

# B.M.S. College of Engineering, Bengaluru-560019

Autonomous Institute Affiliated to VTU

## September / October 2023 Supplementary Examinations

**Programme: B.E.**

**Semester: VII**

**Branch: Institutional Elective**

**Duration: 3 hrs.**

**Course Code: 21IM7IESCM**

**Max Marks: 100**

**Course: Supply Chain and Logistic Management**

**Instructions:** 1. Answer any FIVE full questions, choosing one full question from each unit.  
2. Missing data, if any, may be suitably assumed.  
3. Block diagrams to be written where ever possible

### UNIT - I

- 1 a) What is supply chain? Discuss with an example. **10**
- b) What is strategic Fit in a supply chain? How is this achieved? **10**

### UNIT - II

- 2 a) Explain the Design options available for a Distribution network. **10**
- b) Discuss the factors influencing network design decisions. **10**

### UNIT - III

- 3 a) Explain ABC classification of Inventories with suitable graph? **10**
- b) With suitable assumptions Derive an expression for EOQ without shortage. **10**

### OR

- 4 a) ABC Ltd. Uses EOQ logic to determine the order quantity for its various components and is planning its orders. The annual consumption is 80000 units, cost to place one order is Rs 1200/-, cost per unit is Rs 50/- and carrying cost is 6% of unit cost. Find EOQ, No. of orders/year, ordering cost, carrying cost and total cost of inventory. **10**
- b) Explain Short term discounting: Trade promotions. **10**

### UNIT - IV

- 5 a) Discuss the modes of transportation and their performance characteristics. **10**
- b) Explain Tailored transportation. **10**

### OR

- 6 a) How do third parties increase the supply chain surplus? Discuss. **10**
- b) Discuss the process of Supplier scoring and assessment. **10**

### UNIT - V

- 7 a) What is reverse Logistics? Explain with an example. **10**
- b) Discuss on Lean and Agile supply chain. **10**

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**Important Note:** Completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages. Revealing of identification, appeal to evaluator will be treated as malpractice.