extended ERP systems and ERP bolt –on -CRM, SCM, Business analytics etc-Future trends in ERP systems-web enabled, Wireless technologies so on-Case studies.

(10 L)

#### **References Books:**

- 1. Alexis Leon, Enterprise Resource Planning, second edition, Tata McGraw-Hill, 2008.
- 2. Alexis Leon, ERP demystified, second Edition Tata McGraw-Hill, 2006.
- 3. Jagan Nathan Vaman, ERP in Practice, Tata McGraw-Hill, 2008
- 4. Mahadeo Jaiswal and Ganesh Vanapalli, ERP Macmillan India, 2006.
- 5. Summer, ERP, Pearson Education, 2008.

# SYLLABUS (CBCS) FOR PG DIPLOMA IN SUPLY CHAIN MANAGEMENT

Class : PGD-SCM (Semester- I)

Paper Code : SCM-116

Paper : VI

Title of Paper : Total Quality Management

Credit : 4 credits

No. of lectures : 60

# **Learning Objectives:**

1. To gain the knowledge of possibilities of efficient optimization and management of operation using TQM to improve the overall efficiency of the firm.

**Learning Outcomes:** Students will learn possibilities of efficient optimization and management of operation using TQM to improve the overall efficiency of the firm.

UNIT I: Total Quality Management Evolution – Definition of Quality – Dimensions – QC- QA – QP Concepts –Quality Management – Cost of Quality Failure Cost – Reducing Costs – Juran's model – Analysis of COQ for improvement . (10 L)

**UNIT II:** Definition of TQM – Elements – Deming's 14 points – TQM tools and techniques – Planning phase of TQM – Barriers to TQM implementations. (10 L)

UNIT III: Service quality – Features- customers delight – Kano model – Perceived Quality – Employee Involvement – Employee Motivation – Team work – Effective Communication – Training and Motivation - Performance Appraisal.

**UNIT IV:** Continuous process improvement – Juran's Trilogy – Kaizen – BPR and TQM

supplier importance Selections. Standards – Quality audit –supplier rating systems – Balanced score card.
 Process Control –Flow Charts – Scatter Diagram –Pareto Chart – Control Chart – Central Limit Theorem – Six Sigma , Definitions, Origin ,Process Models (15 L)

UNIT V: Benchmarking – Type, Process – QFD – Taguchi's Loss Function – Total Productive Maintenance- Quality systems – ISO 900 – QMS – Management responsibility – Environmental management systems 14001 – Quality awards – Deming price European and Indian quality awards.

(15 L)

#### **Reference Book:**

1. Dale H. Besterfield, Carol Besterfield, Glen Besterfield and Mary Besterfield – Total Quality Management – Prentice Hall of India – Third Edition – 2007

# SYLLABUS (CBCS) FOR PG DIPLOMA IN SUPLY CHAIN MANAGEMENT

Class : PGD-SCM (Semester- II)

Paper Code : SCM-211

Paper : I

Title of Paper : Store Keeping and Warehousing

Credit : 4 credits

No. of lectures : 60

#### **Learning Objectives:**

At the end of the course students will be able to: : To familiarize the students with Warehousing, its importance, valuation, inventory stores management to provide adequate knowledge to

minimize the cost and improve the overall efficiency of the operation.

**Learning Outcomes:** Store keeping, Warehousing, Valuation, and Adequate Knowledge of Store Opertions.

**UNIT I:** Warehousing Management - Objectives of Stores – Location and Layout – Prevention – Management of Receipts – Issue Control – Stores Documentation (10L)

**UNIT II:** Stock Valuation And Verification - Need for Valuation - Methods of Valuation - FIFO - LIFO - Average Price - Weighted Average - Standard Cost - Replacement Price - Stock Verification - Process of Verification (10L)

**UNIT III:** Disposal of Obsolete and Scrap items - Management of SOS - Categorization of Obsolete/Surplus - Reasons for Obsolescence - Control of Obsolescence - Control of Scrap - Responsibility for Disposal - Disposal Methods. (15L)

