

GUJARAT TECHNOLOGICAL UNIVERSITY
MBA-SEMESTER-III-EXAMINATION-WINTER-2024

Subject Code: 4539297

Date: 19/12/2024

Subject Name: Logistics and Supply Chain Management

Time: 10:30 AM TO 01:30 PM

Total Marks: 70

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Use of simple calculators and non-programmable scientific calculators are permitted.

Q.No.	Question	Marks
Q.1	Definitions / terms / explanations / short questions based on concepts of theory/practical (a) Cross docking (b) 2-OPT & 3-OPT (c) Routing & Scheduling (d) 3PL and 4PL (e) Lead Time (f) Quick Response Logistics (g) Route Sequencing	14
Q.2	(a) Discuss the importance of logistics in a global economy (b) Explain the issues and challenges in global supply chain management. OR (b) Explain the important functions of Internal supply chain management?	07 07 07
Q.3	(a) Which are the prominent transportation network design options? Explain, with applicability of different designs to different operations (b) What are the measure in measuring the logistics cost and performance? OR	07 07
Q.3	(a) Write about the various steps involved in the process of sourcing decision/purchasing procedure? (b) What do you understand by logistics cost analysis and total cost analysis?	07 07
Q.4	(a) “Each stage of the supply chain optimizes only its own local objective by completely neglecting the impact on the complete chain because of lack of coordination.” What is the impact of lack of coordination on Supply Chain performance? (b) Discuss any two design option of network designing. OR	07 07

- Q.4** (a) What is Reverse Logistics? Also explain flow of reverse logistics with its elements. **07**
- (b) How important is coordination between cola companies and their bottling plants? Is it necessary to own bottling plants if the cola companies want to achieve a better degree of coordination at the local level of operations? **07**

OR

Q.5 Shoppers' Paradise has a swanky mall at Andheri, Mumbai. They have a complete range of who's who of shopping items. It was shop-in-shop based on international standards. The shop area is nearly 3, 50,000 square feet and about 25,000 customers visit the mall daily. Fierce competition has driven Shoppers' Paradise to tie-up with music companies, popular food outlets, etc. This ensures at least a certain percentage of sales. Again, to ensure that no stock-outs take place, Shoppers' Paradise has built a warehouse close to its mall. The warehouse has sufficient storage capacity. Based on the consumption patterns, the warehouse is stocked with the required inventory. Shoppers' Paradise basically targets higher income groups. Therefore, it prefers to use roadways for transport of goods from the vendors. Though expensive as compared to railways, roadways have advantages in terms of door-to-door delivery, quicker decisions regarding change in routes or change in delivery schedules, etc. Shoppers' Paradise physically opens the packs received from the vendors. It sorts out the goods and puts the necessary price tags on them. The goods are then repacked to be appropriately stacked for final delivery, as and when required. Since no heavy inventory has to be transported, mechanized material handling is not used since it would involve heavy capital investment. Pallets and crates are used extensively. Again, when goods are returned by the customers due to defects, Shoppers' Paradise sends the goods to the warehouse from where the goods are sent back to the concerned vendor. The cost of return is borne by the vendors. In case of new arrivals of stock, the sales department of Shoppers' Paradise puts bill-boards about the new stock early in the morning, before the customers arrive. This makes it convenient for the customers to know about the new arrivals. Shoppers' Paradise is very keen to ensure that the customers get the right product at the right time. At the same time, the management of Shoppers' Paradise desires to reduce the overall cost. You are appointed as a Logistics Consultant. Suggest ways to improve the performance of Shoppers' Paradise.

- (a) Study and discuss the implications of logistics network design. **07**
- (b) Discuss the modes of inventory sourcing. **07**

OR

- (a) Analyze the alternative modes of communication. **07**
- (b) Study various in which Shoppers' Paradise can increase productivity **07**