

**Syllabus and COs
for
Diploma in Logistics & Supply
(Cargo Management)**

Diploma in Logistics and Supply (Cargo Management)
SEMESTER I

DLS (CM) 11: Business Communication (English) (BCE)

Course Outcomes:

CO 1: The student will be able to comprehend the importance of verbal and non-verbal communication and also apply the basic principles to communicate effectively.

Unit I: Understanding the basic structure used in English Language for formation and comparing it with that of our primary language, understanding and identifying ‘Sense of Sentence’, identifying and defining ‘Subject’ and ‘Verb’, Concept of Verbs and Verb Forms.

Unit II: Structures of Present, Past, Continuous and Future Sentence formation with First, Second and Third forms of Verbs, learning usage of Helping Verbs like Has, Have and Had, do, does, did, will, shall etc., knowing Subject-Verb Agreement principles, knowing ‘Subject Modifiers’ and their usage in sentence formation

Unit III: Structures of Sense of Being (SoB) sentences, and for ‘Sense of Possession (SoP)’, knowing the type of sentences, usage of helping verbs like ‘is/am/are/was/were’ etc as Main Verbs for Present, Past, Continuous and Future times senses

Unit IV: Sentence Structures using ‘THERE’ and ‘IT’, constructing sentences denoting the ‘Location’ of the subject with ‘THERE’, handling ‘identified’ and ‘unidentified’ Subjects, constructing sentences with ‘IT’ where ‘Active Subject’ is not available.

Unit V: Understanding ‘Sense’ of Grammar in special reference to Primary Language, usage of Pronoun, Articles and Prepositions

Unit VI: Sentence constructions using ‘Modals’ like can, could, should, must, have to, will be able to, should have, must have etc.

Unit VII: Communication and English Lab Sessions to reinforce and enhance the effectiveness of Classroom Session.

Section A : These sessions to cover Verb and Verb Form vocabulary, Word vocabulary, ‘Group of Words’ vocabulary, Grammar aspects

Section B : Elementary Reading, Listening and Writing skills practice and ‘Trade Specific Vocabulary building’

Text & Reference Books:

1. Expressions, A language Lbas for English, C. Sumant, Publisher : ‘iGrowth’.
2. SuperFast English and Instant English , Abdul Salam Chaus, Publisher : Salaam Chaus, Jafar Nagar, Masjid Complex, 110, Jafar Nagar, Nagpur.

3. How to Translate into English, Prof. Rajendra Prasad Sinha, Bharti Bhawan, 4271/3, Ansari Road, Dariya Ganj, New Delhi.

DLS (CM) 12: Basic Computer Application

Course Outcomes:

CO 1: To promote professional excellence in the area of Cargo Logistics Management towards National Prosperity through Sustainable Development.

Unit I: Fundamentals of Computers - Identification of various hardware components of a computer system, Architecture and types of Computers. Hardware- Input, Output, Processing, Storage and Networking devices with their working principals. Software - System and Application Software. Computer Languages - Generation of Languages and their Features. Introduction to Information Technology- Data, Information, role of Information System in organization, computer based Information System, latest trends and challenges of information Systems, Information System applications in Air cargo, water Cargo, road and railway cargo, use of RFID and GPS.

Unit II: Familiarization of various Operating Systems - WINDOWS: Basic Operations, Utilities and Features (Explorer to manage files). UNIX/LINUX: Introduction, Features and Basic Commands, introduction to mobile operating system – ANDROID and mobile applications. Fundamentals of Networking - types of networks (LAN, WAN, MAN), Network topologies, and Components of Computer Network -Server, Workstation, NIC, Hubs, Switchers, Cables etc. Internet and its use in business – e-commerce, business communication, sending documents, E-mail, www, Searching, Uploading and Downloading from Internet, Hardware and Software requirement of Internet, Search Engines, Browser, Video conferencing.