UNIT IV: Insurance: Risk Management - Buyer's Interest - Marine Insurance - Inland Transit
 Insurance - Stores Insurance - Contractors All Risk Insurance - Miscellaneous Insurance - A to Z
 Claims Procedure - Loss Minimization- Spare Parts Management -

Salient Features of Spares – Inventory Control of Spares – Categorization of Spares – Provisioning of Spares – Pricing of Spares – Relevance of Maintenance – MaintenanceCosts (15L)

**UNIT V:** Ethics In Materials Management - Importance of Ethics – Business Ethics – Ethics in Buying – Code of Ethics – Problems in Ethics – Backdoor Selling – A to Z Tips for Ethical Buying – Professionalization. (10L)

#### **Reference Books:**

Gopalakrishnan P.– Purchasing and Materials management – Tata McGraw Hill –23rd Edition – 2008

# SYLLABUS (CBCS) FOR PG DIPLOMA IN SUPLY CHAIN MANAGEMENT

(w.e.f. June, 2022)

Class : PGD-SCM (Semester- I)

Paper Code : SCM-212

Paper : II

Title of Paper : Supply Chain and Operations

Credit : 4 credits

No. of lectures : 60

# **Learning Objectives:**

- 1. To Learn IT in Supply Chain Management,
- 2. To Understand Coordination in Supply Chain Management,
- 3. To learn Diiferent Dimensions of Logistics and Demand Management

**Learning Outcomes:** Students will get insight into IT in Supply Chain Management, Coordination in Supply Chain Management, Diiferent Dimensions of Logistics and Demand Management

# **Unit I: Information Technology in Supply Chain**

Introduction-Supply Chain IT Framework-Role of Information in Supply Chain -Customer
Relationship Management (CRM)-Internal Supply Chain Management-Supplier Relationship
Management -Transaction Management-Enterprise Resource Planning (ERP)-E-commerce- Supply
Chain Information Technology in Practice (15L)

# **Unit II: Coordination in a Supply Chain**

Introduction- Lack of Supply Chain Coordination -Bullwhip Effect -Managerial Levers- Building Strategic Partnerships and Trust-Continuous Replenishment Program (CRP) and Vendor Managed Inventory (VMI)-Collaborative Planning, Forecasting and Replenishment (CPFR)-Summary (15L)

# **Unit III: Dimension of Logistics**

Introduction- Macro and Micro Dimension-Macro Dimension - Micro Dimensions-Logistics Activities-Approach to Analysing Logistics Systems-Logistics and Systems Analysis - Techniques of Logistics System Analysis-Factors Affecting the Cost and Importance of Logistics (15L)

# Unit IV: Demand Management and Customer Service

Introduction-Outbound to Customer Logistics Systems-Supply and Demand Relationship - Graphical Representation of Supply and Demand Relationship-Demand Management-The Demand Management Process-Demand Forecasting-Demand Planning-Demand Forecasting Error-CPFR-Customer Service- Cost of Stock-outs- Channels of Distribution (15L)

# SYLLABUS (CBCS) FOR PG DIPLOMA IN SUPLY CHAIN MANAGEMENT (w.e.f. June, 2022)

Class : PGD-SCM (Semester- I)

Paper Code : SCM-213

Paper : III

Title of Paper : Expot Import Law Trade and Documentaion

Credit : 4 credits

No. of lectures : 60

# **Learning Objectives:**

- 1. To Learn in detail about Foreign Trade
- 2. Tounderstand Institutional Setup
- 3. To get insight into Exim Financing

**Learning Outcomes:** Students will learn foreign rade, Institutional Setup, and Exim Financing in Business Organisation.

