

Syllabus and Scheme of Examination
For
B. Voc Retail and Logistics Management

THREE YEAR FULL TIME PROGRAMME

(Choice-based credit system)



**Note: Syllabi applicable for students seeking admission in the
B. Voc Retail and Logistics Management from the academic year 2019-2020**

**COLLEGE OF VOCATIONAL STUDIES
FACULTY OF APPLIED SOCIAL SCIENCES
UNIVERSITY OF DELHI**

B. Voc (Retail and Logistics Management)

Introduction:

Retail and logistics are crucial for the success of companies across the FMCG, manufacturing and services sectors. The survival of a business is dependent on the product or service reaching the customer on time. This depends on an efficient retail operation as well as an effective logistics and supply chain process. Technology has increased the options available to the customer and enhanced the competitiveness of business. Thus, there is demand for trained professionals in the field of retail and logistics. The B. Voc programme addresses this demand of the industry by including the study of a wide spectrum of topics including e-marketing, warehousing, logistic management, supply chains besides computer applications and communication skills.

This course will enable the students to get placement in E-marketing, Digital marketing, and other marketing jobs in the Retail Sector. This course will enable the students to get jobs in the transportation, packaging, freight forwarding, and supply chain management. The students will be able to contribute meaningfully in the operations management of retail and logistic sector enterprises.

Program Duration:

The B. Voc. Retail and Logistics Management programme offers 03 options to students. Each year will be called an academic year and will be divided into two semesters. A student taking admission into the Diploma programme shall study 02 semesters in the 1st academic year. A student taking admission into the Advanced Diploma programme shall study a total of 04 semesters in the 1st and 2nd academic years. A student taking admission into the B. Voc programme, shall study a total of 06 semesters in the 1st, 2nd and 3rd academic years. Thus there will be a total of six semesters.

Design of Program:

The B. Voc. Retail and Logistics Management programme is being offered under Choice-based credit system (CBCS). CBCS programme structure ensures that the student gets a strong foundation in the subject and gains in-depth knowledge of all aspects of the field. The Learning outcomes-based curriculum framework is designed as per CBCS and is intended to suit the present day needs of the student in terms of securing their path towards employment or higher studies.

B. Voc (Retail and Logistics Management)***Programme Structure:***

B. Voc. Retail and Logistics Management programme is a six semester based three years degree course under CBCS programme with a specialization in retail and logistics management. The programme involves study of the following courses:

B. Voc. Retail and Logistics Management: 3 years consisting of 06 semesters

1	Elective Courses (Core Discipline)	12 Papers of 6 Credit Hours each (12 courses x 6) (2 courses in each semester x 6 semesters x 6 hrs)	72
2	Skill Enhancement Courses	18 Papers of 6 Credit Hrs. each (18 courses x 6) (3 courses in each semester x 6 semesters x 6)	108
	Total Credit Hours		180

Advanced Diploma in Retail and Logistics Management: 2 years consisting of 04 semesters

1	Elective Courses (Core Discipline)	08 Papers of 6 Credit Hours each (08 courses x 6) (2 courses in each semester x 4 semesters x 6 hrs)	48
2	Skill Enhancement Courses	12 Papers of 6 Credit Hrs. each (12 courses x 6) (3 courses in each semester x 4 semesters x 6)	72
	Total Credit Hours		120

Diploma in Retail and Logistics Management: 1st year consisting of semester 1 &2

1	Elective Courses (Core Discipline)	12 Papers of 6 Credit Hours each (04 courses x 6) (2 courses in each semester x 2 semesters x 6 hrs)	24
2	Skill Enhancement Courses	18 Papers of 6 Credit Hrs. each (06 courses x 6) (3 courses in each semester x 2 semesters x 6)	36
	Total Credit Hours		60

B. Voc (Retail and Logistics Management)**Semester-Course Break up**

	Semester-1 (12 General) + 18 (Skill)	Credits	Marks
GE 1	English Communication and Personality Development.	6	75+25
GE 2	Computer Basics for Retail and Logistics	6	75+25
SE 1	Introduction to Retail Management and Retail store operation	6	75+25
SE 2	Introduction to Marketing & Consumer Behaviour	6	75+25
SE 3	Introduction to Logistics Management	6	75+25
	Semester-2 (12 General) + 18 (Skill)	Credits	Marks
GE 3	Entrepreneurship & Project Management	6	75+25
GE 4	Web-based computer Applications	6	75+25
SE 4	Store Display and Visual Merchandising	6	75+25
SE 5	Rail, Road, Air and Ocean Cargo Logistics	6	75+25
SE 6	Project	6	100
	Semester-3 (12 General) + 18 (Skill)	Credits	Marks
GE 5	E- commerce	6	75+25
GE 6	Accounting for Retail and Logistics Management	6	75+25
SE 7	Retail branding and strategy	6	75+25
SE 8	Sales and distribution Management	6	75+25
SE 9	Business Communication and Personality Development	6	75+25
	Semester-4 (12 General) + 18 (Skill)	Credits	Marks

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GE 7	Information system for retail and logistics	6	75+25
GE 8	Customer Relationship Management	6	75+25
SE 10	Road Transport Management	6	75+25
SE 11	Retail planning and legal framework	6	75+25
SE 12	Project	6	100
	Semester-5 (12 General) + 18 (Skill)	Credits	Marks
GE 9	Human Resource in Retail and Logistics Operations	6	75+25
GE 10	Marketing Management	6	75+25
SE 13	Supply Chain Management	6	75+25
SE 14	Materials Planning and Control	6	75+25
SE 15	Enterprise Resource Planning	6	75+25
	Semester-6 (12 General) + 18 (Skill)	Credits	Marks
GE 11	Marketing for non- profit organizations	6	75+25
GE 12	Business Ethics	6	75+25
SE 16	Packing and Packaging Management	6	75+25
SE 17	Warehouse management	6	75+25
SE 18	Shipping and Ocean Freight Logistics management	6	75+25

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Teaching Learning Process

The teaching-learning will involve theory classes (Lectures) of one hour duration and tutorial classes. Generic elective (GE) and Skill Enhancement Course (SEC) will involve teaching of 5 lectures per week and 1 tutorial per batch in each week. Student-centered, inquiry based teaching is imparted where the teacher acts as a facilitator. The curriculum will be delivered through various methods including whiteboards and talk, power-point presentations, audio, video tools, E-learning/E-content, field trips/Industry visits, seminars (talks by experts), workshops, projects and class discussions. Teaching aids such as case studies and business newspapers are used for enhancing student understanding. Each student is encouraged to make presentations so as to take ownership of his or her learning and share the learning process in the classroom and feedback is given to every student.

Course SE6 and SE12 on Internship /project work comprising of 6 credits will be split into 03 credit hours with the mentor and 3 credit hours of library/field/industry work.

Greater skill component in the programme makes teaching more practical and application oriented.

Assessment Methods

The assessment broadly will comprise of Internal Assessment (Continuous Evaluation) and End Semester Examination. Each paper will be of 100 marks. Internal Assessment will have a weightage of 25% (25 marks) and 75% weightage (75 marks) for end semester examination. The internal assessment will have a weightage of 5 marks for attendance, 10 marks assessment will be based on quizzes, assignments, group discussions and presentations, problem-solving exercises, case study presentations, seminars, preparation of reports, and presentation of practical etc. and 10 marks for class-tests.

Assessment for Paper SE 6 & SE12 on Internship/Project work will be divided into three parts i.e. attendance, project Report and Viva, each carrying 05, 75 and 20 marks respectively. It will have internal assessment marks for attendance only. The Internship Training Report/ Project Work will be assessed by two examiners i.e. one internal and one external.

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Programme Learning Outcome

The objective of B. Voc Retail and Logistics Management is to enable a student to:

- Have the flexibility of opting out of a 3 year degree programme after 1st or 2nd year with a diploma and at the same time gain the benefit of employability.
- Get employment at the entry level in any medium or large scale retail or logistics business
- Acquire practical application that is founded on sound theoretical knowledge and learning
- Acquire a comprehensive and balanced understanding of both the retail and logistic components that are evenly distributed across the 6 semesters for a student who wishes to complete the entire 3year programme.
- Develop an interest in the subject

Semester – 1: Credits: 12 (General) + 18 (Skill)

	Semester-1 (12 General) + 18 (Skill)	Credits	Marks
GE 1	English Communication and Personality Development.	6	75+25
GE 2	Computer Basics for Retail and Logistics	6	75+25
SE 1	Introduction to Retail Management and Retail store operation	6	75+25
SE 2	Introduction to Marketing & Consumer Behaviour	6	75+25
SE 3	Introduction to Logistics Management	6	75+25

GE 1: English Communication and Personality Development

Credit 6

Lectures 60 hours

Marks 75+25

The student will be able to acquire

CO1: fluency in spoken language and enhance comprehension ability

CO2: skills for writing different types of letters, notes, office orders

CO3: ability to write project and other reports

CO4: correct etiquette for different occasions

CO5: ability to lead a team and make an effective power point presentation

Unit I: Reading Skills: Reading Tactics and strategies; Reading purposes–kinds of purposes and associated comprehension; Reading for direct meanings; Reading for understanding concepts, details, coherence, logical progression and meanings of phrases/ expressions. Activities: a) Active reading of passages on general topics b) Comprehension questions in multiple choice format c) Short comprehension questions based on content and development of ideas

Unit II: Writing Skills: Guidelines for effective writing; writing styles for application, resume, personal letter, official/ business letter, memo, notices etc.; outline and revision. Activities: a) Formatting personal and business letters. b) Organising the details in a sequential order c) Converting a biographical note into a sequenced resume or vice-versa d) Ordering and sub-dividing the contents while making notes. e) Writing notices for circulation/ boards

Unit III: Report Writing: Business reports, Types, Characteristics, Importance, Elements of structure, Process of writing, Order of writing, the final draft, check lists for reports. Vocabulary, Words often confused or misspelt, common errors in English.

