

APJ Abdul Kalam Technological University  
Ernakulam II Cluster  
Second Semester M. Tech Degree Examination May 2017  
**05ME6406 - SUPPLY CHAIN MANAGEMENT**

Time: 3 hrs.

Max. Marks: 60

**Module 1**

1. a) “Supply of product can be controlled combining production capacity and inventory”.  
Discuss. (4 Marks)
- b) Differentiate logistics and SCM. Explain the 5 decision areas of a SC. (4 Marks)
- c) Explain the obstacles to coordination in a SC. (4 marks)

**Module 2**

2. a) Enumerate the role of IT in aggregate planning. (4 Marks)
- b) Comment on the four types of forecasting techniques. (4 Marks)
- c) Enumerate in about 100 words the operational parameters to be identified in aggregate planning. (4 Marks)

**Module 3**

3. a) List the two factors that determine the level of safety inventory. (6 Marks)
- b) “A goal of any supply chain manager is to reduce the level of safety inventory required in a way that does not adversely affect product availability.” Comment? (6 Marks)
- c) What is product availability? Explain Product fill rate, Order fill rate and Cycle service level. (6 Marks)

**OR**

4. a) Explain two types of inventory control models subject to uncertain demands? (9 Marks)
- b) Enumerate the key goals (from the manufacturer's perspective) of a trade promotion? (6 Marks)
- c) Write the Procedures of Simple Exponential Smoothing Method? (6 Marks)

**Module 4**

5. a) List the factors influencing the choice of transportation mode? (6 Marks)

- b) Enumerate the various optimal routing strategies? (6 Marks)
- c) Explain three types of performance indicators in transportation performance analysis? (6 Marks)

**OR**

- 6. a) Enumerate the various effective transportation management techniques? (6 Marks)
- a) List the three main types of risk to consider when transporting a shipment between two nodes on the network? (6 Marks)
- b) Discuss 3PL? List some services provided by 3PL with respect to Reverse logistics and Warehousing? (6 Marks)