# Unit I: Introduction to Foreign Trade

Need for International Trade – Export and Imports – Current Foreign Trade situations in India – Balance of Payment – Thrust Markets and Thrust Products - Significance and Reasons for Conducting Foreign Trade - Global Commodity chains. (15L)

# Unit II: Institutional setup for Promoting Foreign Trade

Export Promotion Programmes - Directorate General of Foreign Trade - The Federation of Indian Export Organization - Commodity boards - The Export Credit Guarantee Corporation of India - India Trade Promotion Organization – EXIM Bank - The Export Inspection Council The Directorate General of Commercial Intelligence and Statistics (DGCI&S) - Functions of Central Board of Excise and Customs. (15L)

# Unit III: Exim Financing

Role of Banks in EXIM Finance - Forms of financial Assistance provided by EXIM Bank to Indian Exporter - Export Credit Insurance - Export Finance - objective of EXIM Bank - Functions of EXIM bank - Export Finance - Financing for various types of Export Buyer's credit - Types of post shipment finance (15L)

# Unit IV: Forex Management

Financial Instruments – Financial Asset – Financial liability – Types of financial instruments – Line of Credit (LOC) – Letter of Credit (L/C) – Basic types of Letter of Credit – International Sales Contract. (15L)

# SYLLABUS (CBCS) FOR PG DIPLOMA IN SUPLY CHAIN

# MANAGEMENT (w.e.f. June, 2022)

Class : PGD-SCM (Semester- I)

Paper Code : SCM-214

Paper : IV

Title of Paper : Technology Management

Credit : 4 credits

No. of lectures : 60

# **Learning Objectives:**

- 1. To help students understand Evolution of Technology
- 2. To know Concepts, basic functions
- 3. To understand recent trends Technology Management concepts and practices for better business decisions.

**Learning Outcomes:** Students will learn Evolution of Technology, basic functions, recent trends Technology Management concepts and practices for better business decisions.

**UNIT I:** Technology and Society – Technology in business context – Strategic technology process – Plan – Vision, Mission and Objectives (10L)

**UNIT II** Technology origin and evolution – Tailoring technology to fit specific industry requirements – Organization redesign – Organizational re-engineering – Financial considerations for technology Planning. (15L)

**UNIT III:** Technology Forecasting – Need – Methodologies: - Trend Analysis, Analogy, Delphi, Soft System Methodology, Mathematical Models, Simulation, System dynamic, S-curve, Role of Technology Information Forecasting and Assessment Council (TIFAC).

(15L)

**UNIT IV:** Dissemination of technology information- and strategic planning - Technology choice and evaluation methods – Analysis of alternative technologies - Implementing technology programmes. (10L)

UNIT V: Intellectual Capital - An introduction to Intellectual Property Right - Patent - Copyrights - Trademarks and other issues. (10L)

#### **References Books:**

- 1. Betz, Frederic, 1996, Strategic Technology Management, New Delhi, McGraw Hill.
- 2. Gerard H. Gaynor, 1996, Handbook of Technology Management McGraw-Hill.
- 3. Robbert Szakonyl, 2006, Handbook of Technology Management Viva booksprivate limited.
- 4. Vijay Kumar Khurana, 2007, Management of Technology and Innovation, Ane

# SYLLABUS (CBCS) FOR PG DIPLOMA IN SUPLY CHAIN MANAGEMENT (w.e.f. June, 2022)

Class : PGD-SCM (Semester- I)

Paper Code : SCM-215

Paper : V

Title of Paper : International Business

Credit : 4 credits

No. of lectures : 60

# **Learning Objectives:**

1. To know theories of International Trade

- 2. To understand International Business Environment
- 3. To know the WTO and FDI

**Learning Outcomes**: Students will learn In detail International Trade, Buseiness Environment, International Financial Institution in detail.

# **UNIT I: Theories of International Trade:**

International Business: An Overview – Evolution of International Business, Drivers of Globalization, Influences of International Business, Stages of Internationalization, Differences between Domestic and International Business, International Business Approaches, Advantages of International Business - Theories of International Trade – Mercantilism, Theory of absolute cost advantage, Comparative cost advantage theory, Relative factor endowment theory, Country similarity theory, Product life cycle theory.

