K.J. Somaiya Institute of Management Studies and Research.
(PGDM (EXECUTIVE) Batch 2016-17)
Global Supply Chain Management
End Term Examination- Trimester IV

Time 3 Hours   **Date : 20/09/2017**   **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. With reference to the Peanutty case study (attached), answer the following questions….

a. What actions can Peanutty's managers take to ensure the supply of raw materials for its operations, while reducing the risk of stock-outs or high production costs?

b. What activities could be developed by Peanutty to reduce or manage the power of its suppliers and customers in order to minimize risks and maximize profitability?

c. In your opinion, what would be the best organizational structure to make the company more agile and competitive?

d. Given the four areas of the company (R&D, Production, Logistics and Management), choose some supply chain processes and suggest appropriate performance metrics.

2 a) Define the term logistics and its objectives, what is its importance in organizations.

   b) What are the various modes of transportations, what are the advantages & disadvantages of each.

3. a) Explain what is purchasing and what are the primary goals of purchasing?

   b) An auto parts supplier sells Exide brand batteries to car dealers and auto mechanics. The Annual demand is approximately 1,200 batteries. The supplier pays Rs. 280 for each battery and estimates that the annual holding cost is 30 percent of the battery's value. It costs approximately Rs.200 to place an order (managerial and clerical costs). The supplier currently orders 100 batteries per month.

   i). Determine the ordering, holding, and total inventory costs for the current order quantity of 100 batteries per month.

ii). Determine the economic order quantity (EOQ).

iii). How many orders will be placed per year using the EOQ?

iv). Determine the ordering, holding, and total inventory costs for the EOQ. How has ordering cost changed? Holding cost? Total inventory cost?

4. a) Explain how containerization has revolutionized global shipping industry and everyday lives…

b) Refer the below Data Set

Period	Sales Volume
1	10000
2	12400
3	14250
4	15750
5	20500
6	18500
7	15750
8	20500
9	21500
10	22550

   i.   what would be the forecast for period 7 using a five period moving average?

   ii. what would be the forecast for period 6 using the exponential smoothing method?

        Assume the forecast for period 5 is 13000. Use a smoothing constant of alpha = 0.3

5. Write Short Notes (any four)

   a) Operations Planning
   b) Dependent and Independent demand
   c) Lean Manufacturing
   d) Six Sigma
   e) Inventory management techniques
   f) Forecasting errors