

## மனோன்மணியம் சுந்தரனார் பல்கலைக்கழகம்

## MANONMANIAM SUNDARANAR UNIVERSITY

# SYLLABUS FOR DIPLOMA IN LOGISTICS MANAGEMENT PROGRAM OFFERED THROUGH DIRECTORATE OF VOCATIONAL EDUCATION (COMMUNITY COLLEGES AND VOCATIONAL SKILL DEVELOPMENT CENTRES) FROM 2019 – 2020



கல்விசார் நிலைக்குழுக் கூட்டம்

MEETING OF THE STANDING COMMITTEE ON ACADEMIC AFFAIRS HELD ON WEDNESDAY THE 22<sup>nd</sup> JANUARY 2020

Program Code: 5240

#### DIPLOMA IN LOGISTICS MANAGEMENT

தளவாடங்கள் மேலாண்மை பட்டயம்

#### SCHEME OF EXAMINATION

Subject code	Title of the Course	Credit	Hours	Passing Minimum
Semester I				
C19LM11/E19LM01	Fundamentals of Management	6	90	40/100
C19LM12/E19LM02	Logistics Management	6	90	40/100
C19LM13/E19LM03	Supply Chain Management	6	90	40/100
C19CE10/E19CE10	Communicative English	6	90	40/100
C19LMP1/E19LMP1	Practical I-MS office	4	120	40/100
Semester II				
C19LM21/E19LM04	Warehouse Management	6	90	40/100
C19LM22/E19LM05	Inventory Management	6	90	40/100
C19LS23/E19LS05	Life Skill	6	90	40/100
C19LM24/E19LM06	Fundamentals of	6	90	40/100
	Quantitative Methods			
C19LMPW/E19LMPW	Internship/Project	10	150	40/100

**Eligibility for admission**: Pass in 10<sup>th</sup>std examination conducted by the Govt. of Tamil Nadu Board of Secondary Education, Government of Tamil Nadu or any other equivalent examination.

**Examination**: Passing Minimum for each Course is 40%. Classification will be done on the basis of percentage marks of the total marks obtained in all the Courses and as given below:

40 % but less than 50 % - Third class 50 % but less than 60 % - Second class 60 % and above - First class

## **Theory Paper**

Internal Marks-25 External Marks-75

#### **Syllabus**

## Semester I

Course I - Fundamentals of Management

Course II - Logistics Management

Course III - Supply Chain Management Course IV - Communicative English

Course V - Practical I-MS Office

#### Semester II

Course VI - Warehouse Management

Course VII - Inventory Management

Course VIII - Life Skill

Course IX - Fundamentals of Quantitative Methods

Course X - Internship/Project

## \*(Semester Pattern for Community College Only)

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#### PROGRAM OBJECTIVE:

- 1- To analyze historical data and track the real-time movement of goods into and out of a business.
- 2- To creating visibility into a company's supply chain.
- 3- To reduce and manage inventory to the lowest possible level.

## SEMESTER I COURSE I

(C19LM11/E19LM01)FUNDAMENTALS OF MANAGEMENT

## **Objective**

• The course is designed to expose the student on the principles of management and associated concepts so as to facilitate him manage the affairs of organization.

Unit-I 18 Hrs

Nature and functions of Management – Skills and levels of management – Different approaches to management – systems approach – Social Responsibility of Business.

Unit-II 18 Hrs

Planning – Nature – Importance – Types – Steps in planning process – MBO – Strategic planning process.

Unit-III 18 Hrs

Formal / Informal organization – Organizational structure – organizing process – Departmentalization – Authority delegation – Decentralization – Coordination.

Unit-IV 18 Hrs

Staffing procedure-Recruitment, Selection, Induction, Performance and Potential Appraisal;— Training and development, Methods, Design & Evaluation of T & D Programmes,

Unit-V 18 Hrs

Direction and Communication – Processes, Barriers and Types, Decision making, System and process of controlling, Control techniques, Total quality management – Use of IT in management functions

## Outcome

• The student will have the knowledge of management and would be efficient in managing the routine affairs of the organization and steer the organization towards success.