Unit IV: Personality development 1: Business Etiquettes, Business manners. Body language gestures, Etiquette of the written word, Etiquette of the telephone, Handling business meetings, Role play on selected topics with case analysis and real life experiences. Aids to correct Business writing, Practical Grammar (basic fundamentals), Sentence errors- Punctuation, Vocabulary building.

Unit V: Personality development 2: Making a Presentation: Oral Presentation, Importance, Characteristics, Visual aids, Presentation Plan, Power point presentation - making a presentation, the various presentation tools, along with guidelines of effective presentation, boredom factors in presentation and how to overcome them, interactive presentation & presentation as part of a job interview, art of effective listening. Leadership: quality of a leader, leadership quiz with case study, knowing your skills and abilities. Introduction to

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group discussion techniques with debate and extempore, increased professionalism. Audio Video recording and dialogue sessions on current topics, economy, education system, environment, politics.

References:

- Courtland L. Bovee, John V. Thil, (2018) Business Communication Today, 14th Edition Pearson.
- E. H. McGraw, S. J., (4th Edition) Basic Managerial Skills for All. Prentice Hall of India Pvt. Ltd., New Delhi.
- Lesikar, R.V. & Flatley, M.E. (2013) Basic Business Communication Skills for Empowering the Internet Generation, Tata McGraw Hill Publishing Company Ltd. New Delhi.
- Locker and Kaczmarek, (2009) Business Communication: Building Critical Skills, TMH 4th edition.
- Reuben, Ray (2012) Communication today – understanding creating skills, Himalaya Publishing House.
- Shirley Taylor, (2018) Communication for Business: A Practical Approach, word press, 2018
- Sinha, K.K. (2018) Business Communication (4th edition revised) Galgotia and Sons, New Delhi.
- Stephen R. Covey (1989) The seven habits of highly effective people, free press

GE 2: Computer Basics for Retail and Logistics

Credit 6

Lectures 60 hours

Marks 75+25

The student will be able to gain

CO1: basic knowledge of computer concepts and components

CO2: understanding of the operating system, windows interface, control panel, system tools, and files

CO3: proficiency in applications such as word, power point, and excel

CO4: basic knowledge of information technology, Value Chain Reconstruction, IT Management, network and telecommunications

CO5: understanding of domain name systems and types of networks.

Unit I: Basic Concepts & components: Meaning of Data, Information and Knowledge, Data types, data storage, data representation such as ASCII. Hardware components: input devices, output devices, system unit. Software components: Application software: general purpose packaged software and tailor – made software, System software: operating system, interpreter, compiler, linker, loader.

Unit II: Operating System: Need and functions of an Operating System, Graphic user interface and character user interface. Windows environment: application and document, Windows interface such as icons, lists, menus, dialog box, etc. Desktop, control panel, system tools, utilities such as calculator, calendar, etc. Explorer: file types, attributes, names, folders, drives, devices. File functions: create, open, close, delete, rename, move, cut, copy, paste, etc.

Unit III: Office Applications: Meaning and applications of word processing and Basics of MS word, MS-PowerPoint: creating simple presentation including slide transitions, bullets, Preparing PPT etc. MS-Excel: creating a workbook, saving a workbook, editing a workbook, creating a series, use of basic formulae in Excel, use of functions in Excel, sorting data, creating simple charts. Meaning and applications of presentation.

Unit IV: Introduction to Information Technology: Evolution of IT Management, basics of information system, Software and Automatic Identification and Data Capture (AIDC), Value Chain Reconstruction for E-Business, IT Management Challenges and Issues. Database Management System, network and telecommunications

Unit V: Domain Name System: Meaning, Need, Importance for e- business Mobile commerce: Wireless Protocol, WAP, Mobile Computing Applications, Blue tooth. E-Business models, E-Business security, Electronic Data Interchange - EDI Applications in Business. Introduction to Networks and Internet: Meaning and types of networks - LAN, MAN and WAN, Internet, difference between internet and intranet. Basics: functions, growth, anatomy,

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Uses, Wireless and wifi, Internet services: ISP, types of accounts, World Wide Web: websites file transfer, browsing, searching.

Dynamic Component for Continuous Internal Assessment: Contemporary Developments to the course during the semester.

References:

- Alexis and Mathew, Fundamentals of Information Technology, Laxmi Publications (P) Ltd
- Henry C. Lucas. Jr. (2004) Information Technology-Strategic Decision Making for Managers, John Wiley and Sons Private Limited, Singapore.
- Joshi Girdhar (2008) Information Technology for Retail, Oxford Printing Press.
- Michael Miller, Computer Basics Absolute Beginner's Guide, Windows 10 Edition (includes Content Update Program), Free press CUI.
- Swapana Pradhan, (2015) Retailing Management, Tata Mc Graw Hill Publishing Company.
- Pradeep K. Sinha, Priti Sinha, (2017) Computer Fundamentals, Bpb Publications.

SE 1: Introduction to Retail Management and Retail Store Operations

Credit 6

Lectures 60 hours

Marks 75+25

The student will be able to gain

CO1: basic knowledge of retailing and its evolution in India

CO2: understanding of retail planning and operation management, aspects of store layout

CO3: proficiency retail HRM, retail selling skills,

CO4: basic knowledge of retail location, merchandising and franchising, outsourcing

CO5: understanding of CRM in retail.

Unit I: Introduction to Retailing, Importance of retailing in economy, Scope of Retailing, Evolution of Retail Environment, The Wheel of Retailing-The Accordion Theory, Emerging Trends in Retailing, Career options in retailing, Retail Structure in India. E-retail & retail sales

Unit II: Retail Strategic Planning and Operation Management, Retail Financial Strategy, Target Market Selection and Retail Location, Store Design and Layout, Visual Merchandising and Displays. Merchandise Planning, Buying and Handling, Merchandise Pricing, Retail Communication Mix, Promotional Strategy.

Unit III: Retail Human Resources Management, Customer Service, GAPs Model, Customer Relationship Management. Retail Selling Skills: Pre-Check, Opening the Sale, Probing, Demonstration, Trial, Close Handling Objections, Closing, Confirmations & Invitations. Retail Management Information Systems, Legal and Ethical Issues in Retailing

Unit IV: Retail Location: Meaning, Importance, Process and Factors Affecting Location; Merchandising: Concept, Importance, Factors Affecting Buying Decision, Role and Responsibilities of Merchandiser; Franchising: Definition, Types and Evolution, Franchising Law in India, Outsourcing: Definition, Scope and Importance; Introduction of the Concept of GST in Retailing.

Unit V: CRM in Retail: Concept, Types of CRM, Application of CRM in Retailing, Strategic Framework for CRM In Retail.

Dynamic Component for Continuous Internal Assessment: Contemporary Developments to the course during the semester.

References:

- Bajaj C, Tuli R. Shrivastava N.V. (2010) Retail Management, Oxford University Press.
- K.V.S. Madaan, (2009) Fundamental of Retailing, Tata MC Graw Hill.
- Michael Levy, Barton Weitz, AjayPandit (2017) Retailing Management, Tata McGraw Hill.
- Piyush Kumar Sinha and Dwarika Prasad Uniyal (2018) Managing Retailing 3rd edition, Oxford University Press (OUP).

SE 2: Introduction to Marketing & Consumer Behaviour

Credit 6

Lectures 60 hours

Marks 75+25

The student will be able to gain

CO1: an introduction to the concept of marketing

CO2: understanding of market strategy, analysis and consumer behaviour

CO3: proficiency in understanding shopper behaviour

CO4: basic understanding of the process of buyers' decision making

CO5: understanding of consumer behaviour in terms of perception and attitude.

Unit I: Introduction to marketing: definition, concept, features, importance, marketing & selling, implementation

Unit II: Market strategy (Advertisements, webpages, reviews, retail environment, and other marketing materials); market analysis (to understand how marketers are trying to influence customers and to evaluate these marketing efforts) & consumer behaviour

Unit III: Introduction to Shopper behaviour, Nature, Types of Shoppers, Importance of understanding shopper behaviour, Buying participants and their role, Concepts and techniques for understanding the retail dynamics of customer

Unit IV: Buying/shopper decision process for products, Need/problem recognition stages in retail buying decision process such as information search alternatives evaluation, brand choice/post purchase dissonance, brand loyalty and motivation research concepts.

Unit V: Model of retail consumer behaviour, personal, social and cultural influence on customer, understanding customer needs and motives; Basic psychological processes (such as memory, habit, identity, preference, and intuition) at different stages of pre-purchase search, to moment-of-purchase deliberation, to post-purchase user experience and word-of-mouth; Influence of social class, types of group & influence of group opinion leadership, word of mouth communication; Motivation theories, perception, importance & meaning, elements of perception; Shopper attitudes: Meaning & Elements, attitude development process. Attitude measurement.

References:

- A. Siva Kumar (2007) Retail Marketing, Excel Books, 2007

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- B.R.Londhe (2006) Retail and Distribution Management, Nirali Prakashan, Mumbai.
- R.K Srivastava (2011) Cases in Retail management, WILEY; First Edition.
- Wayne D.Hoyer & J.Maclnnis (2012) Consumer Behaviour, Cengage Learning; 6th edition.

SE 3: Introduction to Logistics Management

Credit 6

Lectures 60 hours

Marks 75+25

The student will be able to gain

CO1: a basic understanding of the concept of logistics

CO2: understanding of logistics management

CO3: proficiency in understanding logistics strategies

CO4: the skill of effectively outsourcing logistics

CO5: understanding Integrated Logistics & Quality Customer Service.

Unit I: Logistics: Definition, History and Evolution, Objectives, Elements, activities importance, the work of logistics, Logistics interface with marketing, Retail logistics.

Unit II: Logistics Management: Definition, Evolution of the concept, model, process, activities. Achievement of competitive advantage through logistics framework, Role of logistics management, Integrated Logistics Management.

Unit III: Logistics Strategies: Strategic role of logistics, Definition, Role of logistics managers in strategic decisions; Strategy options: Lean, Agile & other strategies; Designing & implementing logistical strategy; emerging concepts in logistics.