(15L)

## **UNIT II: International Business Environment:**

International Business Environment – Social and Cultural Environment, Technological Environment, Economic Environment, Political Environment - Modes of Entering International Business – Modes of Entry, Exporting, licensing, franchising, contract manufacturing, management contracts, turnkey projects, foreign direct investment, alliances like mergers and acquisitions, joint ventures, Comparison of Different Modes of Entry. (15L)

# **UNIT III:Foreign Direct Investment and WTO:**

Foreign Direct Investment– Factors Influencing FDI, Reasons for FDI, Costs and Benefits of FDI, Trends in FDI, Foreign Direct Investment in India - World Trade Organization – General Agreement on Tariffs and Trade (GATT), Establishment of World Trade Organization, The Uruguay Round Package: Organization Structure of the WTO, WTO – The Third Pillar in the Global Business. (15L)

# **UNIT IV: International Financial Institutions:**

International Financial Institutions and Liquidity – IMF, World Bank, International Development Association, International Liquidity and SDR International Finance Cooperation. Basics of International Marketing, Basics of Global HRM, Basics of International Financial Management, Basics of International Accounting. (15L)

UNIT V: INTERNATIONAL PRODUCTION AND LOGISTICS: International Production and Logistics Management – Generic Strategies of the International Business, Acquisition of Resources, Location Decisions, International Logistics Management - Global Strategic Management and Business Ethics – Peculiarities of Global Strategic Management, Value Creation, Global Strategic Management Process, Collaborative Strategies, Ethics and Global Business. (15L)

#### Reference Books:

- 1. Cherunillam Francis, International Business, Text and Cases 3rd, Edition, Prentice-Hall of India Private Limited
- 2. Charles W.L. Hill, International Business Competing in the Global Marketplace, 4th Edition, TataMcGraw Hill, Publishing Company Limited
- 3. Salvatore, Dominick, International Economics, John Wiley and Sons, New York, Chapter 2 and 3.

# SYLLABUS (CBCS) FOR PG DIPLOMA IN SUPLY CHAIN MANAGEMENT

Class : PGD-SCM (Semester- I)

Paper Code : SCM-216

Paper : VI

Title of Paper : Shipping and Port Management

Credit : 4 credits

No. of lectures : 60

# **Learning Objectives:**

1. To gain the knowledge of possibilities of efficient optimization and management of operation using TQM to improve the overall efficiency of the firm.

**Learning Outcomes:** Students will acquire knowledge of efficient optimization and management of operation using TQM to improve the overall efficiency of the firm.

# UNIT I: Fundamentals of Shipping

World Trade Scenario – Global Shipping Sector – Why Ocean Transportation? – Conference Systems in Shipping – Shipping Alliances – Benefits of Alliances – Major Shipping Alliance in the World – stakeholders in shipping – organization structure of shipping company - Freight Rate Calculation in Ocean Transportation – Calculation of Freight Rate – Perils at Sea – Types of Risks – Insurance coverfor Ocean Transportation – Maritime Fraud. (15L)

# UNIT II: Shipping Trade Routes and Types of Vessels

Maritime Security - Major issues of concern for global shipping sector - Terrorism and Maritime Trade

- Container Security Initiative Piracy Reason for Piracy Regions affected by Piracy
- Cost of Piracy IMO and maritime security Shipping Routes and Canals Major Shipping routes of the world Container carrying vessels Types of vessels.

# UNIT III: Container Shipping Costs and Revenue

Relationship between costs and ship's age – Economies of scales – Operating costs – Crew costs – stores – Repair and Maintenance – Insurance – Voyage costs – Fuel costs – Bunker costs – Marine services –Harbour Master's duties and responsibilities – Port charges – Vessel related Charges – Cargo related charges – Canal charges – Bareboat, Time and Voyage charter – Tariff structure – Adjustment factors – Terminal Handling Charges – Different forms of Tariffs- FAK, CBR, TVC. (15L)

#### UNIT IV: Port Structure, Services and Performance Indicator

Types and Layout of the ports – Organized structure – Port Ownership – Types of Port ownership and administration – Port Ownership in Indian Context - Service request process – Marine services – Terminal Services – Repair services – Estate management services – Information management services – General Logistics services – Value added services – Performance Indicator. (15L)

#### **REFERENCES:**

- 1. Martin Stopford: "Maritime Economics" Third Edition
- 2. Jean-Paul Rodrigue, New York: *The Geography of Transport System*, 5<sup>th</sup> Edition.
- 3. Lloyd's Practical guide "Port Management and Operations" Third Edition INFORMA.