#### References

- Essentials of Management Harold Koontz, Heinz Weihrich
- Principles of Management Tripathi, Reddy
- Management: A competency based approach Hellriegel and Slocum

## COURSE II (C19LM12/E19LM02)LOGISTICS MANAGEMENT

#### **OBJECTIVE:**

- To identify Multi-modal challenges and opportunities.
- To find out commercial distribution.
- To know about Importance of distribution.

Unit-I 18 Hrs

Overview of Logistics – Responsibilities of the logistics operator – Multi-modal challenges and opportunities.

Unit-II 18 Hrs

Importance of distribution, Logistics - commercial distribution, the role of logistics in the provision of distribution services.

Unit-III 18 Hrs

Concept of multi modal transport – Inbound and Outbound Logistics System - Different transport modes – Modal interfaces – Inter-modal systems – road/rail/sea; sea/air; road/air; road/rail, sea/rail, sea/road – Inland Container Depot (ICD) & Container, Freight Station (CFS) Terminals.

Unit-IV 18 Hrs

Vehicles - trucks, trains, aircraft and ships, Swap bodies, double stacks, trailer types, - Role of (3PL) Service Providers, Types of 3PL, Emergence of 4PL service.

Unit-V 18 Hrs

Freight management, freight forwarding logistics – Tracking of consignments, depots, warehouses, Warehousing Providers - Just In Time' delivery, Supply chain concept.

#### **OUTCOME:**

- 1- Understand the freight forwarding logistics.
- 2- Receive ideas on Swap bodies.
- 3- Learn Inbound and Outbound Logistics System.

#### References:-

- 1. Logistics by Donald Waters
- 2. Logistics Management and Strategy by Alan Harrison and Remko Van Hoek

## COURSE III (C19LM13/E19LM03)SUPPLY CHAIN MANAGEMENT

#### **Objective**

• The course intent to educate the student on the concepts associated with supply chain so as to facilitate the procurement and the supply of required goods and commodities to the satisfaction of the customers.

Unit I 18 Hrs

Supply Chain – Definition, Generalized Supply Chain Model, Components, features, Types, benefits, Extended organization, Integrative Management, Responsiveness and Obstacles, Supply Chain Synchronization. Supply Chain Security-International Sourcing.

Unit II 18 Hrs

Customer Focused Marketing – Customer Services, customer service priorities and standards, customer service strategy, Customer Satisfaction and retention, Customer Success.

Unit III 18 Hrs

Procurement - Development and Management of suppliers. Manufacturing – scheduling, flow systems, automation, flexibility, Inventory Functionality, Logistical Interfaces, Packaging, Materials Handling. Outsourcing – importance, determinants for outsourcing decisions, vendor-managed inventories.

Unit IV 18 Hrs

Transport Functionality, Principles and Participants- Transportation Service - Transportation Economic and Pricing- Transport Administration - Documentation. Warehousing Operations, Warehousing Ownership Arrangements- Warehouse Decisions.

Unit V 18 Hrs

Comprehensive Information System Integration-Communication Technology, Supply Chain Information System, E commerce advantages and disadvantages for SCM, Management of Supply Chain Relationships.

#### **Outcome**

The student will be able to understand the importance of timely service to customers and develop the knowledge on the challenges for the same. The course will enable him to develop solutions for the supply chain issues.

#### **Reference Books:**

- 1. Supply Chain Logistics Management Bowersox, Closs & Cooper
- 2. World Class Supply Management Burt, Dobbler, Starling, TMGH, 7th ed.

#### **COURSE IV**

## (C19CE10/E19CE10)COMMUNICATIVE ENGLISH

#### 1. Basic Grammar:

- a. Review of grammar
- b. Remedial study of grammar
- c. Simple sentence
- d. Word passive voice etc.

## 2. Bubbling Vocabulary:

- a. Synonyms
- b. Antonyms
- c. One work Institution

## 3. Reading and Understanding English

- a. Comprehension passage
- b. Précis writing
- c. Developing a story from hints.