Unit IV: Outsourcing Logistics: Reasons, Third party logistics provider, Fourth party Logistics providers (4PL), Stages, Role of logistics providers.

Unit V: Integrated Logistics & Quality Customer Service: Customer service, importance, elements, the order cycle system, distribution channels, Functions performed, Types, designing.

Reference:

- David J. Bloomberg, Stephen Lemay, (2015) Logistics 8th edition, Pearson Education Dorling Kindersley; 1st edition
- Donald J. Bowersox, David J. Closs, M. Bixby Cooper (2004) Logistical Management Tata McGraw Hill Publishing Co. Ltd, New Delhi.
- Donald Waters (2004) Logistics, Palgrave Macmillan, New York.
- Krishnaveni Muthiah (1999) Logistics Management & World Sea borne Trade, Himalaya Publishing House, Mumbai.
- Satish C. Ailawadi & Rakesh Singh (2013) Logistics Management, Second Edition edition Prentice-Hall of India Pvt Ltd., New Delhi.

Semester – 2: Credits: 12 (General) + 18 (Skill)

	Semester-2 (12 General) + 18 (Skill)	Credits	Marks
GE 3	Entrepreneurship & Project Management	6	75+25
GE 4	Web-based computer Applications	6	75+25
SE 4	Store Display and Visual Merchandising	6	75+25
SE 5	Rail Road and Air Cargo Logistics	6	75+25
SE 6	Project	6	100

GE 3: Entrepreneurship and Project Management

Credit 6

Lectures 60 hours

Marks 75+25

The student will be able to gain

CO1: a basic understanding of the concept of entrepreneurship

CO2: understanding of project management, including project life cycles and feasibility studies

CO3: proficiency in organization structure, leadership styles and managing change

CO4: the skill in PERT and CPM techniques

CO5: ability to create and use Project Management Information systems.

Unit I: Entrepreneurship: Concept and Evolution of entrepreneurship, Distinction between entrepreneur and manager, Distinction between entrepreneur and intrapreneur, Attributes of entrepreneurs, Entrepreneurship in a Developing economy, Factors affecting Entrepreneurial development. Role of entrepreneurship in the developing economy. Case Studies and examples of successful entrepreneurs and entrepreneurial ventures.

Unit II: Basics of Project Management: Introduction, Need for Project Management, Project Management Knowledge Areas and Processes, The Project Life Cycle, The Project Manager (PM), Phases of Project Management Life Cycle, Project Management Processes, Impact of Delays in Project Completions, Project Management Principles, Project Identification and Selection: Introduction, Project Identification Process, Project Initiation, Pre-Feasibility Study, Feasibility Studies, Project Break-even point

Unit III: Organisational Structure and related Issues: Introduction, Concept of Organisational Structure, Roles and Responsibilities of Project Leader, Relationship between Project Manager and Line Manager, Leadership Styles for Project Managers, Conflict Resolution, Team Management and Diversity Management, Change management

Unit IV: PERT and CPM: Introduction, Development of Project Network, Time Estimation, Determination of the Critical Path, PERT Model, Measures of variability, CPM Model, Network Cost System, Resources Considerations in Projects: Introduction, Resource Allocation, Scheduling, Project Cost Estimate and Budgets, Cost Forecasts

Unit V: Project Management Information System: Introduction, Project Management Information System (PMIS), Planning of PMIS, Design of PMIS, Project Management Software: Introduction, Advantages of Using Project Management Software, Common Features Available In Most of the Project Management Software.

References:

- Brij Bhushan Goel (1987) Project management : a development perspective, Deep & Deep Publications.
- Chitkara (2012) “Construction Project Management”, Tata McGraw- Hill, New Delhi.
- Prasanna Chandra (2010) “Projects – Planning, analysis, selection, implementation and review” 5th Ed, Tata McGraw-Hill, New Delhi.
- Sanjiv Marwah (2011) Project Management, Wiley Dreamtech.
- Shilpi Jauhari, S.K. Chaturvedi (2014) Project Management, Himalaya Publishing House.

GE 4: Web-based computer Applications

Credit 6

Lectures 60 hours

Marks 75+25

The student will be able to gain

CO1: a basic understanding of the concept of internet, search engines, and web page designing

CO2: understanding of www and web browsers

CO3: proficiency in managing different aspects of web security

CO4: the preliminary skill in data base applications

CO5: ability to engage in enterprise resource planning and data management.

Unit I: Concept of Internet Protocol, Internet services, Client-server organization, FTP, HTTP, Telnet, world wide web, E-mail, Domain Name System, Uniform Resource Locator, Internet Browsers, Searching the web, Search engines, Basics of HTML and web page designing.

Unit II: WWW and Web Browsers: Web Browsing software, Surfing the Internet, Chatting on Internet, Basic of electronic mail, Document handling, Network definition, Common terminologies: LAN, WAN, Node, Host, Workstation, bandwidth, Network Components: Servers, Clients, Communication Media. Web Based Tools for Electronic Commerce: Intranet, Composition of Intranet, Business Applications on Intranet, Extranets. Electronic Data Interchange, Components of Electronic Data Interchange, Electronic Data Interchange Communication Process.

Unit III: Web security – Firewall, Transaction security, Secured Socket layout, Security Threats, Network security. Security Protocols such as HTTP, SSL, Firewalls, Personal Firewalls, IDS, VPNs, Public Key Infrastructure (PKI) for Security. e-Business Applications & Strategies: Business Models & Revenue Models over Internet, Emerging Trends in e-Business, e-Governance, Digital Commerce, Mobile Commerce, Strategies for E-Commerce, Internet based Business Models. Laws Related to IT Security.

Unit IV: Database Applications: Design, create and edit database, Sort and filter data, Query data, Merge data, Create reports. Presentation Applications: Design, create, edit, and deliver presentations, Audio Clips, Use effective communication skills, Select effective digital tools for publishing projects, Software applications.

Unit V: Enterprise Resource Planning (ERP), information systems for supply chain management, Knowledge Management, Data Warehousing, Data Mining, Customers Relationship Management applications, e-tailing, Emerging retail technology and retail IT products and vendors ,E-Business ,E-Business Expectations and Customer Satisfaction.

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Dynamic Component for Continuous Internal Assessment: Contemporary Developments to the course during the semester.

References:

- Alexis Leon & Mathews Leon (2009) Fundamentals of Information Technology, 2/e, Vikas Publishing.
- Girdhar Joshi (2008) Information Technology for Retail, Oxford Printing Press.
- Henry C. Lucas. Jr., Information Technology-Strategic Decision Making for Managers, John Wiley and Sons Private Limited, Singapore
- Information Technology for Retail, Girdhar Joshi, Oxford Printing Press
- Saxena Akash, Sunil Chauhan, Kratika Gupta (2008) Fundamentals of Computer, Laxmi Publication.
- Sinha K. Pradeep, Priti Sinha (2017) Computer Fundamentals - 6th Edition, BPB Publications.

SE 4: Store Display and Visual Merchandising

Credit 6

Lectures 60 hours

Marks 75+25

The student will be able to gain

CO1: an in-depth understanding of store design and display

CO2: understanding of store image, security and managing communication

CO3: proficiency in managing visual merchandising

CO4: an introduction to different aspects of visual merchandising

CO5: knowledge about the growth and future of visual merchandising.

Unit I: Store Design and Display: Introduction, Objectives, Concept of Store Design and Display, Objectives of store design, Purpose and importance of display, Rules of display planning, Display Settings, Store Design, Exterior of a store, Interior of a store, Window displays, Merchandise Presentation Strategies, Colour blocking, Other techniques of merchandise placement, Physical materials used to support the display, Components of display, Some Useful Display Fixtures, Shelves, Gondolas, Round racks, Four ways, Saccades and fixation, Replenishes, Plano gramming.

Unit II: Store Image & Security: Introduction, Objectives, Concept of Image Mix, Elements of Image Mix, Merchandise, Fixtures, Sound/Music, Odour, Visuals, Employees, Elements that Levy Negative Impact on Shoppers, Change of Image, Security Issues.

Managing Communication for a Retail Store Offering: Introduction, Objectives, Marketing Communication, Thematic Communication, Methods of Communication, Graphics, Signage, The Loop for Guiding the Shoppers through a Store

Unit III; Introduction to Visual Merchandising (VM): Introduction, Objectives, Concept of Visual Merchandising, Objectives of Visual Merchandising, Growth of Visual Merchandising, Visual Merchandising in India, Scope of visual merchandising in India, Visual Merchandising as a Support for Positioning Strategy, Prospects of Visual Merchandising, Challenges in Visual Merchandising, The common challenges, Ways to overcome the visual merchandising challenges

Unit IV: The Merchandise Mix: Introduction, Objectives, Concept of Merchandise Mix, Merchandise line, The Assortment of Products, Assortment strategy, Merchandise Mix of Show Off, Role of a merchandiser, Other Atmospherics in Merchandising, Colour scheme, Lighting

Unit V: The Present and Future of Visual Merchandising: Introduction, Objectives, Visual Merchandising at Different Stores, Apparel store, Furniture store, Gift store, Future

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Prospects of Visual Merchandising. Non-Store Merchandising: Introduction, Objectives, Non-Store Retail Merchandising, Television retailing/home shopping, Internet retailing/online shopping, Catalogue Management, Product Presentation in Non-Store Retail Merchandising

Dynamic Component for Continuous Internal Assessment: Contemporary Developments to the course during the semester.

