

# School of Business

Department of Business  
Mid Term Examination

Exam Date: 05 Oct 2023  
Time : 90 Minutes  
Marks : 50

## Sem IX - MBOP6007 - Supply Chain and Logistics Management

*Your answer should be specific to the question asked  
Draw neat labeled diagrams wherever necessary*

- 1) Explain the different decision phases in a supply chain, namely strategic, tactical, and operational decisions. K2 (2)
- 2) How does transportation contribute to the movement of goods in the supply chain? K1 (3)
- 3) Explain two factors that influence the optimal level of safety inventory in a supply chain. K2 (4)
- 4) Explain the concept of a grid transportation network design. K2 (6)
- 5) Explain the impact of demand forecasting accuracy and lead time variability on the determination of the optimum level of product availability. Discuss how companies can mitigate the effects of these factors to achieve better supply chain performance. K3 (6)
- 6) Explain how can tailored transportation solutions benefit a company's supply chain? K3 (9)
- 7) You are working as a supply chain analyst for a retail company that sells a wide range of products. You have been asked to perform an ABC analysis of the company's inventory. The company's inventory consists of 10,000 SKUs (Stock Keeping Units), with an annual inventory value of \$10 million. Using the ABC analysis, determine the following: 1. How many SKUs are categorized as A, B, and C items? 2. What percentage of the inventory value is represented by each category? K4 (8)
- 8) Classify the advantages and disadvantages of an in-house supply chain versus an outsourced supply chain K4 (12)

**OR**

Compare and contrast third-party logistics (3PL) and fourth-party logistics (4PL) providers, discussing their roles, responsibilities, and value propositions K4 (12)