## 4. Writing English

- a. Writing Business letters.
- b. Paragraph writing
- c. Essay writing
- d. Dialogue writing

## 5. Speaking English

- a. Expressions used under different circumstances
- b. Phonetics

#### Reference:

- 1. V.H.Baskaran "English Made Easy"
- 2. V.H.Baskaran "English Composition Made Easy" (Shakespeare Institute of English Studies, Chennai)
- 3. N.Krishnaswamy "Teaching English Grammar" (T.R.Publication, Chennai)
- 4. "Life Skill" P.Ravi, S.Prabakar and T.TamzilChelvam, M.S.University, Tirunelveli.

#### **COURSE V**

#### PRACTICAL I

#### (C19LMP1/E19LMP1)MS OFFICE

#### **List of Exercises**

- 1. Capabilities of computers, Block diagram, generations of computers
- 2. Types of computers, Input devices, output devices, memory devices, Storage devices, RAM and ROM, Internet and its concepts.
- 3. Applying advanced formatting techniques, formatting pages, working with columns, constructing high quality tables
- 4. Creating outlines in word. Working with complex documents, managing data with word
- 5. Mail merge, publishing online forms, adding references to documents, working together on documents.
- 6. Creating Excel worksheets: entering and editing cell entries, working with numbers, changing worksheet layout, other formatting options, printing in excel, creating charts and statistical functions.
- 7. Creating power point presentations.

#### Reference Book:-

- 1) Gini Courter & AnnettelMaraquis-MS Office 2010, BPB Publishing
- 2) Stephen L. Nelson-Office 2010
- 3) Tata McGraw Hill-Computer reference

#### SEMESTER II

#### **COURSE VI**

#### (C19LM21/E19LM04)WARE HOUSE MANAGEMENT

## **Objective**

• The course intent to educate the student on the concepts associated with ware housing, its operation and management.

Unit I 18 Hrs

Warehouse Management (WM) - Concepts & function of Warehouse Management. Types - Private Warehousing, Public Warehousing, Contract Warehousing.

Unit II 18 Hrs

Location selection for warehouse, Ware house Layout design and Structure. Warehouse Equipment, Racking, Dock Equipment, Pallets, Lift Truck, Automated Equipment.

Unit III 18 Hrs

Basic Warehouse Operations: Receiving, Basics Documents, Receiving Scheduling, Unloading, Palletization, Update, Putaway operations, Putaway Strategies, Rainbow Pallets, 2-step Putaway. Warehouse Management Vs Stores Management.

Unit IV 18 Hrs

Material handling Decision on Warehousing and storekeeping, strategies of storekeeping. Material handling - System design, Automated Data Collection Facilities, Space management.

Unit V 18 Hrs

Warehousing Ownership Arrangements - Warehouse Decisions, Warehouse movement types. Strategic Warehousing, Warehouse Management Business Scenario. Warehouse system arrangement, Zero Inventory and JIT Philosophy.

#### Outcome

• The student will be able to understand the system of warehouse, the nuances of managing the warehouses and the required equipments in their daily operations. The student will be able to get a glimpse of various inventory management philosophies.

#### **Reference Books:**

- 1. International Logistics Wood, D.F. A Barone, P.Murphy, and D.L. Wardlow,.
- 2. Business Logistics Management Ronald H.

#### **COURSE VII**

## (C19LM22/E19LM05)INVENTORY MANAGEMENT

### **Objective**

• The course intent to educate the student on the principles and the concepts that are associated with Inventory Management and the control techniques.

Unit I 18 Hrs

Fundamental principles of inventory control, Inventory management measurements and techniques, Importance& Scope of Inventory Control,

Unit II 18 Hrs

Costs Associated with Inventory, financial importance of inventory management and control, Types of Inventory, Inventory classifications – raw materials, work-in- process, and finished goods.

Unit III 18 Hrs

Inventory Control, Selective Inventory Control, Economic Order Quantity, Safety Stocks, Inventory Management Systems

Unit IV 18 Hrs

Forecasting Techniques, Principles of Material Requirements Planning, Material Requirement Planning, Manufacturing Planning (MRP-II), Just in Time (JIT).