References:

- David Gilbert. (2003) Retail Marketing Management, Dorling Kindersley (India) Pvt. Ltd. New Delhi.
- Fleming P (2003) “Guide to Retail Management” Jaico publications.
- Newman, Andrew J. and Peter Cullen (2007) Retailing Environment and Operations, Thomson Learning, India.
- Neelesh Jain (2008) Retail Management, Global India Publications Pvt. Ltd. New Delhi.
- R.Sudarshan (2007) Retail Management, New Century Publications, New Delhi 2007.
- Swapan Pradhan (2007) Retailing Management- text and cases, Tata Mc Graw Hill, 2012

SE 5: Rail, Road, Air and Ocean Cargo Logistics

Credit 6

Lectures 60 hours

Marks 75+25

The student will be able to gain

CO1: an in-depth understanding of transportation logistics

CO2: understanding of different aspects of Railway logistics

CO3: proficiency in the concept of roadways logistics

CO4: comprehensive understanding of coordination between different logistics segments

CO5: a basic knowledge of air logistics

CO6: the concept of marine logistics, containerization and chartering

UNIT I: Transportation Logistics: significance, utility created by transportation as a means of conquering time and space, features of inbound, outbound, local and medium, long and continental transportation- features of logistics transportation.

UNIT II: Railways: Features and facilities offered by Railways, Factors influencing growth in Rail Logistics, Suitability for different Cargo and distance Ranges segments, Innovative schemes/facilities to popularize rail logistics in India, Railway infrastructure in India and Freight movement, Share of Railways in Cargo movement in India and world-wide.

UNIT III: Roadways: Roadways as a primary mode and complementary mode of transportation in Logistics, Features, Facilities and suitability, Innovations in road ways to make it Logistics friendly, Factors influencing choice, Factors influencing growth in Road Logistics, Suitability for different Cargo and distance Ranges segments, Role National Highways and the Toll highways, Outsourcing Fleets from others, Technology, Cost, Speed, Security and Dynamics, Competition with other modes

UNIT IV: Coordination among different segments: Concept, need and areas of coordination among different modes coordination among supply chain partners, energy, product, prices and logistics environments and logistics problem and prospects in interstate logistics by road, role of truckers bodies in road, rail, air cargo movement, case study: growth of logistics in China.

UNIT V: Air Transportation: Significance of air transportation in logistics: utility created by air transportation in logistics, Air transportation as a means of conquering time and space features, facilities offered by air cargo, factors influencing growth in air logistics, air suitability for different cargo, Innovative schemes facilities to popularize air cargo logistics in India, share of cargo movement in India and worldwide conventions covering the movement of dangerous goods by air.

B. Voc (Retail and Logistics Management)

UNIT VI: Marine Logistics: Containerization and Chartering, Containerization: Genesis, Concept, Classification, Benefits and Constraints; Inland Container Depot (ICD): Roles and Functions, CFS, Export Clearance at ICD; CONCOR; ICDs under CONCOR; Chartering: Kinds of Charter, Charter Party.

Dynamic Component for Continuous Internal Assessment: Contemporary Developments to the course during the semester.

REFERENCES:

- Chi Chu, C. Leung, Van Hui & Cheung (2004) 4th Party Cyber Logistics for Air Cargo, Spring.
- Coyle, Bardi & Novack Transportation (2010) A Supply Chain Perspective, South-Western College.
- Hui, Leong, Arming Zhang, et al, (2004) Air Cargo in Mainland China and Hong Kong, Ash gate.
- L. B. Embry, P. K. Day (2009) Carrier based air logistics study--data sources and issues Digitalized.
- MB. Stroh (2006) A Practical Guide to Transportation and Logistics, Logistics Network Inc.
- MOSWest (2005) Transportation and Cargo Security, Prentice Hall.
- Peter Belobaba, Amedeo Odoni and Cynthia Barnhart (2009) The Global Airline Industry, Wiley.
- Ritter, Barrett and Wilson (2006) Securing Global Transportation Networks, McGraw Hill.

SE 6: Internship Project/ Project

Credit 6

Marks 05+75+20

(3 credits with mentor + 3 credits field work/Library)

The student will be able to gain

CO1: an in-depth understanding of the industrial / business working environment through practical, on-site operations.

Each student of B. Voc Courses shall undergo Practical Internship of four weeks during the vacations after first semester in an approved Business/Industrial/Govt./Service organization. After completion of the training they will have to submit a training report. The internship/project reports will carry 75 marks and viva 20 marks and 05 marks for attendance. It will be evaluated by two examiners (one internal and one external). It is to be submitted by the date fixed by the College.

The students will also have to submit a performance certificate from the company where he/she undertook the training. This report will also be considered while evaluating the training report by examiners.

Alternatively, if it is not possible to do industrial internship the students will prepare a project report on a topic after proper research and industry practice. The project report (Approx 5000 words) will be evaluated as above.

B. Voc (Retail and Logistics Management)

Semester – 3: Credits: 12 (General) + 18 (Skill)

	Semester-3 (12 General) + 18 (Skill)	Credits	Marks
GE 5	E- commerce	6	75+25
GE 6	Accounting for Retail and Logistics Management	6	75+25
SE 7	Retail branding and strategy	6	75+25
SE 8	Sales and distribution Management	6	75+25
SE 9	Business communication and Personality Development	6	75+25

GE 5: E- Commerce

Credit 6

Lectures 60 hours

Marks 75+25

The student will be able to gain

CO1: an in-depth understanding of various aspects of e-commerce

CO2: understanding of different available e-commerce technologies

CO3: proficiency in existence and operations of electronic payment systems

CO4: comprehensive understanding of e-marketing, with special reference to growth in India

CO5: a basic knowledge of e-security

Unit I: Introduction to E-Commerce: Meaning and concept of E-Commerce; History of E-Commerce; Traditional Commerce and E-Commerce; Different types of E-Commerce – B2B, B2C, C2C, B2E, G2C; Need and Role of E-Commerce; Advantage and Disadvantage of E-Commerce – organization, Consumer, Society; E-Business and E-Commerce; Value Chain in E-Business.

Unit II: E-Commerce Technologies: Internet & WWW; Internet Protocols – OSI Model, TCP/IP, TCP, UDP, IP, DNS, FTP, SLIP, PPP; Multimedia technology – ISDN, ATM, Cell relay, desktop Video Conferencing; Information Publishing Technology - HTML, URL, HTTP, HTML FORM. Electronic Data Inter-change: Introduction, Concepts of EDI and Limitation, Applications of EDI, Disadvantages of EDI , EDI model.

Unit III: Electronic Payment System: Transaction through Internet, Requirements of E-Payment System, Post Paid Payment System, Credit Card Solutions, Cyber Cash Internal Cheques, Instant Paid Payment System, Debit Card, Prepaid Payment System, Electronic Cash, Digi Cash, Net Cash, Cyber Cash, Smart Cards.

Unit IV: E-Marketing: Concept of E- Marketing, 4Ps of E-Marketing, Traditional Marketing v/s E-Marketing, Advantages of E-Marketing, Status of E-Marketing in India.

Unit V: E-Security: Areas of Internet Security, Security Threats, Security Breach Avoidance, Defection and Recovery, Confidentiality and Integrity, Electronic Signature, Access Control, Authentication Precaution for Secure E-Commerce.

References:

- Agarwala, K.N. and D. Agarwala (2000) Business on the Net : What's and How's of E-Commerce , Laxmi Publications.
- James A. O'Brien, George M. Marakas (2010) Management Information Systems, Global 10th Edition, TMH.

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- Ravi Kalkota (2002) Frontiers of E-Commerce, Pearson.
- Sundeep Oberoi, E-security and you (2001) Electronic authentication and information systems security: the IT Act, 2000 explained, Tata McGraw Hill Pub.

GE 6: Accounting for Retail and Logistics Management

Credit 6

Lectures 60 hours

Marks 75+25

The student will be able to gain

CO1: a preliminary understanding of various aspects of accounting

CO2: understanding of different procurement procedures

CO3: proficiency in prevalent cost concepts

CO4: comprehensive understanding of break-even analysis and decision making

CO5: a basic interpretation of financial & cash flow statements

Unit I: Introduction, Meaning and Definition, Objectives of Accounting, Functions of Accounting, Users of Accounting Information, Limitations of Accounting, GAAP, IFRS, Journal, ledger, trial balance, Balance sheet, capital and revenue item

Unit II: Procurement procedures- Store procedures and documentation in respect of receipts and issue of stock, Stock verification, Valuation of material receipts, Inventory control- Techniques of fixing level of stocks- minimum, maximum, re-order point, safety stock, determination of optimum stock level, Determination of Optimum Order quantity- Economic Order Quantity (EOQ), Techniques of Inventory control- ABC Analysis, Fast, Slow moving and Non moving (FSN), High, Medium, Low (HML), Vital, Essential, Desirable (VED), Just-in-Time (JIT)- Stock taking and perpetual inventory system, use of control ratios, Inventory Accounting, Consumption- Identification with products of cost centers, Basis for consumption entries in financial accounting, monitoring consumption.

UNIT III: Cost Concepts and Classification, Cost sheet, Variable Costing and Absorption Costing- Emerging Costing Approaches, Life cycle costing- Quality costing- Kaizen costing- Throughput costing- Back flush costing.

Unit IV: Break even analysis, Decision Making: Managerial application of CVP analysis- Make or Buy Decision- Alternative Methods of production- Buy or Lease decision- Shut down or continue- Repair or replace- Accepting bulk orders for idle capacity utilization- Pricing under different situation- Suitable product mix- Key factor etc.

Unit V: Financial Ratio Analysis, Cash Flow Statement.