Introduction to mobile communication and mobile computing, Computer Virus, Trojan horse and Worms and their Prevention

Unit III: Application Software (Open Office Automation Software) - *Word Processing Software*- Word Processing Basics, spell check and grammar, Formatting Text and Documents, Headers, Footers, Tables, Working with Graphics, Templates, printing documents, advance report formatting, Introduction to Mail Merge

Presentation Software - Presentation software Basics, Creating Presentation, slide layouts, working with Text, Graphics, pictures, audio and video in presentation, Slide transition, Custom animation, managing slide shows

Unit IV: Spreadsheet Software - Working with cell and cell Addresses, Inserting and Deleting Cells, rows and columns, cell ranges, Formatting and styles, entering formula, inbuilt simple Functions, Working with multiple sheets, Visual presentation of data using charts, adding Graphics, Table format, sorting and filtering data, Auto fill

Unit V: Advance Features of Spreadsheet Software – logical and text functions, Validation, Conditional formatting, Editing charts, Using Worksheet as Databases, Subtotals, Goal Seek, Solver, Pivot tables, Protection of workbooks, managing large spreadsheets.

Case Study: Role of Information Technology for Supply Chain Management

Case Study: Role of internet in logistics and Supply chain management

Text & Reference Books:

1. Antony Thomas. Information Technology for Office. Pratibha Publications.
2. Gini Courter & Annette Marquis. Ms-Office 2007: BPB Publications.
3. Leon A & Leon M, Introduction to Computers, Vikas Publication.
4. Leon, Fundamentals of Information Technology, Vikas Publication.
5. Kakkar D.N., Goyal R, Computer Applications in Management, New Age.
6. Lucas, Henry C., Information Technology for Management, New Delhi, Tata McGraw-Hill.
7. P.K. Sinha, Computer Fundamentals, New Delhi, BPB Publications
Christian Crumlish, ABCs of the Internet, New Delhi, BPB Publications.
8. Das, Sumitabha, Unix Concepts and Applications, New Delhi, Tata McGraw Hill Pub. Co. Ltd.

DLS (CM) 13: Logistics & Supply Chain Management

Course Outcomes:

CO 1: Students will be able to understand fundamentals of supply chain management concepts along with its application to evaluate and manage an effective supply chain.

CO 2: Also, students will understand the fundamental role of logistics to transportation and warehousing.

Unit I: Logistics Management: Origin & Definition, Concepts of Logistics, Types of Logistics, Logistics management, warehouse nature management, concepts in Logistics distribution.

Unit II: Routing & Transportation Management, Some Commercial Aspects in Distribution Management, Codification, Distribution Channel Management, Distribution Resource Planning (DRP), Logistics in 21ST Century.

Unit III: Supply Chain Management: Introduction & Development, Nature & Concepts, importance of Supply Chain in business, Value Chain, Components of Supply Chain, The Need for Supply Chain, Understanding the Supply Chain Management, Participants in SCM, Global Importance.

Unit IV: Role of a manager In Supply Chain, Supply Chain Improvement, Inter-relation between enablers and levels of Supply Chain Improvement.

Unit V: Aligning the supply chain with business strategy, SCOR Model, SCM Relationships & Conflict Management in Business.

Text & References Books:

1. Essentials of Supply Chain Management, Michael H. Hugos.
2. Logistics and Supply Chain Management, Martin Christopher.
3. Designing and Managing the Supply Chain, David Simchi-Levi, Philip Kaminsky and Edith Simchi-Levi.
4. Purchasing and Supply Chain Management, Robert Monczka, Robert Handfield, Larry Giunipero and James Patterson.
5. Logistics Management and Strategy: Competing through the Supply Chain, Alan Harrison and Remko Van Hoek.
6. Manufacturing Planning and Control for Supply Chain Management, F. Robert Jacobs, William Berry, D. Clay Whybark and Thomas Vollmann.
7. Purchasing and Supply Chain Management: Analysis, Strategy, Planning and Practice, Arjan J. Van Weele.
8. Strategic Supply Chain Management: The Five Core Disciplines for Top Performance,
Shoshanah Cohen and Joseph Roussel. Supply Chain Logistics Management by Donald Bowersox, David Closs and M. Bixby Cooper.
9. Supply Chain Management: Strategy, Planning, and Operation, Sunil Chopra and Peter Meindl.
10. Textbook of Logistics and Supply Chain Management, D. K. Agrawal.

