

MBA: Semester-III**Paper MGTM301P: SUPPLY CHAIN & LOGISTICS MANAGEMENT****Duration: 3Hrs.****Marks: 100****Credits: 4****Objective**

Supply chain management involves a number of decisions that benefit by quantitative techniques of analysis and design. The course will take up a few of these to explore modeling, computation and IT-enabled implementation of solutions in some areas of Supply Chain Management. The application areas include material flow management across the supply chain, value management and analysis of total supply chain costs, robust design of supply chains, co-ordination of supply chain decisions and handling of uncertainties in supply chain management. The emphasis will be on modeling, analysis and implementation issues, including a few case studies, but the relevant techniques will be covered as required.

Curriculum**UNIT I- Introduction to Supply Chain Management**

- Basic Concept & Philosophy of Supply Chain Management; Essential features, Various flows (cash, value and information), Key Issues in SCM, benefits and case examples.

UNIT II- Logistics Management and Purchasing & Vendor management

- Logistics as part of SCM, Logistics costs, Inbound and outbound logistics, bullwhip effect in logistics, Centralized and decentralized purchasing, functions of purchase department and purchase policies, single vendor concept, management of stores.

UNIT III- Inventory Management in SC

- Inventory fundamentals, Basic EOQ models; Inventory review policies; Just-in-time manufacturing; Kanban System of Inventory Management, Enterprise resource planning.

UNIT IV- Strategic Issues in Supply Chain

- Quick Response Systems, Vendor Management Inventory, Supplier Relationship, Supplier Certification ; Supplier Selection Process, Supplier Contracts, Mass Customization & Principle of Postponement, Role of network design in Supply Chains.

UNIT V- Warehousing decisions & Emerging Issues

- Warehousing and its uses and types; Total distribution concepts, Integrated logistics, Materials handling, Packaging and transportation system.

Recommended Book

- Chopra Sunil and Peter Meindl - Supply chain management (Pearson, 3rd Ed.)

Reference Books

- Raghuram G. (I.I.M.A.) - Logistics and Supply Chain Management (Macmillan, 1st Ed.)
- Sahay B.S. - Supply Chain Management (Macmillan, 1st Ed.)
- Agarwal D.K. - A Text Book of Logistics and Supply chain management (Macmillan, 1st Ed.)

MBA: Semester-III**Paper MGTM-302P: PROCUREMENT MANAGEMENT****Duration: 3Hrs.****Marks: 100****Credits: 4****Objective**

This course will put the emphasis on the design and management of processes and control systems of the inbound supply chain. The content that is covered in this course include procurement processes and strategies, risk pooling and multi-stage inventory control systems, value of collaboration and streamlined information and financial flow in supply chains, supplier relationship management as well as elementary and advanced methods for analysis and planning.

Curriculum**Unit-I: Introduction to Procurement management**

Function of procurement, purchasing cycle, roles in the purchasing organization for a large project, contribution of shipping and freight forwarding agents in procurement management, preparation of purchase specifications, nature and relevance of purchase requisition, importance of procurement management.

Unit-II: Supplier Selection

Supplier identification, Key issues in Supplier selection, Supplier selection Methods, Contract with the supplier, bidding process, Bargaining and Negotiation.

Unit-III: Sourcing

Global sourcing and international procurement, problems associated with international sourcing and recommend solutions, nature of arbitration in international sourcing, implications of customs and countertrade in global sourcing.

Unit-IV: Outsourcing

Nature of outsourcing, Meaning by outsourcing, Methodologies of outsourcing, Drawbacks of outsourcing and ways of avoiding or managing such drawbacks.

Unit-V: E-Procurement Systems

Meaning by an e-procurement system, Benefits of e-procurement, barriers to e-procurement, key indicators for measuring the benefits of e-procurement.

Recommended Book

- Peter Bailey et 2008; Procurement, Principles and Management. Prentice Hall

Reference Books

- Kenneth Lysons et al 2008; Excellence in Procurement: How to optimise costs and add value.
- Purchasing and Materials Management - K S Menon.

MBA: Semester-III**Paper MGTM-303P: MATERIAL MANAGEMENT****Duration: 3Hrs.****Marks: 100****Credits: 4****Objective**

The course intends to equip students with updated knowledge of modern materials management concepts and aims to develop their functional expertise in the store and purchase management discipline. To increase the profitability of industry, the course intends to prepare the fleet of students equipped with latest tools and techniques of materials management so that they can face the challenges arising out of present scenario of competitiveness due to globalization of economy

Curriculum**Unit-I: Introduction to Material management**

Introduction: Materials Management - Evolution, Importance, Scope and Objectives - Interface with other functions. Concept of Logistics and Supply Chain Management and evolution to 4PL, Trade off Customer Service & Cost.

Unit-II: Material Requirement Planning

Advantages over conventional planning (Order Point Method) – Input and output of MRP system - Forecasting – Overview of quantitative and qualitative methods of forecasting - Master Production Schedule - Bill of Materials – BOM Explosion - Material flow in MRP. MRP II. Concept of ERP.

(Numericals expected on BOM Explosion, estimating Net requirements)

Unit-III: Inventory Management

Need of Inventory, Costs associated with Inventory, Types of Inventory , Basic EOQ Model, EOQ with discounts, Classification of material, ABC Analysis, VED, HML, FSN, GOLF, SOS (Numericals expected on Basic EOQ, EOQ with discounts & ABC)

Unit-IV: Inventory control & Cost Reduction techniques

Inventory turns ratios, Standardization, need and importance, Codification, concept, benefits. Value

Engineering and Value Analysis, concept and process.

Unit-V: Purchasing Management and Materials Handling

Responsibilities of Purchase Department, Purchase Cycle, Negotiation & Bargaining, Vendor relations, Purchasing Methods, Global sourcing.

Principles of Materials Handling system - Materials Handling Equipments – Safety issues.

Recommended Book

- An integrated approach to Materials Management – Gopal krishnan & Sundersan
- Materials Management - Dutta

Reference Books

- Materials Management – Mr. K. K. Ahuja
- Purchasing and Materials Management - K S Menon
- Handbook of Materials Management - Gopalkrishnan
- Materials & Logistics Management - L.C.Jhamb