References:

- Gupta R.L., M. Radhaswamy (2018) Advanced Accountancy 17th edition, Sultan Chand & Sons, New Delhi

B. Voc (Retail and Logistics Management)

- Sehgal Ashok, Sehgal Deepak (2004) Advanced Accounting, Taxman Allied Services (P) Ltd., New Delhi.
- Shukla M.C., Grewal T.S (2016) Advanced Accounts 19th edition, S. Chand & Company Ltd., New Delhi.
- Singh Surendra & Kaur Rajeev (2015) “ Basic Financial management” 3rd edition, Mayur Paper back 2015
- Tulsian PC, Financial Accounting, Tata McGraw-Hill, New Delhi.2007

SE 7: Retail Branding & Strategy

Credit 6

Lectures 60 hours

Marks 75+25

The student will be able to gain

CO1: a preliminary understanding of the meaning of brand

CO2: understanding of the consumers perspective about the brand

CO3: proficiency in managing the brand portfolio

CO4: comprehensive understanding of retailing organisations and their growth

CO5: a basic understanding of strategic approaches to management of retail

Unit I: Brand: Meaning, Definition, Role of Brand, Brand Positioning & Personality of a Brand

Unit II: Consumer's concept of 'Self-Image', Brand Proposition, Brand Name & Brand Awareness

Unit III: Managing Brand Portfolio, Contemporary view of the role of Brand Management, Various issues related to Brand Management, Process involve in Building & Managing Brand in retail management

Unit IV: Retailing organizations, Formulation and evaluation of strategic options within retailing organizations, Mergers, Acquisition and strategic alliances involving retailers, Analysis of organization structure and design among retail organizations

Unit V: Strategic Management: Approaches to Strategic Analysis of the retailing environment, Approaches to the analysis of resources, Competence and Strategic capability, Application of technique such as Value Chain Analysis & Bench Marking

References:

- A. Siva Kumar (2007) Retail Marketing, Excel Books.
- B.R. Londhe (2006) Retail and Distribution Management, Nirali Prakashan, Mumbai.
- Bajaj, Tuli & Srivastava (2010) Retail Management, Oxford University Press, New Delhi.
- R.K Srivastava (2011) Cases in Retail management, WILEY; First Edition.
- Robert F. Lusch (2015) Retailing 8 edition, Cengage Learning India Private Limited.
- Wayne D. Hoyer & J. MacInnis (2012) Consumer Behaviour, Cengage Learning; 6th edition.

SE 8: Sales and Distribution Management

Credit 6

Lectures 60 hours

Marks 75+25

The student will be able to gain

CO1: an in-depth understanding of sales management and personal selling

CO2: understanding of the compensation and supervision of salesmen besides setting sales territories and targets

CO3: proficiency in evaluation of sales performance and sales cost analysis

CO4: sound understanding of marketing channels

CO5: basic understanding of distribution management and evaluation of channel performance

Unit I: Sales Management; Objectives and Functions; Setting and Formulating Personal Selling Objectives; Recruiting and selecting Sales Personnel; Developing and conducting Sales Training Programmes. Sales organization, Sales function & policies, Personal selling - nature, scope & objectives, Formulating Personal selling strategy.

Unit II: Designing and Administering Compensation Plans; Supervision of Salesmen; Standards and Performance; Motivating Sales Personnel; Sales Meetings and Sales contests. Planning the Sales Effort - Sales planning and Budgeting, Estimating Market Potential and Sales forecasting, Setting the sales territory & quotas, Sales and cost Analysis.

Unit III: Designing Territories and Allocating Sales efforts; Objective and Quotas for sales Personnel; Developing and Managing Sales Evaluation Programme; Sales Cost and Cost analysis. Organizing and Directing the sales Force - Recurring and training sales personnel, Designing & compensating sales Personnel, Motivating and Leading the sales force, Evaluating sales force performance

Unit IV: Marketing Channels, their Structure; Channel Intermediaries-Role and Types; Wholesaling and Retailing; Logistics of Distribution; Channel Planning, Organizational Patterns in Marketing Channels: Assessing Performance of Marketing Channels; International Marketing Channels.

Unit V: Distribution Management - Managing marketing logistics & channels, Channel Integration - VMS, HMS, Channel Management, and Marketing channel Policies & legal issue. Channel Institutions & control, Wholesaling &- Retailing, Channel Information systems, Managing & Evaluating Channel Performance Case & future trends in sales & distribution management.

Reference:

- Gupta, S.L (2005) Sales and Distribution Management: Text and Cases – An Indian Perspective, Excel Books.
- Havaldar, K. K. & Cavale, V. M. (2007) Sales and Distribution Management: Text & Cases, Tata McGraw-Hill.
- Still, R. R., Cundiff, E. W. & Govoni, N. A. P(1998) Sales Management: Decision Strategies and Cases, Dorling Kindersley.
- www.hbsp.harvard.edu

SE9: Business Communication and Personality Development

Credit 6

Lectures 60 hours

Marks 75+25

The student will be able to gain

CO1: basic understanding of theories explaining personality, factors governing success and oral communication

CO2: in-depth perspective on attitude and motivation

CO3: ability to analyze different aspects of self esteem

CO4: proficiency in skills (body language, time management, etiquette) that enhance personality

CO5: skills of writing an effective CV, participating in group discussions and mock interviews

Unit I: Introduction to Personality Development: The concept of personality, Dimensions of personality, Theories of Freud & Erickson, Significance of personality development. The concept of success and failure: Meaning, Hurdles in achieving success, Overcoming hurdles, Factors responsible for success; meaning of failure - Causes of failure. SWOT analysis. The objectives of managerial oral communication; improving the facility of oral communication. Both Transmission and reception in six managerial situations such as (i) Information sharing (ii) Conversation (iii) Interview (iv) Committee (v) Negotiation (vii) Presentation.

Unit II: Attitude & Motivation: Attitude, Concept, Significance, Factors affecting attitudes, Positive attitude - Advantages, Negative attitude-Disadvantages, Ways to develop positive attitude, Differences between personalities having positive and negative attitude. Concept of motivation: Significance, Internal and external motives, Importance of self- motivation, leading to de-motivation

Unit III: Self-esteem: Symptoms, Advantages, Do's and Don'ts to develop positive self-esteem, Low self-esteem, Symptoms, Personality having low self-esteem, Positive and negative self-esteem. Interpersonal Relationships, Defining the difference between aggressive, submissive and assertive behaviours, Lateral thinking.

Unit IV: Other Aspects of Personality Development: Body language, Problem-solving, Conflict and Stress Management, Decision-making skills, Leadership and qualities of a successful leader, Character building, Team-work, Time management, Work ethics, Good manners and etiquette, functional CV, oral presentation on any topic, checklist for preparing for an interview

B. Voc (Retail and Logistics Management)

Unit V: Employability Quotient: Resume building, the art of participating in Group Discussion, Facing the Personal (HR & Technical) Interview, Frequently Asked Questions, Psychometric Analysis, Mock Interview Sessions.

References:

- Andrews, Sudhir (2008) How to Succeed at Interviews, Tata McGraw-Hill.
- Heller, Robert (2008) Effective leadership. Essential Manager series. DK Publishing.
- Hindle, Tim (2008) Reducing Stress. Essential Manager series. Dk Publishing.
- Hurlock, E.B (2006) Personality Development, 28th Reprint. New Delhi: Tata McGraw Hill.
- Lucas, Stephen (2011) Art of Public Speaking. 11th edition, McGraw-Hill Education.
- Stephen P. Robbins and Timothy A. Judge (2014) Organizational Behavior 16th Edition: Prentice Hall.

B. Voc (Retail and Logistics Management)

Semester – 4: Credits: 12 (General) + 18 (Skill)

	Semester-4 (12 General) + 18 (Skill)	Credits	Marks
GE 7	Information system for retail and logistics	6	75+25
GE 8	Customer Relationship Management	6	75+25
SE 10	Road Transport Management	6	75+25
SE 11	Retail planning and legal framework	6	75+25
SE 12	Project Report	6	100

GE 7: Information system for Retail and Logistics

Credit 6

Lectures 60 hours

Marks 75+25

The student will be able to gain

CO1: basic understanding of information technology and logistics

CO2: in-depth perspective IT for supply chain management

CO3: ability to understand the concept of logistics information

CO4: proficiency in Logistics information system (LIS) architecture

CO5: comprehensive knowledge of information forecasting

Unit I: Information Technology and Logistics: Electronic Data Interchange, Personal Computers Artificial Intelligence/Expert system, Communications Bar coding and Scanning, Electronic Data Interchange standards, Communication, Information and Future directions.

Unit II: Information Technology for Supply Chain Management (SCM): Bull whip effect, IT in supply chain, Business Process Reengineering, Enterprise Resource Planning, Electronic data interchange (EDI), Problems with EDI, Impact of Internet on SCM.

Unit III: Logistics Information: Meaning and Need, forms of; LIS: Definition, Information functionality, activities involved in transaction system, Principles of designing or evaluating LIS applications.

Unit IV: LIS Architecture: Components, Two forms of activities, Planning and co-ordination flows and operating flows, Flow and use of integrated logistics information.

Unit V: Information Forecasting: Definition, Process, Component, Characteristic of forecast compound, Approaches, Forecast techniques, Forecast error, E-Commerce.

Dynamic Component for Continuous Internal Assessment: Contemporary Developments to the course during the semester

Reference:

- Ashok Sharma, Sarika Kulkarni (2008) Supply Chain Management, - Tata McGraw Hill Publishing Co Ltd., New Delhi.
- David J. Bloomberg, Stephen Le May & Joe B. Hanna (2008) Logistics. Prentice-Hall of India Pvt Ltd., New Delhi.
- Donald J. Bowersox & David J. Closs (2007) Logistical Management. Tata McGraw Hill Publishing Co. Ltd, New Delhi.

B. Voc (Retail and Logistics Management)

- Donald Waters. (2004) Logistics. Palgrave Macmillan, New York.
- Krishnaveni Muthiah (1999) Logistics Management & World Sea borne Trade. Himalaya Publishing House, Mumbai.
- Satish C. Ailawadi & Rakesh Singh (2005) Logistics Management. Prentice-Hall of India Pvt Ltd., New Delhi.

GE 8:Customer Relationship Management

Credit 6

Lectures 60 hours

Marks 75+25

The student will be able to gain

CO1: fundamental understanding of customer and customer relationship management (CRM)

CO2: perspective on business intelligence and application service providers

CO3: ability to analyze Sales force automation and its implication for CRM

CO4: proficiency in skills evaluate CRM

CO5: skills involved in implementation of CRM

Unit I: Definition of customer and CRM, CRM technology components, customer life style, customer interaction. Difference between CRM and e-CRM, features of e-CRM. CRM Theory & Development and Relationship Marketing.

