

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

MBA PART TIME - SEMESTER-V EXAMINATION – WINTER 2020

Subject Code:4559997

Date:02/01/2021

Subject Name:Sectoral Elective_Logistics and Supply Chain Management (LSCM)

Time:10:30 AM TO 12.30 PM

Total Marks: 47

Instructions:

1. Attempt any two questions from Q1 to Q4.
2. Q5 & Q6 are compulsory.
3. Make suitable assumptions wherever necessary.
4. Figures to the right indicate full marks.

Q. No.	Question Text and Description	Marks
Q.1 a	Definitions / terms / explanations / short questions based on concepts of theory/practical (a) CPFR (b) Bullwhip Effect (c) RFID	06
Q.1 b	Definitions / terms / explanations / short questions based on concepts of theory/practical (d) Reverse Logistics (e) Backward v/s Forward Integration (f) ERP	06
Q.2	(a) Explain what the drivers of supply chain performance are.	06
	(b) Discuss the goal of a supply chain and explain how supply chain decisions affect the success of a firm.	06
Q.3	(a) Transportation modes can either compete or complement one another in terms of cost, speed, accessibility, frequency, safety, comfort, etc. There are three main conditions that ensure that some modes are complementing one another. Elaborate it on the basis of different geographical markets, different transport markets and different levels of service.	06
	(b) Describe principals of good vehicle routing and scheduling.	06
Q.4	(a) Discuss the situations in which make vs buy approach can be practiced.	06
	(b) Describe briefly advantages of Vendor Managed Inventory (VMI). List out and explain movements of perishable inventories.	06
Q.5	(a) Write a note on Green Supply Chain Management	06
	(b) Explain Push and Pull strategies with suitable examples	05
or		
Q.5	(a) Differentiate between Agile and Lean supply chain management system.	06
	(b) State your views on E-Procurement and its need in today's developing retail industry.	05

Q.6

CASE STUDY:

A manufacturer of cookware, bake ware, dinnerware and household tools made a series of changes in their supply chain network because of both organic growth and growth through acquisitions. The changes included the number and location of manufacturing operations, the number and location of distribution centers and the reconfiguration of the company's customer base (mass merchants, department stores, specialty retailers and online businesses).

The management of the company concluded that to achieve the optimal supply chain network from the perspective of cost and service performance, the entire network needed to be redesigned. To do so, a special project team was then commissioned to manage the network redesign internally and 'Establish' was engaged to create the new redesigned network.

The Solution: Establish developed a project methodology based on the project objective and scope and the firm's experience (30+ years) and judgment. The methodology was multi-stepped. Establish also selected a best-in-class network modeling tool to use for the work required.

The first step in the methodology was for the manufacturer's project team and the Establish team to meet to structure the project work, refine the project scope, develop planning factors and identify key contacts at the major locations and the sources for the data that would need to be gathered. **Second**, site visits were scheduled to observe a number of the manufacturer's operations so that Establish would develop an understanding of current network to include the product groups in the network, their storage and shipping characteristics and requirements, customer's service requirements, current issues, etc.

Note: From these visits several quick fix opportunities were identified and implemented immediately. Implementation of these opportunities yielded benefits that offset the project costs. **Third**, the data was gathered and analyzed, and developed as necessary to reflect the operation of the current supply chain. Progress meetings were scheduled to validate the data against the actual supply chain costs. **Fourth**, a validation model run was prepared to confirm the accuracy of the model. Then, a 5- year forecast was applied to the validation model to create a model Baseline. **Fifth**, a few alternative scenarios were modeled to identify the optimal supply chain network. The alternative supply chain network scenarios were compared to the baseline. The overall best supply chain network, from the perspective of cost and service performance, was identified and then it was evaluated for practicality. Minor location adjustments were made, a few product groups were shifted, and the completed result was the redesigned optimal supply chain network.

A business case was prepared for this redesigned optimal supply chain network and in it more than a 10 percent reduction in annual supply chain operating costs were identified along with improvements in customer's service performance. In addition, the redesigned network had a simpler

- (a) Express your opinion about the manufacturer's strategies **06**
- (b) In your opinion, is there any need to redesign entire network for efficient service? Substantiate your answer with suitable arguments. **06**

OR

- (a) Justify how far the progress meetings mentioned in the case study are necessary. **06**
- (b) Evaluate the effectiveness of the network redesigning strategies suggested by the team from the perspective of cost and service performance. **06**
