

**END SEMESTER EXAMINATION, MAY - 2026****M. B. A. Semester – II****Paper Code: 552114****Subject Name: Operations & Supply Chain Management****Subject Code: MB208****Time allotted: 03 Hours****Max. Marks: 100****Note: Read all the instructions carefully.****Q.1. Objectives Type****(Very short/ Short Answer, MCQ, One-liners, Fill in the Blank, True/ False) Attempt all. (10x2=20)**

|    |                                                                                 |     |
|----|---------------------------------------------------------------------------------|-----|
| a. | State one difference between operations management and supply chain management. | CO1 |
| b. | What is mass production?                                                        | CO2 |
| c. | What is meant by strategic fit?                                                 | CO1 |
| d. | Define inventory carrying cost.                                                 | CO1 |
| e. | What is EOQ used for?                                                           | CO2 |
| f. | What is a control chart?                                                        | CO1 |
| g. | What is network design in supply chain management?                              | CO2 |
| h. | What is the meaning of logistics?                                               | CO2 |
| i. | State one benefit of RFID.                                                      | CO1 |
| j. | What is sustainable SCM?                                                        | CO2 |

**Q.2. Short notes / Short Answer Type (Attempt any five out of Seven)****(5x4=20)**

|    |                                                                   |     |
|----|-------------------------------------------------------------------|-----|
| a. | Explain the nature and scope of operations management.            | CO3 |
| b. | Write a short note on process analysis.                           | CO3 |
| c. | Explain the importance of location decisions.                     | CO3 |
| d. | Differentiate between EOQ and JIT.                                | CO3 |
| e. | Discuss the concept of bullwhip effect.                           | CO4 |
| f. | Write a note on transportation as a logistics function.           | CO4 |
| g. | Explain the role of Blockchain or ERP in supply chain visibility. | CO4 |

**Q.3. Structured Question (Attempt any three out of four)**

**(3×10=30)**

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| <b>a.</b> | (i) Explain the evolution of supply chain management and its emerging trends.<br>(ii) A company has annual demand of 20,000 units, ordering cost ₹500, and carrying cost ₹20 per unit. Calculate EOQ.<br>(iii) State any three benefits of strategic fit.                                                         | CO5 |
| <b>b.</b> | (i) Explain job, batch, mass, and continuous production systems briefly.<br>(ii) A company sold 200, 240, 260, and 300 units in four successive months. Calculate the four-month moving average forecast for the next month.<br>(iii) Why is forecasting important in operations planning? Give any three points. | CO5 |
| <b>c.</b> | (i) Explain inventory management techniques: ABC, JIT, and VMI.<br>(ii) A firm experiences variation in orders at each level of the supply chain although final customer demand is stable. Name the concept and explain any two causes.<br>(iii) Suggest any three ways to improve supply chain coordination.     | CO5 |
| <b>d.</b> | (i) Explain the role of transportation, warehousing, and distribution in logistics management.<br>(ii) A manufacturing company wants to use RFID and ERP to improve supply chain performance. Explain how these technologies can help.<br>(iii) List any three risks in global supply chains.                     | CO5 |

**Q.4. Long Answer / Essay type (Attempt any two out of three)**

**(2×15=30)**

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| <b>a.</b> | A quick-service restaurant chain is expanding rapidly across different cities. Some outlets face long service times, while others face ingredient shortages and wastage. Management wants consistent service, faster replenishment, and lower operating cost.<br>(i) Using relevant concepts, explain the operations and supply chain issues visible in the case.<br>(ii) Propose suitable improvements in process design, inventory control, and supplier coordination. | CO6 |
| <b>b.</b> | A pharmaceutical distributor serves hospitals and pharmacies through a central warehouse. Sudden demand spikes for certain medicines, poor data sharing, and dependence on a few suppliers have led to delivery delays and emergency purchases.<br>(i) Analyse the case with reference to demand uncertainty, information flow, and sourcing decisions.<br>(ii) Recommend measures to improve network design, service reliability, and risk management.                  | CO6 |
| <b>c.</b> | A large appliance manufacturer wants to redesign its supply chain for sustainability. It is evaluating rail transport for long distance movement, better warehouse energy systems, reverse logistics for used appliances, and analytics-based demand planning.<br>(i) Discuss the operational and supply chain decisions involved in this case.<br>(ii) Explain how green logistics, IT tools, and coordinated planning can improve long-term performance.               | CO6 |

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