Unit II: Data, Information & Technology: CRM Technology and Data Platforms, Database and Data Management, and the role of Business Intelligence (BI) in CRM; Application Service providers (ASPs): their role and function, advantages and disadvantages of implementing ASP.

Unit III: CRM: Impact on Sales & Marketing Strategy, Definition and need of sales force automation (SFA), barriers to successful SFA functionality, technological aspect of SFA, data synchronization, flexibility and performance, reporting tools.

Unit IV: CRM Evaluation: measurement of CRM effectiveness including CRM's impact on company efficiency, effectiveness, and employee behavior, Components of enterprise marketing automation (EMA), marketing campaign, campaign planning and management, business analytic tools, EMA components (promotions, events loyalty and retention programs), response management.

Unit V: Implementing CRM: Pre implementation, kick off meeting, requirement gathering, prototyping and detailed proposal generation, development of customization, Power , beta test and data import, training, roll out and system hand off, ongoing support, system optimization, follow up, Privacy, Ethics and Future of CRM.

Dynamic Component for Continuous Internal Assessment: Contemporary Developments to the course during the semester

References:

- Kumar V. & Werner J. (2008) Customer relationship management, Willey India.

B. Voc (Retail and Logistics Management)

- Mukherjee Kaushik (2008) Customer relationship management, Prentice Hall of India Private Limited, New Delhi.
- Rai Kumar Alok (2011) Customer relationship management- Concept and Cases, Prentice Hall of India Private Limited, New Delhi. 2011
- S. Shanmugasundaram (2008) Customer relationship management, Prentice Hall of India Private Limited, New Delhi.

SE 10: Road Transport Management

Credit 6

Lectures 60 hours

Marks 75+25

The student will be able to gain

CO1: fundamental understanding of planning for road transport

CO2: perspective on vehicle selection

CO3: ability to analyze costing of vehicles

CO4: proficiency in documentation involved in road transportation of cargo

CO5: knowledge of legislation involved in road transportation

Unit I: Planning and Resourcing: Need for Planning, Fleet management , Main types of road freight transport, Transport resource requirements, Vehicle routing and scheduling issues, Data requirements, Manual methods of vehicle routing and scheduling, Computer routing and scheduling, Information system applications, GPS, RFID.

Unit II: Vehicle Selection: Types of vehicles, Types of operations, Load types and characteristics, Main types of vehicle body, Implications of vehicle selection, Vehicle acquisition.

Unit III: Vehicle Costing: Reasons for road freight transport vehicle costing, Main types of costing systems, Vehicle standing costs, Vehicle running costs, Overhead costs, Costing the total transport operation, Whole life costing, Vehicle cost comparisons, Zero-based budget.

Unit IV: Documenting and Information Flow: Advices, Planning, FTL, LTL, Documentation, Road Receipts / Truck Receipts / Way Bills (RR / LR), Consignment note CMR (EU & Canada), Booking, Invoicing & Information Flow, Long Haul, Coordination with terminals, Exceptional Loads (Project Cargo).

Unit V: Legislation: Operator licensing, Driver licensing, Driver's hours regulations – Road transport directive, Tachographs, Vehicle dimensions.

Dynamic Component for Continuous Internal Assessment: Contemporary Developments to the course during the semester

Reference:

- Alan Rushton, Phil Croucher, Peter Baker (2014) Logistics and Distribution Management: Understanding the Supply Chain Fifth Edition.
- Dileep R. Sule (2001) Logistics of facility location and allocation, 1st edition, CRC Press.

B. Voc (Retail and Logistics Management)

- John J. Coyle, Edward J. Bardi, C. John Langley (2002) The management of business logistics, 7th edition, West Publishing Company.
- Martin Christopher (1998) Logistics & supply chain management, Prentice Hall Financial Times.
- Nigel Slack (2008) Operations and process management: principles and practice for strategic impact, Financial Times Prentice Hall.

SE 11: Retail Planning and Legal Framework

Credit 6

Lectures 60 hours

Marks 75+25

The student will be able to gain

CO1: fundamental understanding of strategic management of retail in India

CO2: holistic knowledge of retail operations

CO3: ability to manage the various aspects of human resources involved in retailing

CO4: proficiency in legal framework documentation involved in retailing

CO5: comprehensive knowledge of mall management

Unit I: Introduction to Strategic Management : Retailing, Role, Relevance & Trends, Retail Customer, Retail Market Segmentation & franchising, Relationship marketing in Retailing , Retailing in banking and other financial services, mutual funds and Insurance, Quantitative methods in marketing, Social Marketing in Retail Management Strategic Management, Retail in India, Services Marketing and Management, Brand Management, International / Strategies, Pricing, Advertising & sales promotion.

Unit II: Operations in Retailing: Retail location strategy, Product and Merchandise Management, TQM (Mathematics / Statistics), EDP / MIS Logistics & SCM Security Measures, Footfalls / computerized methods non-computerized methods, Visual / Display methods, Merchandising & Management, Fashion Designing. Finance in Retailing: Accounting Methods, Capex planning, Risks, Capex Planning, Accounting Processes Accounting Software's, WIP, Accounting Methods, Strategic Cost Management, Management of obsolete goods.

Unit III: Human Resources Management in retailing: Retail Organization, Laws involved in HR Motivation, Customer Psychology, Training needs for employee, Top grading & Obstacles to Top grading, Astronomical Costs of Miss Hires, Company Killers and Company Derails, Recruitment Best Practices, How to avoid Mis-Hires, CIDS (chronological in Depth Structure) based Model, Coaching to fix weakness, Interview guide, Avoiding Legal Problems: Bulletproof Approach.

Unit IV: Legal framework for Retailing: License, Contracts & Recovery, Legal Process, PF/ESIC & Exemptions, Foods & Restaurants, PPF, IR Law: Shops & establishments, IPR Patents, Copy right & Trademarks, Inclusion of Service Mark, Procedure and Duration of Registration, Collective Mark, Certification Mark, Procedural Compliance for Establishing an Retail Store, Customer Rights, Consumer Protection Acts, Unfair Trade Practices, Holding of Contests and Schemes, Disparaging Products of Competitors, Correctness of Representation , The Standards of Weights and Measures Act, Procedures applicable for a Retail Store.

B. Voc (Retail and Logistics Management)

Unit V: Mall Management, Types of Various retail formats, concepts in mall design, factors influencing malls establishments, Aspects in Finance, Aspects in Security / accounting - aspects in HR, Aspects in Quality Management, Statistical methods used in measuring mall performance.

Dynamic Component for Continuous Internal Assessment: Contemporary Developments to the course during the semester

References:

- Bhatia S.C. and Randhawa Gurpreet (2008) Retail Management, Atlantic Publishers & Distributors Pvt. Ltd. New Delhi.
- Mathur U.C. (2010) Retail Management, I.K. International Publishing House Pvt. Ltd. New Delhi
- Nair Suja (2006) Retail Management, Himalya Publishing House, New Delhi.
- Pradhan Swapna (2009) Retailing Management, Tata McGraw-Hill, New Delhi.
- Varley Rosemary (2001) Retail Product Management, Routledge, New York.
- V.S.Ramaswamy and S.Namakumari (2017) Marketing Management, Macmillan Publishers India Ltd. New Delhi.

SE 12

Internship Project / Project

Credit 6

Marks 05+75+20

(3 credits with mentor + 3 credits of field work/Library)

The student will be able to gain

CO1: an in-depth understanding of the industrial / business working environment through practical, on-site operations

Each student of B.Voc Courses shall undergo Practical Internship of four weeks during the vacations after third semester in an approved Business/Industrial/Govt./Service organization. The objective of this training is to make the student acquainted with the industrial / business working environment. After completion of the training they will have to submit a training report. The internship/project reports will carry 75 marks and viva 20 marks and 05 marks for attendance. It will be evaluated by two examiners (one internal and one external). It is to be submitted by the date fixed by the College.

The students will also have to submit a performance certificate from the company where he/she undertook the training. This report will also be considered while evaluating the training report by examiners.

Alternatively, if it is not possible to do industrial internship the students will prepare a project report on a topic after proper research and industry practice. The project report (Approx 5000 words) will be evaluated as above.

Semester – 5: Credits: 12 (General) + 18 (Skill)

	Semester-5 (12 General) + 18 (Skill)	Credits	Marks
GE 9	Human Resource in Retail and Logistics Operations	6	75+25
GE 10	Marketing Management	6	75+25
SE 13	Supply Chain Management	6	75+25
SE 14	Materials Planning and Control	6	75+25
SE 15	Enterprise Resource Planning	6	75+25

GE 9: Human Resource in Retail and Logistic Operations

Credit 6

Lectures 60 hours

Marks 75+25

The student will be able to gain

CO1: basic understanding of human resource management in retail operations

CO2: knowledge of organisation structures and design

CO3: in-depth understanding of planning processes and procurement of human resources

CO4: proficiency in managing internal mobility and training of human resources

CO5: comprehensive knowledge of compensation systems, challenges of managing employees.

Unit I: Introduction to Human Resource in retail and logistic operations: Evolution, Importance, Scope, functions, Long Run and Short Run Objectives.

Unit II: Planning for Human Resource, Organizational charts, Design for specific needs.

Unit III: Job analysis, Process of job analysis, Job specification, Methods of job analysis, Recruitment & selection.

Unit IV: Placement, Induction, socialization, Internal mobility of human resource. Training of employees, Need for training, objectives and methods of training, evaluation, Motivation of human resource.

Unit V: Compensation management & grievance redressal, Compensation planning, wage systems, factors influencing wage system, Absenteeism & Employee turnover, Labour participation in management. Dynamic Component for Continuous Internal Assessment: Contemporary Developments to the course during the semester

References:

- Almas Sultana (2014) Human Resource Management in Organized Retail Industry in India, Global Journal of Finance and Management.
- Aswathappa K. (2005) Human Resource and Personnel Management Tata McGraw-Hill Education.
- Bhatla Neeta, Krishan Kant Pandey (2014) The impact of HR issues in retail sector in emerging market, IOSR Journal of Business and Management.
- Michael Levy and Barton Weitz (2007) Retailing Management, Mc Graw Hill, Irwin.
- Dwivedi R.S (2009) Human Resource in Indian Organisation, Vikas Publishing House.

