

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**MBA – SEMESTER - 3 - EXAMINATION – SUMMER 2021**

**Subject Code: 4539297****Date: 17/08/2021****Subject Name: Logistics and Supply Chain Management****Time: 02:30 PM TO 05:30 PM****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

<b>Q. No.</b>	<b>Question Text and Description</b>	<b>Marks</b>
<b>Q.1</b>	Explain following terms substantiating with suitable examples - (a) Internal v/s External Integration (b) Cross Docking (c) 2-OPT and 3-OPT (d) Decoupling Point (e) Agile v/s Lean Supply Chain (f) Point of Differentiation (g) ECR	<b>14</b>
<b>Q.2</b>	(a) Explain how logistics and supply chain are mutually dependent on each other in making sure that the channel operates efficiently and effectively.	<b>07</b>
	(b) Describe with a suitable example how a company achieves strategic fit between its supply chain strategy and its competitive strategy.	<b>07</b>
	<b>OR</b>	
	(b) Describe what is Bullwhip effect. Explain its causes and obstacles to coordination in a supply chain with suitable example of a company.	<b>07</b>
<b>Q.3</b>	(a) State what is meant by 3PL and explain various types of 3PL service providers.	<b>07</b>
	(b) Describe what is RFID and give suitable examples of its usage in supply chain management.	<b>07</b>
	<b>OR</b>	
<b>Q.3</b>	(a) Explain the factors that influence supply chain network design decisions.	<b>07</b>
	(b) Describe Reverse Logistics with suitable examples.	<b>07</b>
<b>Q.4</b>	(a) Deliberate how IT plays a crucial role in an effective and value added Logistic and supply chain firm.	<b>07</b>
	(b) In what way do supply chain flows affect the success or failure of a firm such as Amazon? List two supply chain decisions that have a significant impact on supply chain Profitability.	<b>07</b>
	<b>OR</b>	
<b>Q.4</b>	(a) Express your understanding of Sustainable Supply Chain and how companies in India are adopting them.	<b>07</b>
	(b) Describe principals of good vehicle routing and scheduling for a specialty chemical company in the domestic market.	<b>07</b>

Q.5	<p><b>CASE STUDY:</b></p> <p>There has been still shortage of power in India. For our growth, power is required in huge quantity. Knowing this our Government is focusing on power projects like Hydel power, Thermal power, Nuclear power, Wind energy, Solar power etc. The Government has come up with large Power projects, across our country, by identifying the various resources of power. One such hydel project has come up, in Kashmir, a place called Bandipura, 85 kms from Srinagar.</p> <p>A leading Engineering Construction Company M/s HCC ( Hindustan Construction Co Ltd , has bagged a Turnkey hydel project from M/s NHPC ( National Hydel Power Corporation a, Govt body ) This mega project construction includes a water tunnel of 24 kms, for transporting water from dam to powerhouse, which is 5.8 meter diameter. For this operation and construction, project needs several high capacity construction machineries, many of them need to be imported. TBM (Tunnel Boring Machine) is one such machinery.</p> <p>The project management have decided to import this TBM MACHINE FROM ITALY. This machine would require about 170 containers and 10 ODC / BREAKBULK Consignment to get them transported from ITALY by ship to Mumbai and JNPT Port near Mumbai and then move them by road to its project destination at Bandipura near Srinagar in Kashmir.</p> <p>Out of these heights of ODC consignment, biggest of them is 72 tons, single item with height of 3.9 meter. The preliminary study made indicated that the route that need to be followed is Mumbai - New Delhi - Jammu - Srinagar – Bandipura. Between Jammu and Srinagar there are 2 road tunnels, one of the famous Jawahar tunnel through which these consignments need to be transported. At Jawahar tunnel you can move only consignments of height 4.6 meter. The route from Jawahar tunnel towards project site there is heavy snow fall from Dec to March of the year. The route from Jammu to Srinagar and then to BANDIPURA Project site the road has steep gradient and need high power transportation vehicles. In addition, this stretch of road has few steel bridges constructed by Army &amp; need approval from them before moving any ODC consignments for security reasons.</p> <p>Ms HCC have chosen you as Logistics Manager for this Project execution &amp; handling the transportation of such consignments, considering your experience of handling such project Cargo, in India. However, any damage, or delay in transportation of any of these containers or ODC consignments mean, delay in Important project, of National importance and will not be tolerated by the top management. Monitoring of each of the activities, decision making by you for handling this project cargo is monitored by high level top management of M/s HCC. Your success in this will bring you a double promotion with bigger emolument, and you would be a blue-eyed man in this organization.</p>	
	(a) State 3 important decisions that you would take in handling of this logistic assignment for its 100 % success.	07
	(b) Describe the job responsibilities, that you would demand and put in the scope of your outsourced logistic service provider.	07
<b>OR</b>		
Q.5	(a) Illustrate what vehicles you would deploy for transportation of these consignments by road in the route suggested.	07
	(b) Explain the reports that you would prepare for monitoring these critical consignments.	07

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