Unit V 18 Hrs

Internal and external lead time and cumulative lead time, work in Process Inventories, Finished Goods Inventories, General Management of Inventory, Spare Parts Inventories, Use of Computers in Inventory Management.

#### Outcome

• The student will have knowledge on the fundamentals and importance of Inventory management. The students will be able to manage the inventory in a professional way using modern methods and systems.

#### Reference Books:-

- 1. Inventory Management by Steven M. Bragg
- 2. Inventory Management by Chandra Bose

#### **COURSE VIII**

## (C19LS23/E19LS05)Life Skill

## I <u>Life Coping or adjustment</u>

- (a) External and internal influence in one's life
- (b) Process of coping or adjustment
- (c) Coping with physical change and sexuality
- (d) Coping with stress, shyness, fear, anger far live and criticism.

#### II Attitude

- (a) Attitude
- (b) Self acceptance, self esteem and self actualization
- (c) Positive thinking

## III Problem Solving

- (a) Goal Setting
- (b) Decision Making
- (c) Time Management and stress Management.

## **IV** Computers

- (a) Introduction to Computers
- (b) M.S.Office
- (c) Power Point

#### V Internet

- (a) Introduction to internet
- (b) E mail
- (c) Browsing

#### References:

- 1) Life Skill Programme course I & II by Dr. Xavier Alphona MCRDCE Publications. R.K.Mutt Road, Chennai 28
- 2) ஆளுமைபண்புவளர்த்தல் மற்றும் தகவல் தொடர்பு by M.Selvaraj Community College,Palayamkottai
- 3) "Life Skill" –P.Ravi, S.Prabahar & T.TamilChelvam, M.S. University, Tirunelveli

#### **COURSE IX**

## (C19LM24/E19LM06)FUNDAMENTALS OF QUANTITATIVE METHODS

**Course Objective:** The course intent to educate the student on the basic quantitative principles and the related concepts that help in the analysis. The course also would help the incumbent to present on the data for logical understanding and decision making.

Unit I: 18 Hrs

Set theory – Coalitions - Venn Diagrams – relations - Domain – Co-domain. Functions – Linear and nonlinear – Maxima and minima. Business Applications of Matrix.

Unit II: 18 Hrs

Statistics - Meaning, scope, characteristics and Limitations. Statistical enquiry - Census and sample survey. Data - Primary and secondary. Data collection - Scale - Types & Characteristics (Nominal to Ratio scale) - classification - tabulation (Univariate& Bi-variate). Frequency Distribution - Graphical representation (Bar Charts - Pie Diagram - Line graphs).

Unit III: 18 Hrs

Measures of Central tendency-Arithmetic mean, median, mode, harmonic mean and Geometric Mean-Weighted Arithmetic Mean.

Unit IV:

Measures of dispersion – Range – Moments - Standard deviation - Coefficient of variation- Skewness and Kurtosis. Correlation and Regression - Rank correlation. Introduction to Hypothesis Formation and Testing.

Unit V:

Arithmetic and Geometric Progression. Index number – Types of index numbers. Time series - Trend (Secular, cyclical, seasonal and random) – use of time series in business and forecasting.

**Course Outcome:** The student will have knowledge on the fundamentals of quantitative and the analysis of the data required for making decisions.

#### Reference Books:

- 1. Statistics for Management -Richard I. Levin & David S. Rubin
- 2. Statistical Methods-SP Gupta
- 3. Statistics for management Richard I Levin & David S Rubin
- 4. Fundamentals of Mathematical Statistics Gupta S.C. and Kapoor V K
- 5. Complete Business Statistics Aczel A.D. and Sounder pandian J.

#### **COURSE X**

## (C19LMPW/E19LMPW)INTERNSHIP/PROJECT

The students of this course are required to take up Internship training or undertake a project work on a specific topic during the second semester and submit a report at the end of the semester but before the commencement of the end semester examination. The period of the internship can be decided the centres concerned according to the availability of the training opportunities available. The choices could be either the internship can be on a daily basis in the afternoon or evening throughout the semester or for a period of one month after completion of the classes, before the examinations.

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