DLS (CM) 14: Materials Management

Course Outcomes:

CO 1: It will help the students understand the basic principles related to materials used in a manufacturing facility.

CO 2: This also include purchase of materials, storage and handling and inventory management. CO 3: Other concepts include vendor selection, purchase budgeting and stores management.

Unit I: Introduction of Materials Management : Objective of Materials Management, Importance & Integrated approach of Materials Management, Materials Management Information System(MMIS), Materials Management Organizations.

Unit II: Material Planinig & Control : Introduction to Materials Management ,factors affecting & techniques of Materials planning, material budgeting, material control, material control cycle.

Unit III: Purchasing Management : Importance and Objectives of Purchasing, Functions of Purchasing Department, Purchase organization, Purchase Cycle, Purchasing Policies, Make-or-Buy, Role of Purchasing Manager, Speculative Buying, Vendor Rating, Rating Techniques, Value Analysis.

Unit IV: Stores Management and Materials Handling: Nature of Stores, Stores layout, Stock Verification, Classification and Codification.

Organization for Materials Handling, Factors affecting the selection of Materials Handling Equipment, Types of Materials Handling Systems, Selection and Design of Handling System, Types of Materials Handling Equipment, Materials Handling and Plant Layout, Evaluation of Materials Handling Performance, Safety in Materials Handling.

Unit V: Inventory Management: Meaning, Definition and Objectives of Inventories, Inventory Costs, Process of Inventory Management and Control, Fixed Order Quantity System (Q - System), Fixed Order Period System (P - System), Inventory Control Techniques – ABC Analysis, Measurement of Effectiveness of Inventory Management.

Text & Reference Books:

1. Introduction To Materials Management, A. K. Chitale.
2. Production and Operations Management, Ashwathapa.

DLS (CM) 15: Minor Industry Project (BCE+LS+MM)

SEMESTER II

DLS-CM 21: Basics of Accounting

Course Contents:

CO 1: The students should be able to understand the basic principles of accounting.

CO 2: Hands-on-training on TALLY will be helpful for implementation of these principles in real time applications.

UNIT I: Introduction: Introduction and Purpose of Accounting, uses of Accounting Information & Basic Accounting Concepts.

UNIT II: Accounting Structure: Process of Accounting, Journal, Ledger & Trial Balance based on double entry book keeping.

UNIT III: Practical System of Accounting: Cash Book, Sales & Purchase of goods. Bill of exchange, Bank Reconciliation Statements.

UNIT IV: Preparation of Financial Statements: Income Statements, (Profit and Loss A/C), Statement of Financial Position (Balance Sheet) and Adjustments (only Closing Stock, Prepaid, Outstanding, Unearned & Accrued), Valuation of Assets and Depreciation methods.

UNIT V: On the basis of Specialization: Case Study

PRACTICALS

- Exploration of features of TALLY software.
- To create & design various types of documents related to accounting such as Cash Book, Sales & Purchase of goods. Bill of exchange etc.

Reference Book:

1. T. S. Grewal, Introduction to accountancy, S. Chand & co. Ltd.

DLS (CM) 22: Corporate Business Communication

Course Outcomes:

CO 1: To consistently impart advanced professional knowledge and thus improve the skills in the area of Cargo and Logistics Management functions.

Unit I- Business Communication: Concept, nature, definitions, features, importance, processes, models and functions of Business Communication. Objective, types, dimensions, channels, pattern and barriers of effective communication.

Unit II- Media of Corporate Business Communication (Written and body language): verbal, nonverbal, listening skills, Johri Window, Corporate communication and image management, Kinesics (15%) Physical Appearance, Postures, Gestures, Dress Code for Formal and Informal occasions. (Postures and Gestures should include Hand and Legs movement, whole body movement-Sitting, standing, walking style, Facial expressions etc.) Tools of Corporate communication, process of corporate communication.

Unit III- Corporate Business Correspondence : Design of stationary, feature writing and production of House journal/Newsletter, Layout, Business report writing, Notices, Minutes of the Meeting, Press releases, Handouts, Circulars and memo report, applications for employment and goodwill letters, Public Speaking(Elocution/Extempore/Welcome speech/Vote of Thanks/Presentation-with and without use of Audio visual aids)

Unit IV- Corporate Business Presentations : Business Report presentations, public speaking, how to participate in radio talk and panel discussion on factory site, Professional use of telephone, mobiles, Grapevine, face to face, Negotiation, Formal and Informal etc. Recent developments in modes of Corporate Business Presentations like internet, video conferencing etc.