GE10:Marketing Management

Credit 6

Lectures 60 hours

Marks 75+25

The student will be able to gain

CO1: basic understanding of marketing concepts

CO2: knowledge of marketing mix strategies

CO3: in-depth understanding of pricing, policies and promotion

CO4: proficiency in understanding marketing research

CO5: an introduction to digital marketing

Unit I: Introduction: Meaning and definition of different marketing concepts, functions of marketing, environmental factors, market segmentation, buying motive and process, consumer and customer, Factors affecting consumer behavior, Marketing Plan;

UNIT II: Marketing Mix Strategies: meaning, product, product mix, product life cycle, importance of branding, packaging and labeling.

Unit III: Pricing: Pricing policies, objectives, factors influencing pricing decisions, different pricing strategies: skimming, penetration. Market structure, channel of distribution and its importance; Promotion: Advertising, objectives and functions, types of advertising, personal selling and direct marketing, Sales Promotion.

UNIT IV: Marketing Research: Definition, Scope and Process, Marketing Risk and Marketing Audit.

UNIT V: Digital marketing: concept, importance, techniques. Facebook, LinkedIN and Twitter, Google Adwords, Google Plus, Search Engine Optimization (SEO), YouTube and Video Marketing, Affiliate Marketing & Google AdSense, E-mail Marketing, Lead Generation & Marketing Automation, Google Analytics and Webmaster Tool, Case Studies.

Dynamic Component for Continuous Internal Assessment: Contemporary Developments to the course during the semester.

Reference:

- Bhattacharjee C. (2006) Service Marketing, Excel Books, New Delhi.
- Kotler Philip and Gray Armstrong (2016) Principles of Marketing, Prentice Hall, New Delhi.

B. Voc (Retail and Logistics Management)

- Parry E. Mark (2005) Strategic Marketing Management, Tata McGraw Hill, New Delhi 2005
- Rajan Saxena (2009) Marketing Management, Tata McGraw-Hill, New Delhi.
- Sharma Kapil (2006) Marketing Management, Global India Publication Pvt. Ltd., New Delhi.

SE 13: Supply Chain Management

Credit 6

Lectures 60 hours

Marks 75+25

The student will be able to gain

CO1: basic understanding of supply chain management

CO2: knowledge of supply management systems

CO3: in-depth understanding of cross functional teams and supply management, information sharing

CO4: proficiency in quality management concepts

CO5: an introduction to statistics for presentation

Unit I: Supply Chain Management: Supply management an organization spanning activity. How purchasing becomes supply management? Supply Management and the Bottom line. The four phases of supply management. (Generation of requirement, sourcing, pricing and post Award activities).

UNIT II: Supply management systems: B2B, Strategic Supply Management. Enabling Concepts in Supply: Buyer-supplier relationship: Developing and Managing collaboration and Alliance relationship.

UNIT III: Cross-functional teams and supply-Management Activities. Challenges and problems with cross functional approach, ERP Systems, Negotiations and Bidding, Information sharing.

Unit IV: Quality Management Concepts: ISO Certification. Methods of Control: Product, Process, Risk, Evolution, Management Approaches, Quality Management Support System. R Chart, P Chart and X charts; Acceptance Sampling & OC Curve in production Control.

Unit V: Statistics for Presentation: Elements of data representation for (i) Tabulation and cumulative frequency, (ii) histogram, (iii) measures of central Tendency, (iv) Probability Theory (Basic concepts excluding non-conditional and Bayes Theorem)

Dynamic Component for Continuous Internal Assessment: Contemporary Developments to the course during the semester

References:

- Anderson, Sweeney & Williams (2017) Quantitative Methods for Business, 13rd edition South Western Cengage.

B. Voc (Retail and Logistics Management)

- Bowersox D, Class J. David & Cooker (2011) Supply Chain Logistics Management, McGraw Hill.
- Chopra S, Meinde P & Kalra D.V. (2009) SCM-Strategy Planning & Operation, 3rd Edition, Pearson Education.
- Fawcett, Ellram& Ogden (2007) Supply Chain Management, From Vision to Implementation, Pearson education.
- Render Barry, Stair, Hanna & Badri (2008) Quantative Analysis for Management, 10th Edition, Prentice Hall.
- Saxena Anurag & Kaushik Sircar (2008) Logistics and SCM, Jaico Publishing House, 2008
- Vohra N.D. (2006) Quantitative Techniques in Management, 3rd edition, McGraw Hill 2006

SE 14: Materials Planning and Control

Credit 6

Lectures 60 hours

Marks 75+25

The student will be able to gain

CO1: basic understanding of costing for decision making

CO2: knowledge of standard costing

CO3: in-depth understanding of budgeting and budgetary control

CO4: the understanding of usage of computers in materials management

CO5: skill to evaluate the Material Management Function

UNIT I: Costing for Decision making: Marginal Cost, Fixed and Variable Costs (Period and Product Costs), Marginal Costing System, Marginal Cost Equation, Profit -Volume Ratio, Break Even Analysis, Margin of Safety, Cost-Volume Profit Analysis and its Uses, Concept of Relevant Costs in Decision Making, Simple Decision Making Problems including Make or Buy Decision, Domestic versus International Purchase.

Unit II: Standard Costing: Meaning of standard cost, Standard Costing System, Material Cost Variance Analysis.

UNIT III: Budgeting & Budgetary Control: Meaning of Budget, Types of Budgets, Budgetary Control System, Material Requirement Planning, Principal Budget Factor, Budget Manual, Preparation of Different Types of Budgets Like Sales, Production, Material Consumption, Purchase Budget etc. Fixed and Flexible Budget.

Unit IV: Computers in Material Management: Use of Computers in Material Planning, Purchase, Store, Issue and Inventory Control. Integrated Information System for Material Management.

Unit V: Evaluation of Material Management Function: Meaning and Procedure. Evaluation Tools and Techniques.

Dynamic Component for Continuous Internal Assessment: Contemporary Developments to the course during the semester

References:

- Arora M.N. (2019) Management Accounting 10th edition Vikas Publishing House Pvt. Ltd.
- Dutta A.K. (1998) Materials Management: Procedures, Text and cases 2nd edition, Prentice Hall of India Pvt. Ltd., New Delhi.

B. Voc (Retail and Logistics Management)

- Gopalakrishnan, P. and Sundarson, M. (2007) Materials Management: An Integrated Approach, Prentice Hall of India Pvt. Ltd., New Delhi.
- Maheshwari & Mittal (2010) Management Accounting 3rd edition, Shree Mahavir Book, Depot, New Delhi.
- Saxena, V.K. and Vashist CD (2015) Cost and Management Accounting, 7th edition Sultan Chand and Sons, New Delhi.

SE15: Enterprise Resource Planning

Credit 6

Lectures 60 hours

Marks 75+25

The student will be able to gain

CO1: an overview of enterprise resource planning (ERP)

CO2: knowledge of selection and implementation of ERP and business process re-engineering

CO3: basic understanding of ERP packages and framework

CO4: the knowledge of technical architecture of ERP systems

CO5: understanding of ERP, supply chain management and SAP

Unit I: Enterprise Resource Planning: Evolution of ERP, MRP and MRP II, problems of system Islands, need for system integration and interface, enterprise wide software solutions, difference between integrated and traditional information systems, early and new ERP packages, overview of ERP packages, ERP products and markets, players and characteristics, benefits of ERP implementations, critical success factors, pitfalls.

Unit II: Selection and Implementation: Opportunities and problems in ERP selection and implementation, ERP implementation, identifying ERP benefits, team formation-consultant intervention, Business Process Reengineering (BPR) concepts: emergence of reengineering, business process, rethinking of processes, identification of reengineering, need, preparing for reengineering; Implementing change, change management, integrating with other systems, Post ERP implementation.

Unit III: Business Units of ERP package, functional architecture, salient features of each Unit of ERP, comparison of ERP packages. Implementation of ERP systems, Business process modeling, Gap analysis, Framework for ERP implementation, business process, emerging trends in business process, selection of ERP, process of ERP implementation, managing changes in IT organization, preparing IT infrastructure, measuring benefits of ERP, implementation obstacles, risk factors.

Unit IV: Technical Architecture of ERP Systems: Communication and networking facilities, distributed computing, client server systems, concepts of business objects, distributed object, computing architecture, support for data mining and warehousing, EDI, internet and related technologies, Net technologies.

Unit V: ERP and Supply Chain Management: Extending scope of ERP through SCM, Value chain differentiation between ERP and SCM, issues in selection and implementation of SCM solutions, E-business and ERP, BI, SAAS, business opportunities, basic and advanced business models on internet, security and privacy issues, recent developments, future and

B. Voc (Retail and Logistics Management)

growth of ERP, role of ERP in international business, Introduction to SAP and application of SAP in Retail and logistics.

