

**JYOTI NIVAS COLLEGE AUTONOMOUS**

**Programme: B.Com LSM**

**Semester: VI**

**INFORMATION TECHNOLOGY FOR SUPPLY CHAIN MANAGEMENT**

**No. of Credits: 3**

**No. of Hours: 45**

**COURSE OBJECTIVES:**

- Introduce students to the fundamental concepts of IT in the context of SCM.
- Have the knowledge of the different types technology used in SCM.
- Recognize the importance of ERP and DSS in SCM.

**LEARNING OUTCOMES:**

- To understand the technology that enhances efficiency and coordination in SCM.
- To get an insight into the future trends in SCM technology.
- To learn the significance of e-commerce in SCM.

**UNIT 1: INTRODUCTION TO IT IN SUPPLY CHAIN MANAGEMENT 09 HRS**

The Role of IT in a Supply Chain, Supply Chain IT Framework, E-SCM – meaning and components, Supply Chain macro process, factors affecting regarding SCM information technology. Future of IT in SCM.

**UNIT 2: IT USED IN SUPPLY CHAIN MANAGEMENT 10 HRS**

ERP – Introduction, meaning, advantages, – role of ERP in SCM, benefits of ERP in SCM strategies, Factors to consider when selecting an ERP System, ERP software and benefits, ERP modules in SCM. End to end integration of global supply chain up to CRM. CRM and E-CRM – meaning, role and benefits in SCM, CRM technology components, software identification and specification for E-CRM implementation, Applications of e-CRM.

**UNIT 3: E- COMMERCE AND SUPPLY CHAIN INTEGRATION 10 HRS**

E- commerce – meaning and types, role of e-commerce in SCM, E- commerce platforms, integration of E- commerce in SCM, order processing and fulfillment, e-commerce challenges and solutions.

**UNIT 4: DECISION SUPPORT SYSTEM IN SUPPLY CHAIN MANAGEMENT 08 HRS**

DSS – meaning, components and structure, decision making process, DSS framework in SCM,

types of DSS in SCM, important considerations in DSS application and evaluation in Supply Chain System, Basics of Business Intelligence (BI) – meaning and concept, Data Visualization – meaning

## **UNIT 5: SUPPLY CHAIN TECHNOLOGY TRENDS**

**08 HRS**

RFID, Barcodes, Electronic Data Interchange (EDI), Internet of Things (IoT), Artificial Intelligence (AI), Robotics, Built to Order (BoT), Last-Mile Delivery

### **SKILL DEVELOPMENT:**

- List out examples for each E-commerce models in SCM.
- Discuss case study with respect to ERP in SCM.
- Analyze the role of robotics and AI in SCM.
- Prepare a report on the use of BI and Data Visualization in DSS.

### **BOOKS FOR REFERENCE:**

- Chopra, S., & Meindl, P. (2016). Supply chain management: Strategy, planning, and operation. Pearson.
- Laudon, K. C., & Laudon, J. P. (2016). Management information systems: Managing the digital firm. Pearson.
- C.S.V Murthy- E Commerce, HPH
- Davis, Gordon B. and Olson, Malgrethe H., - Management information Systems, McGraw-Hill
- R H Ballou & Samur K Srivastava(2009), 'Business Logistics/ Supply Chain Management', Pearson publication Pvt. Ltd, New Delhi.

**Note: Latest edition of text books may be used.**