Unit V- Self Development : Development positive attitude, Self Motivation, Time Management, Stress Management, Self Discipline, Meditation with Nature/oneself, factory and modern business manners.

Note: Respective subject faculty should ensure that theory is put into practice by implementing exercises based on hypothetical situations. For e.g.: By giving hypothetical situations students should be asked to write down minutes of the meeting, job applications, letter writing, agenda, press notes, etc. for better understanding. The concerned faculty should stress the importance of positive attitude that can be reflected through verbal and non verbal communication (e.g : Constructing positive phrases .)

Books Recommended:

1. Business Communications for managers by Payal Mehra, Pearson Education.
2. Business Communications for Today by Courtland L .Bovee & John V.Thill, Pearson Education.
3. Business Communications (Thomson), seventh Edition by Krizan, Merrier, Logan & Williams.

DLS (CM) 23: Principles and Practices of Supply Chain

Course Outcomes:

CO 1: Students will be able to understand fundamentals of supply chain management concepts along with its application to evaluate and manage an effective supply chain.

Unit I- Introduction-What is Management, Definition of management, Functions of Management, Principles & Practices of Supply Chain Management, Is management Art or Science? Case study: “Naughty Rule”. Leadership- Tasks of Leaders, Meaning, Approaches. Case study: “ Unfair treatment” Coordination & Control Concept, Nature, Types, Methods of Coordination, Management Control, Types, Principles, Techniques of Controlling.

Case study: “Patel Mills”.

Unit II- Understanding Principles & Practices of Logistics & Supply: Twenty first century logistics & supply chains, the supply chain revolution – generalized supply chain

model – supply chain and networks logistics: the logistics of business - the logistical value proposition- the work of logistics-logistical operating arrangements - flexible structure – Supply Chain Synchronization. Case-Stud: India's Generic Drugs and Consumer Surplus.

Unit III- Order Processing & Information System : The Customer order cycle, order management system, customer relationship management, Customer Focused Marketing - Customer Services Customer Satisfaction , Procurement And Manufacturing: The Quality Imperative- Procurement – Manufacturing-Logistical Interfaces, Information Technology Framework: Information System Functionality - Supply Chain Information System Design, Global Supply Chain Integration-Supply Chain Security. Case-Study: BioPharma, Inc.

Unit IV- Advance Purchasing & Material Operations: Overview of Purchasing & Material Management, Nature of Organizations & its types, Conflict in Purchasing among vendor parties, Ethical Concepts in Purchase. Make or Buy or Outsourcing and Vendor Analysis, Price and Pricing Impact on purchase, Purchasing Cycle and Contracts / Purchase Orders, Negotiations, Application of Computers in Purchasing. Types of material handling equipment: Importance of material handling equipment's & Study of safety procedure for material handling devices.

Case Study: ONGC Ltd.

Unit V- Material Relationship Development and Management: Functionality, Principles and Participants Transportation Service, Warehousing Ownership Arrangements and security, Material Requirement Planning Systems (MRP): Meaning, purpose and advantage of MRP, Data Requirements and Management –Bill of Materials, Master Production Schedules, process of MRP, output of MRP. Materials Management in JIT Environment: Zero inventory concept, Excess Inventory: A Roadblock to World-Class Manufacturing, Materials management in JIT environment, Vendor Managed Inventory, vendor relationship in JIT context.

Case Study: Case Study: Specialty packaging corporation

Books Recommended:

1. Foundations of Inventory Management – Zipkin, McGraw Hill.
2. Orliky's MRP – Plossl
3. Production Planning And Inventory Control - Seetharama L Narsimhan, Dennis W McLeavy, Peter J Billington, Prentice Hall Of India Pvt Ltd.
4. Introduction To Materials Management, - J. R. Tony Arnold, Stephen N. Chapman - Prentice Hall
5. Principles of Inventory and Materials Management - Richard J. Tersine, Prentice Hall PTR
6. Essentials of Inventory Management - Max Muller, AMACOM/American Management Association
7. Production And Inventory Control - J H Greene, Homewood III: Richard D Irwin
8. World Class Supply Management - Burt, Dobbler, Starling , TMGH, 7th ed.

