Reg. No._____ Name:_____

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

FOURTH TRIMESTER MBA DEGREE EXAMINATION SEPT 2018

OM-T4-1 SUPPLY CHAIN AND LOGISTICS MANAGEMENT

Max. Marks: 60 Duration: 3 Hours

Part A

Answer all questions. Each question carries 2 marks

1. Define supply chain management.
2. What is meant by 4PL?
3. What is the role of e-business in supply chain?
4. Explain the factors affecting a distribution network design.
5. What are the elements of a global supply chain system?

(5x2 marks = 10 marks)

Part B

Answer any 3 questions. Each question carries 10 marks

6. Describe the various logistics activities for which the logistics Manager is responsible.
7. What are the various supply chain drivers and discuss its impact of on the performance of a supply chain?
8. What is meant by Milk run? Explain the various Transportation Network options available to Logistic providers.
9. Elaborate on the Material Handling Principles.
10. What is the significance of global supply chain and explain the factors influencing it?

(3x10 marks = 30 marks)

Part C

Compulsory question, the question carries 20 marks

11. Read the following case and answer the questions given at the end.

Toyota Motor Corporation is Japan's top auto manufacturer and has experienced significant growth in global sales over the last 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 can 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. Should they be

designed for local consumption or should there be few parts plants globally that supply multiple assembly plants? For any global manufacturer like Toyota, one must address the following questions regarding the configuration and capability of the supply chain:

i. Where should the plants be located and what degree of flexibility should be built into each? What capacity should each plant have? (4 Marks)
ii. Should plants be able to produce for all markets or only specific contingency markets? (4 Marks)
iii. How should markets be allocated to plants and how frequently should this allocation be revised? (3 Marks)
iv. What kind of flexibility should be built into the distribution system? (3 Marks)
v. How should this flexible investment be valued? (3 Marks)
vi. What actions may be taken during product design to facilitate this flexibility? (3 Marks)

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