Dynamic Component for Continuous Internal Assessment: Contemporary Developments to the course during the semester

Reference:

- Hammer, Micheal and Jamts Chamby (2006) Reengineering the corporation, Harper Business; Revised, Updated edition.
- Jyothindra Zaveri (2012) Enterprise Resource Planning Himalaya Publishing House Pvt. Ltd.
- Motiwalla F. Luvai (2011) Enterprise Systems for Management 2 edition, Pearson.
- Ptak, Carol A. & Eli Schragenheim (2000) Enterprise Systems for Management, St. Lucie Press NY.
- D.P. Goyal, Enterprise Resource Planning

Semester – 6: Credits: 12 (General) + 18 (Skill)

	Semester-6 (12 General) + 18 (Skill)	Credits	Marks
GE 11	Marketing for Non-profit organizations	6	75+25
GE 12	Business Ethics	6	75+25
SE 16	Packing and Packaging Management	6	75+25
SE 17	Warehouse management	6	75+25

GE11 : Marketing for non-profit organizations

Credit 6

Lectures 60 hours

Marks 75+25

The student will be able to gain

CO1: an overview of Non-Profit Organisation (NPO)

CO2: knowledge of different types of NPOs and their imaging

CO3: basic understanding of managing marketing effort

CO4: the knowledge of market segmentation of NPOs and their public relations

CO5: understanding of managing human resources in NPOs

Unit I: Introduction: Non-Profit Organisation (NPO), Concept, Non-Profit Organisations in India, types, problems. Characteristics, Need, Importance of Marketing of Non-Profit Organisation

Unit II: Differentiation of NPOs: Concept of Responsive Organisation, Image management, image causation, image modification, Mission, Exchange, Environment affecting operations of NPOs (Public), Image & Satisfaction measurement.

Unit III: Managing Marketing efforts: Understanding Consumer, Product, Product Mix, Product Mix decisions for Non-profit Organisations, Pricing for Non-Profit organisations.

Unit IV: Market Segmentation for Non-profit organisation, Target Marketing, Promotion: Advertising, personal selling, sales promotion and Public Relations for Non-profit Organisation.

Unit V: Managing Human Resource: Attracting People, Analysing people, Recruitment, Members and membership criterion, Volunteers; Managing Financial Resources: Donor Marketing, Attracting Funds, Analysing Donor markets, Fund raising goals and strategy.

Dynamic Component for Continuous Internal Assessment: Contemporary Developments to the course during the semester

References:

- Andreasen Alan R & Kotler P (2007) Strategic marketing for NPOs, 7th edition, Pearson 2007
- Kapil Sharma (2006) Marketing Management, Global India Publication Pvt. Ltd., New Delhi.

B. Voc (Retail and Logistics Management)

- Laidler-Kylander, N., & Stenzel, J. S. (2014) *The brand idea: Managing nonprofit brands with integrity, democracy, and affinity*. San Francisco.
- Lee, N. & Kotler, P. (2015) *Social Marketing: Changing Behaviors for Good* 5th edition SAGE Publications, Inc.
- Mark E. Parry (2005) *Strategic Marketing Management*, Tata McGraw Hill, New Delhi.

GE 12: Business Ethics

Credit 6

Lectures 60 hours

Marks 75+25

The student will be able to gain

CO1: an introduction to business ethics

CO2: knowledge of dilemmas of ethical decision making in business

CO3: basic understanding of ethics management

CO4: an overview of ethics in different functional areas

CO5: understanding of the relationship between corporate social responsibility and business ethics

Unit I: Introduction to Business Ethics: Definition of ethics and business ethics, Law vs. Ethics, Ethical principles in business, approaches to business ethics: Teleology, Deontology and Utilitarianism, importance of business ethics, debate for and against business ethics.

Unit II: Ethical Decision Making in Business: Ethical dilemmas in business, ethical universalism and relativism in business, factors affecting the business ethics, process of ethical decision making in business, individual differences in managers and ethical judgement, whistle blowing.

UNIT III: Ethics Management: Role of organizational culture in Ethics, structure of ethics management: Ethics programmes, code of conduct, ethics committee, ethics officers and the CEO, communicating ethics: communication principles, channels, training programmes and evaluation, Ethics audit, corporate governance and ethical responsibility, transparency international and other ethical bodies, recent trends, issues and cases.

UNIT IV: Ethics in Functional Areas: Marketing, HR, Production, IT/Systems and Finance, Environmental ethics, Gender ethics, Ethics in international business

Unit V: Corporate social responsibility: concept, benefits, challenges, laws relating to CSR, experience in India, CSR & ethics

Dynamic Component for Continuous Internal Assessment: Contemporary Developments to the course during the semester.

Reference:

- Albuquerque Daniel (2010) Business Ethics, Oxford University Press.
- Chakraborty S. K. (2003) Management and Ethics Omnibus, Oxford University Press.

B. Voc (Retail and Logistics Management)

- Ghosh P. K. (2010) Business Ethics, Vrinda Publications.
- John R. Boatright (2008) Ethics and the Conduct of Business, Pearson Education.
- Manuel G. Velasquez (2008) Business Ethics, Pearson Prentice-Hall.
- Trevino K. Linda and Katherine A. Nelson (1995) Managing Business Ethics, John Wiley & Sons.

SE 16: Packing and Packaging Management

Credit 6

Lectures 60 hours

Marks 75+25

The student will be able to gain

CO1: knowledge to differentiate packaging and packing

CO2: overview of types of packaging

CO3: basic understanding of packing considerations

CO4: an understanding of different materials used for packing

CO5: proficiency in managing the economics of packaging

Unit I: Packing and Packaging: Meaning, Functions and Essentials of Packing and Packaging. Difference, Types of packing: for Storage, Overseas Shipment, Inland Transportation, Packaging for Product content Protection, Test of packaging: Mechanical, Climatic & Lab test, International Care labeling code, Packaging cost.

Unit II: Packaging Types, Requirements of Consumer Packaging, Channel Member Packaging and Transport Packaging, Shrink packaging, Identification codes, bar codes, and electronic data interchange (EDI), Universal Product Code, GS1 Standards, package labels, Symbols used on packages and labels; Heavy, Medium and small Packaging, Active packaging, Child-resistant packaging, Pilfer/Tamper Evident/Proof Packaging, Product-Packaging compatibility, Pharma Packaging, Food Packaging, Electronic goods Packaging, FMCG packaging, Heavy Engineering Goods/Equipment Packaging.

Unit III: Packing Considerations: Protection, Convenience, Environment, Use/Re-use Cost and Competition, Packing as a systems approach to Logistics, Transport/Storage Requirements: Physical, Chemical Environmental, Biological Nature of the Products, Packing as Protection Against Hazards, Package design considerations: Structural design, marketing, shelf life, quality assurance, logistics, legal, regulatory, graphic design, end-use, environmental factors, Packaging for Marketing and Visual Appeal, Biodegradation, Recycling: Glass, Plastic & Paper Reuse, Sustainable packaging, Waste management.

Unit IV: Packaging/Packing Materials & Components: Various Materials/Metals, Flexible, Folding, Insulated, Corrugated Packing Materials- Packing materials: Paper, Wood, Adhesive, Aluminum foil, Cushioning-stuff, Packaging gas, Pallet, Paperboard, Plastic wrap, Shrink wrap, Screw cap, Slip sheet- Security printing- Stretch wrap -Time temperature indicator-Tinplate. Packaging Industry Process and Machining: Packaging Demands of Consumer goods Industry, Packaging Demands of Industrial Users, Technology Trends in Packaging Industry, Aseptic processing, Authentication, Automatic identification and data capture, Blow fill seal, Blow moulding, Containerization, Electronic article surveillance, Graphic Design, Induction sealing, Plastic welding, Printing.

B. Voc (Retail and Logistics Management)

Unit V: Packaging Economics: Packaging Cost Vs Product cost, Cost Reduction in Packaging, Packing for Inventory Control, Value Analysis, Packing and Value Engineering, Packaging Laws, Consumer Protection in Food Packaging, Marking and Labeling, Eco-friendly Packaging for Exports, Scientific Packaging, Standardization in Packaging. Quality assurance, Radio- frequency identification, Track and trace, Vacuum forming, Verification and validation, Barcode printer, Barcode reader, Bottling line, Carton machine, Check weighed, Conveyor system, Heat gun, Heat sealer, Industrial robot, Injection molding machine, Logistics automation.

Dynamic Component for Continuous Internal Assessment only: Contemporary Developments Related to the Course.

REFERENCES:

- Calver, G. (2003) 'What Is Packaging Design', Rot vision.
- Dean, D. A. (2000) 'Pharmaceutical Packaging Technology' Taylor & Francis.
- McKinley, A. H. (2004) 'Transport Packaging', IoPP.
- Scott Boylston (2009) Designing Sustainable Packaging, Lawrence King.
- Soroka, W (1995) 'Fundamentals of Packaging Technology', IPP.

SE 17: Warehouse Management

Credit 6

Lectures 60 hours

Marks 75+25

The student will be able to gain

CO1: knowledge of warehousing

CO2: overview of warehouse management systems

CO3: basic understanding of inventory management

CO4: a preliminary understanding of ABC inventory control

CO5: proficiency in analyzing performance measures of Material Handling Systems

Unit I: Introduction to Warehousing: Concept, Decision making, Operations, Need for warehousing, Issues affecting warehousing, Various warehousing facilities, Different types of ware houses, Characteristics of ideal ware houses.

UNIT II: Warehouse Management Systems: Introduction, necessity of WMS, Logics of determining locations and sequences, Independent demand systems, Uncertainties in material management systems, Dependent demand systems, Distribution resource planning.

Unit III: Introduction to Inventory Management: Role in supply chain, Role in competitive strategy, Role of inventory: Functions of inventory, Types of inventory, WIP inventory, Finished goods inventory, MRO inventories, Cost of inventories, Need to hold inventory.

Unit IV: ABC Inventory Control: Managing inventories by ABC, Multi-echelon inventory systems, Managing inventory in multi echelon networks, Managing inventory in single echelon networks, Various approaches, Distribution approaches, true multi echelon approach.

Unit V: The Principles and Performance Measures of Material Handling Systems: Introduction. Vehicle travel path (time), Handling time, vehicle utilization, no of loads completed, congestion, Effective performance systems, Fundamentals of various types of material handling systems, automated storage and retrieval systems, Bar coding technology and applications RFID technology.

Reference:

- Gopalakrishna, P. and Shandilya M.S. (2013) Stores Management and Logistics. S. Chand & Co.
- Martin Christopher (2003) Logistics – The Strategic Issues, Chapman & Hall.
- Martin Christopher (2016) Logistics and Supply Chain Management. Pearson education.
- Raghuram G. (2015) Logistics and Supply Chain Management. MacMillan.

