

Question Paper Code	13032
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**MBA - DEGREE EXAMINATIONS, NOV / DEC 2024**

**Master of Business Administration**

**20MBO301 - SUPPLY CHAIN AND LOGISTICS MANAGEMENT**

Regulations - 2020

Duration: 3 Hours

Max. Marks: 100

**PART - A (10 × 2 = 20 Marks)**

Answer ALL Questions

	Marks	K- Level	CO
1. Why might a business choose a "Make" approach instead of a "Buy" approach for a component in their product?	2	K1	CO1
2. If a retailer experiences frequent stock outs, what logistics strategy could help to ensure continuous product availability?	2	K1	CO1
3. Explain the role of a distribution network in the overall supply chain.	2	K2	CO2
4. Outline the factors that influence the design of a distribution network.	2	K2	CO2
5. Identify the advantages of multi-echelon inventory system in complex supply chains.	2	K3	CO3
6. Identify the importance of site selection in warehousing operations.	2	K3	CO3
7. Infer primary drivers that influence transportation decisions in logistics.	2	K2	CO4
8. Outline the importance of Logistical packaging.	2	K2	CO4
9. Explain the key factor in the framework for IT adoption in supply chain management.	2	K2	CO5
10. Outline the challenges companies face while implementing reverse logistics processes.	2	K2	CO5

**PART - B (5 × 13 = 65 Marks)**

Answer ALL Questions

11. a) Demonstrate how an effective logistics strategy can reduce operational costs for a company. Provide examples of practices that a business could implement to streamline logistics processes.	13	K2	CO1
<b>OR</b>			
b) Explain how performance measurement tools help in identifying supply chain bottlenecks. Provide an example of a metric and explain how it could be used to enhance decision-making.	13	K2	CO1
12. a) Examine the challenges and strategic considerations involved in designing a supply chain network that operates globally. How can businesses address issues related to customs, import/export regulations, and cross-border logistics?	13	K4	CO2
<b>OR</b>			
b) Analyse the use of simulation models to predict the outcomes of strategic decisions in supply chain management. How can simulation aid companies in preparing for various market and environmental changes?	13	K4	CO2

13. a) Identify how warehouse layout design influence operational efficiency and cost-effectiveness? Describe some common layout designs and the specific situations in which each design would be most effective. 13 K3 CO3
- OR**
- b) Identify the objectives of effective inventory management and how they can reduce the impact of the bullwhip effect. What strategies can companies implement to mitigate demand fluctuations across the supply chain? 13 K3 CO3
14. a) Examine how the National Logistics Policy (NLP) fosters sustainability and competitiveness in logistics. Highlight its key components and objectives, emphasizing its role in enhancing efficiency and addressing sustainability goals in the national and global supply chain. 13 K4 CO4
- OR**
- b) Analyse the design considerations for effective packaging in logistics. How does packaging contribute to product protection, branding, and sustainability? Discuss the trade-offs between material costs and design features. 13 K4 CO4
15. a) Determine the process of business process reengineering and its impact on supply chain efficiency. What are the steps involved in reengineering supply chain processes, and how can companies measure the success of these initiatives? 13 K5 CO5
- OR**
- b) Explain the role of ERP systems in streamlining supply chain operations. How do these systems support data sharing and collaboration among different functional areas within an organization? 13 K5 CO5

**PART - C (1 × 15 = 15 Marks)  
(Compulsory)**

16. Food Savories Limited is engaged in the manufacturing of various types of fast food items that are ready-to-eat. It has been in the business for the past 12 years. It has its factory as well as a processing unit in Navi Mumbai. The raw materials required are mainly vegetables, and chicken which the company procures from either the local vendors or from various suppliers situated at Nasik, Pune, and other districts. The required materials are procured with the help of hired transporters. However, the hired transporters do not care much about the preservation of the goods. Hence, about 20% of the goods are lost due to damage, deterioration, pilferage, etc. Again, the hired transporters are unreliable with regard to their availability as well as prompt delivery schedules. The company's products are quite popular with the customers who are situated in Mumbai, Navi Mumbai, Pune, etc. However, the company stands to lose the market due to erratic supply schedules which do not cater promptly to the customers. The packaging of the products is attractive, but it does not preserve the product for a long time. The shelf-

life is only about 5 hours if the goods are not properly refrigerated. Loss on this account is about 10%.

The company has about 10 distribution centres. But there does not seem to be much coordination between these centres. A logistical information system is not adequate. Due to this, the company is unable to expand its business. In fact, due to competition, there is fear that the company may stand to lose its existing clientele. Due to mismanagement, the company is unable to meet an increase in the demands during festival seasons and holidays.

You are appointed as a logistics consultant. You are required to put forward your suggestions with regard to

- a) Setting-up of proper, effective logistical information system to improve coordination.
- b) An Effective forecasting system to reduce inventory carrying cost, wastages, damages, pilferages.
- c) Setting up of effective purchasing and distribution system improved system of storage, handling, and packaging.
- d) Alternative modes of transport to reduce/eliminate wastages.