



Institute of Management
JK Lakshmipat University
Jaipur

END TERM EXAMINATION 2017

Programme: MBA Sem- I
MM: 50 Marks

Sub: L&SCM
Time: 3 Hours
Subject code: OM02

Instructions: Attempt any three questions from Section A. Section B is compulsory.

Section A

Q1. How do third parties increase the supply chain surplus? While designing a transportation network, we have to focus on three important aspects. What are those three aspects? (7+3)

Q2. (a) Explain direct shipping with milk run and Cross-docking type transportation network

(b) What are the factors affecting in election of 3PL providers?

(5+5)

Q3. (a) Explain push and pull view of supply chain.

(b) Explain how changing of the distribution network effects on inventory cost, transportation cost, and facilities and handling cost

(4+6)

Q4. Differentiate manufacturing storage with direct shipping, manufacturer storage with direct shipping and in-transit merge, and distributor storage with carrier delivery with respect to response time product variety, product availability, customer experience, time-to-market, order visibility, returnability. (10)

Q5. How does bullwhip effect relate to lack of co-ordination in supply chain and also explain the impact of lack of co-ordination on supply chain performance?

(5+5)

Section B

Q6. (a) A retail chain has eight stores in a region supplied from four sources. Trucks has a capacity of 40,000 units and cost \$1000 per load plus \$100 per delivery. Thus, a truck making two deliveries charges \$1,200. The cost of holding one unit in inventory at retail for a year is \$0.20. The vice president of supply chain is considering whether to use direct shipping from suppliers to retail stores or

setting up milk runs from suppliers to retail stores. What network do you recommend if annual sales for each product at the retail store are 960,000 units? What network do you recommend if sales for each product at each retail store are 120,000 units?

(b) The following information s provided for an item:

Annual Demand: 12,000 units

Ordering Cost: Rs. 60 per order

Carrying Cost: 10%

Unit cost of Item: Rs 10 and Lead Time: 10 days

There are 300 working days in a year. Determine EOQ and number of orders per year. In the past two years, the demand rate has gone as high as 70 units per day. For a reordering system based on the inventory level determine (i) Buffer Stock, (ii) reorder level at this buffer stock (iii) carrying cost for a year.

(15+5)