SUPPLY CHAIN MANAGEMENT

CREDITS 3

OBJECTIVE:

> To help understand the importance of and major decisions in supply chain management for gaining competitive advantage.

UNIT I INTRODUCTION

9

Supply Chain – Fundamentals, Evolution, Role in Economy, Importance, Decision Phases, Enablers & Drivers of Supply Chain Performance; Supply chain strategy; Supply Chain Performance Measures.

UNIT II SUPPLY CHAIN NETWORK

9

Distribution Network Design – Role in supply chain, Influencing factors, design options, online sales and distribution network, Distribution Strategies; Network Design in supply chain – Role, influencing factors, framework for network design, Impact of uncertainty on NetworkDesign.

UNIT III PLANNING DEMAND, INVENTORY AND SUPPLY

Managing supply chain cycle inventory and safety inventory - Uncertainty in the supply chain, Analyzing impact of supplychain redesign on the inventory, Risk Pooling, Managing inventory for short life-cycle products, multiple item -multiple location inventory management; Pricing and Revenue Management.

UNIT IV LOGISTICS

9

Transportation – Role, Modes and their characteristics, infrastructure and policies, transport documentation, design options, trade-offs in transportation design, intermodal transportation. Logistics outsourcing – catalysts, benefits, value proposition. 3PL, 4PL, 5PL, 6PL; International Logistics -objectives, importance in global economy, Characteristics of global supply chains, Incoterms.

UNIT V SUPPLY CHAIN INNOVATIONS

9

Supply Chain Integration, SC process restructuring, IT in Supply Chain; Agile Supply Chains, Legible supply chain, Green Supply Chain, Reverse Supply chain; Supply chain technology trends — AI, Advanced analytics, Internet of Things, Intelligent things, conversational systems, robotic process automation, immersive technologies, Blockchain.

TOTAL: 45 PERIODS

OUTCOME:

- Understanding of supply chain fundamentals
- > Ability to design supply chain networks to enhance supply chain performance
- Ability to plan demand based on inventory and supply
- > Understanding the role of logistics in supply chain performance
- Awareness of innovations for sustainable supply chains

REFERENCES:

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- 3. Ballou Ronald H, Business Logistics and Supply Chain Management, Pearson Education, 5th Edition, 2007.
- 4. David Simchi-Levi, Philip Kaminsky, Edith Simchi-Levi, Designing and Managing theSupplyChain: Concepts, Strategies, and Cases, Tata McGraw-Hill, 2005.
- 5. Pierre David, International Logistics, Biztantra, 2011.