

Devi Ahilya University, Indore, India Institute of Engineering & Technology				I Year M.E.(Industrial Engineering and Management) Full Time			
Subject Code & Name	Instructions Hours per Week			Credits			
IMR2C3 SUPPLY CHAIN MANAGEMENT	L	T	P	L	T	P	Total
	3	1	1	3	1	1	5
Duration of Theory Paper: 3 Hours							

Objectives and Pre requisites: To inbuilt the concepts of Logistics and supply chain Management.

To strengthen skills related to supply chain strategies decisions.

COURSE CONTENTS

UNIT-1

Introduction to Supply chain:

Introduction to supply chain. Objective of supply chain, Process view of supply chain, Supply chain management, supply chain challenges, Supply Chain performance. Competitive and Supply chain strategies, achieving strategic fit, expanding strategies scope, Supply chain drives & obstacles: Frame work, inventory, transportation facilities, information, and obstacles to achieving fit.

UNIT- 2

Designing the Supply Chain Network:

Role of distribution in supply chain, factors influencing distribution network, design options, e – business and distribution network.

Network Design in supply chain: Role of network design, factors influencing, framework for network design decision, role of IT.

UNIT-3

Sourcing decision in Supply chain

Role of sourcing, supplier scoring, design collaboration, sourcing planning and analysis, role of IT in sourcing, Risk management, in sourcing, design collaboration, making sourcing decisions in practice

UNIT-4

Transportation in supply chain

Transportation in supply chain: Factors affecting transportation decision , modes of transportation & their performance characteristics , design options , tradeoffs , tailor transportation , routing & scheduling in Transportation , Network design in supply chain : Factors affecting network designing decisions, frame work, models , information technology in supply chain

UNIT-5

Supply chain coordination and Information technology

Understanding lack of coordination and Bullwhip effect, obstacle to coordination in supply chain, managerial levers to achieve coordination, building strategic partnership, collaborative planning, forecasting, achieving coordination in practice.

Role of IT in supply chain, supply chain IT frame work, supply chain IT in practice

BOOKS RECOMMENDED:

- [1]. Hutchinson Norman E., an Integrated approach to logistics management, PHI, 1987
- [2]. Finkelstein & Guertin, Integrated logistics support, IFS publication U.K., 1988
- [3]. Copra Sunil & Meindl Peter, Supply chain management. McGraw-Hill, 1998.
- [4]. Mentzer, Supply chain management. . Sage Publications, 2004
- [5]. Chistofer M., Logistics & supply chain management. 1998.

LABORATORY EXPERIMENTS:

- (1) Case studies related to operation and systems logistics.
- (2) Case studies related to Logistics in system utilization and support
- (3) Case studies related to integrated logistic support.
- (4) Case studies related to Competitive and Supply chain strategies.
- (5) Case studies related to Factors affecting transportation decision.
- (6) Case studies related to Network design in supply chain.