

**GUJARAT TECHNOLOGICAL UNIVERSITY****MBA - SEMESTER– III EXAMINATION – WINTER 2020****Subject Code:1539304****Date:04/01/2021****Subject Name:Global Supply Chain & Logistic Management****Time:10:30 AM TO 12.30 PM****Total Marks: 47****Instructions:**

1. Attempt any **THREE** questions from Q1 to Q6.
2. **Q7 is compulsory.**
3. **Make suitable assumptions wherever necessary.**
4. **Figures to the right indicate full marks.**

<b>Q.1a</b>	Definitions a) Make or buy decision b) Supply chain network c) RFID	<b>06</b>
<b>Q.1b</b>	Definitions d) Outsourcing e) Pull and Push Strategy f) Air waybill	<b>06</b>
<b>Q.2</b>	(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 the bullwhip effect in supply chain and explain how it is measured.	<b>06</b> <b>06</b>
<b>Q.3</b>	(a) Explain how to manage supply chain cycle inventory (b) Write short note on Lean Manufacturing.	<b>06</b> <b>06</b>
<b>Q.4</b>	(a) “The mission of logistics management is to plan and coordinate all those activities necessary to achieve desired levels of quality and service at lowest possible cost.” Explain (b) What are the important reasons for worldwide sourcing/global purchasing?	<b>06</b> <b>06</b>
<b>Q.5</b>	(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) Briefly explain about the most important and major ways of transportation?	<b>06</b> <b>06</b>
<b>Q.6</b>	(a) Suggest factors to be considered in deciding whether to “make and supply “ or to buy and supply” at Health care kit at Primary health center in India. (b) What is the role of cycle inventory in a supply chain?	<b>06</b> <b>06</b>

Case Study

Q.7

Deere & Company (brand name John Deere) is famed for the manufacture and supply of machinery used in agriculture, construction, and forestry, as well as diesel engines and lawn care equipment. In 2014, Deere & Company was listed 80th in the Fortune 500 America's ranking and was 306th in the 2013 Fortune Global 500 ranking.

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Deere and Company has a diverse product range, which includes a mix of heavy machinery for the consumer market, and industrial equipment, which is made to order. Retail activity is extremely seasonal, with the majority of sales occurring between March and July.

The company was replenishing dealers' inventory weekly, using direct shipment and cross-docking operations from source warehouses located near Deere & Company's manufacturing facilities. This operation was proving too costly and too slow, so the company launched an initiative to achieve a 10% supply chain cost reduction within four years.

The company undertook a supply chain network-redesign program, resulting in the commissioning of intermediate "merge centers" and optimization of cross-dock terminal locations.

Deere & Company also began consolidating shipments and using break-bulk terminals during the seasonal peak. The company also increased its use of third-party logistics providers and effectively created a network that could be optimized tactically at any given point in time.

Deere & Company's supply chain cost-management achievements included an inventory decrease of \$1 billion, a significant reduction in customer delivery lead times (from ten days to five or less) and annual transportation cost savings of around 5%.

- (a) Discuss Supply Chain Cost Reduction Challenges faced by Deere & Company 5.5
- (b) Do you think Deere & Company can do it Globally or at individual operations only ? 5.5
- or
- (a) Suggest the path to cost reduction for Deere & Company. 5.5
- (b) Third party logistics is good decision or not. Discuss. 5.5

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