

K.J. Somaiya Institute of Management Studies and Research.

Logistics & Supply Chain Management

End Term Examination- Trimester II. (PG FS Batch 16-18)

Date : 05/01/2016

Time 3 hrs

Marks 50.

Pls. Note: - 1.Question No. 1 is compulsory and carries 20 marks, attempt any 3 questions from questions 2 to 5 (each carries 10 marks).

1. Attempt any 4 questions from the 5 below:-

- a) Define the term logistics and its objectives, what is its importance in organizations. For an organization in the fashion garments industry, what would be the requirements from its logistics system, how would it be different for the cement industry?**
- b) Explain what is purchasing and what are the primary goals of purchasing? Why is sustainability increasingly being included in the agenda of purchasing managers?**
- c) Why are production planning and capacity planning important to SCM? How are APP, MPS , BOM and MRP interrelated?**
- d) Explain clearly the difference between liner and tramp shipping? When will you use respectively liner shipping and tramp shipping.**
- e) Graphically depict any 3 distribution networks, and compare the 3 systems on the basis of various parameters of cost and service?**
- 2 a) Why is demand forecasting important for effective supply chain management? What is the goal of any forecasting system?**

b) Following data is available about actual sales quantities for the past 10 years

Year	1	2	3	4	5	6	7	8	9	10
Sales	230	220	200	240	230	260	300	240	280	320

Find the forecast for year 11 using two Years as well as Three Years Moving averages. Which of the two forecasts is more reliable on the basis of Mean absolute deviation (MAD) and mean squared error (MSE) criterion.

3 a) Clearly explain the difference between dependent and independent demand with examples. How would the inventory systems for the 2 types vary? Can the same item fall under the classification of dependent and independent demand item under different circumstances....

b) PQR Tubes Ltd are the manufacturers of picture tubes for T.V. The following are the details of their operations during the current financial year.

Ordering cost (per order) Rs 100

Inventory carrying cost (per annum) 20%

Cost of tubes (per tube) Rs 500

Normal usage (tubes per week) 100

Lead time to supply (weeks) 6 – 8

- i) Assume 50 weeks in a year, find out the EOQ and the total cost of procurement.
- ii) If the supplier is willing to supply quarterly 1,250 units at a discount of 3 per cent on the earlier price, is it worth accepting? What would be the total cost of purchase in this scenario?

4. a) Explain the ABC inventory system and inventory turnover, how they can be used to manage inventory.

b) The daily demand of a product can be specified by a normal distribution. The average daily demand is 250 units with a standard deviation of 40 units. The order lead time for this product is also normally distributed with an average of 10 days and a standard deviation of 3 days. What is the safety stock and reorder point for a 95 percent service level? How would these figures change for a service level of 97.5 percent?

5. Write Short Notes (any four)

- a) Classification of Indian Road transportation vehicles , with examples
 - b) Role of ERP in the Supply chain
 - c) Strategic sourcing.
 - d) Centralised vs decentralised purchasing.
 - e) Containerisation and its impact on global trade
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