

Reg No.: \_\_\_\_\_

Name: \_\_\_\_\_

**APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY**  
MBA T4 (Regular and Supplementary) Examination, November 2020

**Course Code: OM-T4-1**

**Course Name: Supply Chain and Logistics Management**

Max. Marks: 60

Duration: 3 Hours

**PART A**

*Answer all questions. Each question carries 2 marks.*

Marks

- |   |                                                        |     |
|---|--------------------------------------------------------|-----|
| 1 | What are the components of Logistics Management?       | (2) |
| 2 | Brief Push/ Pull View of supply chain management.      | (2) |
| 3 | What is meant by last mile delivery?                   | (2) |
| 4 | What is tailored transportation?                       | (2) |
| 5 | What are the elements of a global supply chain system? | (2) |

**PART B**

*Answer any three questions. Each question carries 10 marks.*

- |    |                                                                                                                                       |      |
|----|---------------------------------------------------------------------------------------------------------------------------------------|------|
| 6  | Differentiate between Third party and fourth party Logistics                                                                          | (10) |
| 7  | Critically examine the logistical and cross functional drivers of supply chain performance and its impact on achieving strategic fit. | (10) |
| 8  | “As the number of facilities in a supply chain increases, the inventory and resulting inventory costs also increases” Explain.        | (10) |
| 9  | Compare and contrast the various transportation network design options.                                                               | (10) |
| 10 | What is the significance of global supply chain and explain the factors influencing it?                                               | (10) |

**PART C**

*Compulsory Question. The question carries 20 marks.*

- |    |                                                                                                                                                                |      |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| 11 | Toyota: A Global Auto Manufacturer                                                                                                                             | (20) |
|    | Toyota Motor Corporation is Japan’s top auto manufacturer and has experienced significant growth in global sales over the past two decades. A key issue facing |      |

Toyota is the design of its global production and distribution network. Part of Toyota's global strategy is to open factories in every market it serves. Toyota must decide what the production capability of each of the factories will be, as this has a significant impact on the desired distribution system. At one extreme, each plant can be equipped only for local production. At the other extreme, each plant is capable of supplying every market. Prior to 1996, Toyota used specialized local factories for each market. After the Asian financial crisis in 1996/1997, Toyota redesigned its plants so that it could also export to markets that remain strong when the local market weakens. Toyota calls this strategy "global complementation." Whether to be global or local is also an issue for Toyota's parts plants and product design. Should parts plants be built for local production or should there be few parts plants globally that supply multiple assembly plants? Toyota has worked hard to increase commonality in parts used around the globe. While this helped the company lower costs and improve parts availability, common parts caused significant difficulty when one of the parts had to be recalled. In 2009, Toyota had to recall about 12 million cars using common parts across North America, Europe and Asia causing significant damage to the brand as well as the finances. Any global manufacturer like Toyota must address the following questions regarding the configuration and capability of the supply chain:

Question:

- a) Where should the plants be located and what degree of flexibility should be built into each? What capacity should each plant have?
- b) Should plants be able to produce for all markets or only specific contingency markets?
- c) How should markets be allocated to plants and how frequently should this allocation be revised?
- d) What kind of flexibility should be built into the distribution system?
- e) How should this flexible investment be valued?
- f) What actions may be taken during product design to facilitate this flexibility?

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