MBPC3040 PROCUREMENT, STORAGE AND WAREHOUSE MANAGEMENT

Course Objectives:

Provides know-how required to operate an efficient and cost effective warehouse as also the role of inventory in warehouse management.

It provides guidance on using the latest technology, reducing inventory, people management, location and design and manage uncertainty risks of customer markets

Define the right structure of the supply network and inventory control and warehouse management system.

Module-I

Procurement System, Principles of Procurement, History of procurement function: from administrative to strategic, value-added role, Procurement Cycle, Procurement Planning, Purchasing Mix: Six Rights, Selecting the right supplier, Source of information and process, Supplier appraisal/vendor capability, Bidding process. Emerging Trends in Procurement system.

Module-II

Warehousing: Concepts -Role of warehouse-types of warehouse- warehouse location- Need for warehousing- Supply chain trends affecting warehouse –Warehouse functions- Role of warehouse manager-Warehouse process: e-commerce warehouse- Receiving and put away- Warehouse process – pick up preparation-Receiving - Pre-receipt - In- handling - Preparation - offloading - Checking - Cross-docking - Quality control - Put-away - Pick preparation - Pick area layout – Picking strategies and equipment -order picking methods - Warehouse processes, Replenishment to dispatch- Value adding services - Indirect activities - Stock management - Stock or Inventory counting - Perpetual inventory counts - Security - Returns processing – Dispatch. Lean Warehousing: Waste reduction, 5S methodology, and continuous improvement. Warehouse Safety and Compliance: maintaining standards, fire safety, and ergonomics.

Module-III

Storage Management system – Storage Inventory Management – Functions of storage & Inventory - Classification of Inventory- Methods of Controlling Stock Levels- Always Better Control (ABC) Inventory system- Warehouse Management Systems (WMS) - choosing a WMS-the process implementation-cloud computing- Warehouse Layout-Data collection-space calculation-aisle width- finding additional space. Storage and Warehousing Information system -Storage Equipment: storage option - shuttle technology - very high bay warehouse - warehouse handling equipment - vertical and horizontal movement - Automated Storage/ Retrieval System (AS/RS)-specialized equipment Technical advancements- Resourcing a warehouse- warehouse costs. Types of cost - Return on Investment (ROI) - Charging for shared-user warehouse service - Logistics charging methods Warehousing Information System (WIS)- Performance management- outsourcing decisions. Recent developments in Storage and Inventory Management- Case Studies

Course Outcome:

CO1: Define key concepts in procurement, warehousing, and inventory management.

CO2: Explain the role of procurement and warehousing in the supply chain ecosystem.

CO3: Demonstrate the use of procurement tools and warehouse processes in case studies.

CO4: Compare different inventory control systems and evaluate supplier capabilities.

CO5: Assess warehouse layouts, WMS solutions, and procurement strategies for efficiency.

CO6: Design a sustainable procurement plan or warehouse layout using digital tools.

Books:

1. Gwynne Richards, Warehouse Management: A Complete Guide to Improve Efficiency and Minimizing Cost in the Modern Warehouse. The Chartered Institute of Logistics and Transport, Kegan page limited.
2. David E. Mulchy & Joachim Sidon, A Supply Chain Logistics Program for Warehouse Management. Auerbachian Publications
3. World-Class Warehousing and Material Handling. (International ed.), McGraw-Hill. Muller, M..
4. Essentials of Inventory Management. (2 nd ed.), American Management Association.