MBPC4013 AGRICULTURAL SUPPLY CHAIN MANAGEMENT (3-0-0)

Course Objectives:

1. Gain insights into the changing business environment, the conceptual model of supply chain management, and the evolution of SCM, focusing on both traditional and modern approaches.
2. Learn about demand management, forecasting, and operations management principles in supply chain management, including procurement, inventory management, and logistics.
3. Understand procurement management processes, inventory management techniques, and logistics strategies, including transportation, warehousing, and distribution management.
4. Explore the role of information technology in SCM, performance measurement metrics, controls, and advanced planning and scheduling techniques.

Module –I

Supply Chain: Changing Business Environment; SCM: Present Need; Conceptual Model of Supply Chain Management; Evolution of SCM; SCM Approach; Traditional Agri. Supply Chain Management Approach; Modern Supply Chain Management Approach; Elements in SCM. Innovations in Global Agri-SCM

Demand Management in Supply Chain: Types of Demand, Demand Planning and Forecasting; Operations Management in Supply Chain, Basic Principles of Manufacturing Management. SCM Metrics/Drivers and Obstacles.

Module-II

Procurement Management in Agri. Supply chain: Purchasing Cycle, Types of Purchases, Contract/Corporate Farming, Classification of Purchases Goods or Services, Traditional Inventory Management, Material Requirements Planning, Just in Time (JIT), Vendor Managed Inventory (VMI).

Logistics Management: History and Evolution of Logistics; Elements of Logistics; Management; Distribution Management, Distribution Strategies; Pool Distribution; Transportation Management; Fleet Management; Service Innovation; Warehousing; Packaging for Logistics, Third-Party Logistics (TPL/3PL); GPS Technology.

Module – III

Concept of Information Technology: IT Application in SCM; Advanced Planning and Scheduling; SCM in Electronic Business; Role of Knowledge in SCM; Performance Measurement and Controls in Agri. Supply Chain Management- Benchmarking: introduction, concept and forms of Benchmarking.Case Studies on the following:(a) Green Supply Chains (b) Global Supply Chains (c) Coordination in a SC. Value of and distortion of information: Bullwhip effect (d) Sourcing and contracts in SC (e) Product availability with uncertain demand (f) Inventory planning with known /unknown demand (g) Cases from FAO/IFPRI etc.

Course Outcomes:

CO-1: Develop a comprehensive understanding of supply chain management principles, approaches, and techniques, enabling effective decision-making and strategic planning in supply chain operations.

CO-2: Acquire proficiency in demand forecasting, procurement management, inventory planning, and logistics operations, contributing to efficient and effective supply chain performance.

CO-3: Develop expertise in procurement management, inventory optimization, transportation, warehousing, and distribution strategies, ensuring smooth and streamlined supply chain operations.

CO-4: Apply information technology tools, performance measurement metrics, and advanced planning techniques to optimize supply chain performance.

Books:

1. Acharya, S. S., and Agarwal, N. L., 2011, Agricultural marketing in India. Oxford and IBH.
2. Altekar, R. V., 2006, Supply Chain Management: Concepts and Cases.PHI
3. Chopra, S., Meindl, P. and Kalra, D. V., 2016, Supply chain management: Strategy, Planning, and Operation, Pearson Education India
4. Mohanty R.P.2010. Indian Case studies in Supply Chain Management & other Learning Resources. OXFORD
5. N.Chandrasekaran.2010.Supply Chain Management: Process, system &Practice.OXFORD.
6. Singh Sukhpal. Organic Produce Supply Chains in India-organisation and governance. Allied Publ.,