

## SUPPLY CHAIN MANAGEMENT

Semester	III	CIE Marks	: 40
Course Code	18NBAN1306	SEE Marks	: 60
Teaching Hours / week (L:T:P)	3-0-2	Exam Hours	: 03
Credits : 04			

### Objectives:

1. To understand the basic concepts, processes and key elements of a supply chain.
2. To provide insights for establishing efficient, effective, and sustainable supply chains.
3. To explain the role of technology in supply chain planning, visibility, and execution.

### Unit 1:

**Introduction:** Basic concepts & philosophy of SCM, essential features, decision phases – process view, supply chain framework, key issues in SCM and benefits.

### Unit 2:

**Designing the supply chain network:** Designing the distribution network, role of distribution, factors influencing distribution, design options, distribution networks in practice, network design in the supply chain, factors affecting the network design decisions. Designing and Planning Transportation Networks, role of transportation, modes, design options, tailored transportation.

### Unit 3:

**Inventory Management:** Concept, various costs associated with inventory, EOQ, buffer stock, lead time reduction, reorder point / re-order level fixation, ABC analysis, SDE/VED Analysis.

### Unit 4:

**Purchasing and vendor management:** Centralized and decentralized purchasing, functions and purchase policies, vendor rating/ evaluation, single vendor concept, account for materials, just in time & Kanban systems of inventory management

### Unit 5:

**Logistics Management:** Logistics of part of SCM, logistics costs, logistics, sub-systems, inbound and out bound logistics bullwhip effects in logistics, distribution and warehousing management. Demand Management and Customer Service: Demand Management, CPFRP, customer service, expected cost of stock outs.

### Unit 6:

**Recent Issues in SCM:** Role of computer/ IT in supply chain management, CRM Vs SCM, Benchmarking concept, features and implementation, outsourcing – basic concepts, value addition in SCM.

### PRACTICAL COMPONENTS:

- Students are expected to choose any 4 Indian Organizations and study their supply chain in terms of drivers of the Supply chain and submit a report.
- Students should visit different logistics companies and understand the services provided by them and submit a report.
- Students should identify any product/service and study the type of distribution system used and understand the reason for using that particular type and present it in the class.
- Students should identify the various types of IT applications employed by Indian Organizations in their Supply chain.

### COURSE OUTCOMES:

- The student should be able to:
1. Demonstrate knowledge of the functions of logistics and supply chain management.
  2. To relate concepts and activities of the supply chain to actual organizations.
  3. Highlight the role of technology in logistics and supply chain management.
  4. Evaluate cases for effective supply chain management and its implementation.

### RECOMMENDED BOOKS:

- A Logistic approach to Supply Chain Management – Coyle, Bardi, Longley, 1st Edition, Cengage Learning.
- Supply Chain Logistics Management, Donald J Bowersox, Dand J Closs, M Bixby Coluper, 2nd Edition, TMH, 2008.

### REFERENCE BOOKS:

- Supply chain management, Chopra Sunil and Peter Meindl - 3rd edition, Pearson, 2007.
- Supply Chain Management-A Managerial Approach, Amith Sinha, Herbert, 2nd edition, TMH.
- A Text Book of Logistics and Supply chain management, Agarwal D.K. - 1st edition, Macmillan

### CO-PO MAPPING

CO	PO1	PO2	PO3	PO4	PO5
CO1	X				
CO2	Def	X		X	
CO3	Def	X		X	
CO4	Def	X		X	