9. Global operations & Logistics- Philippe - Pierre Dornier, John Wiley & sons Inc, New York, 2002.
10. Supply Chain Management – Sunil Chopra, Peter Meindl, Dharam Virkalra- Pearson Education in South Asia.
11. CRM Concepts & Cases By Alok Kumar Rai PHI Learning Private LTD., Delhi, 2013.
12. Harold Koontz, O'Donnell and Heinz Weihrich, "Essentials of Management", New Delhi, Tata McGraw Hill, 1992.
13. R.D.Agrawal," Organization and Management", New Delhi, Tata McGraw Hill,1995.

DLS(CM) 24: Case Studies in Logistics & Supply

Course Outcomes:

CO 1: Case studies in logistics and supply chain will provide knowledge about current scenario of various industries of India as well as situated in other countries also.

Unit I- General Duties & Store Records- Introduction to safety measures-personal, general and store room, procedure of custody & keys, Knowledge about first aids & firefighting equipment. Introduction to Stores, Store layout and its types , Centralized and Decentralized Stores and its Advantages and Disadvantages, roles and responsibilities of a store manager importance of Maintenance & Care of material on site/store and related safety precaution of material and its bylaws. Case Study Presentation.

Unit II- Inventory and Warehouse Operations- Basic of Inventory& Warehouse concept; need for inventory; types of inventory, functions, use; Dependent and Independent Demand II, Strategic Inventory Management: Objectives and Importance of the inventory management function in reference to Profitability, Strategy, customer satisfaction and Competitive Advantage. Strategic Warehousing-Warehousing Operations-Warehousing Ownership Arrangements- Warehouse Decisions. Case Study Presentation.

Unit III- Logistics & Supply Chain Drivers- Impellers of Logistics & Supply Chain, Financial Measures of performance, drivers of supply chain performance, framework for structuring drivers, inventory, facilities, transportation management system, warehouse management system, Logistics & Supply Chain information system and e-commerce.

Case Study Presentation.

Unit IV- Designing the network of Logistics & Supply- Role of distribution in the logistics & supply chain, factors influencing distribution network design decisions, framework for network design decisions, Indian FMCH Sector- Distribution Channels, Indian Commodities Distribution Channels.

Case Study Presentation.

Unit V- Planning and Coordination- Role of Forecasting in Supply Chain, Characteristics & Component of demand forecasting, aggregate planning in logistics & supply chain, sales and operations planning, managing supply , managing demand, implementing sales and operations, Bullwhip effect, coordination in supply chain.Global v/s Domestic SCM, logistics & supply chain challenges for the future.

Case Study Presentation.

Unit VI- Material Management and CRM Approach- Material Requirement Planning Systems (MRP), Materials management via JIT approach, stages of material operations in factory site and other factory outlets, material relationship in business, CRM concepts and practices, CRM success factors, CRM process/cycle(business and working hours) & CRM Value chain, Stakeholders in CRM. Case Study Presentation.

Books Recommended:

1. Supply Chain Logistics Management - Bowersox, Closs & Cooper – McGrawHill, 2nd Indian ed.
2. World Class Supply Management - Burt, Dobbler, Starling , TMGH, 7th ed.
3. Global operations & Logistics- Philippe - Pierre Dornier, John Wiley & sons Inc, New York, 2002.
4. Designing and Managing the supply chain - David Simchi, Levi & Philip Kaminsk, McGraw-Hill Companies Inc., 2000.
5. Supply Chain Management – Sunil Chopra, Peter Meindl, Dharam Virkalra- Pearson Education in South Asia.
6. CRM Concepts & Cases By Alok Kumar Rai PHI Learning Private LTD., Delhi, 2013.

DLS (CM) 25: Major Industry Project

The students will be involved fully for training and working in the project with some related industry. Also, the students are required to present their work done time to time as per the instructions given by the Course Coordinator.