

Time: 3 Hours

Note :

- Question No.1 is compulsory.
- Attempt any three of the remaining five questions.
- Figure to the right indicates full marks.
- Assume suitable data wherever required, but justify the same.

(11)

- Q. 1 Attempt any four of the following questions. (Each question carries 5 marks)
- a) Describe the functions of Logistics Management.
- b) State the assumptions underlying the basic EOQ model. Write the basic EOQ formula and also state the significance of each of the terms in it.
- c) Describe the role of IT in Supply Chain Management.
- d) Describe a Transport Management System (TMS) with the help of a neat sketch.
- e) Draw a neat labelled sketch of the different distribution network designs and describe them in brief.
- Q. 2 a) Describe the concept of 3PL in detail with the help of a neat labelled sketch. 10
- b) ABC Plumbing Supply Company stocks thousands of plumbing items sold to regional plumbers, contractors and retailers. Mr. X, the firm's General Manager wonders how much money could be saved annually if EOQ were used instead of the firm's present rules of thumb. He instructs Mr. Y to conduct an analysis of one material only to examine if significant savings might result from using the EOQ. Mr. Y develops the following estimates from accounting information:
Annual Demand = 10,000 items.
Present order quantity = 400 valves/order.
Inventory Holding Charges = Rs. 4/unit/year.
Ordering Cost = Rs. 55/order.
Suggest which of the two options is more economical. 10
- Q. 3 a) Describe the concept of Bullwhip Effect. What causes it? What is its remedy? 10
- b) Differentiate between a Fixed Order Quantity System and a Periodic Review System of inventory control. State the advantages and limitations of each of the two systems of inventory control. 10
- Q. 4 a) Differentiate between an Efficient Supply Chain and a Responsive Supply Chain. 10
- b) What is a Global Supply Chain? Describe the challenges faced in Global Supply Chain Management. 10
- Q. 5 a) Describe the Push-Pull view of a Supply Chain with the help of a neat labelled sketch. 10
- b) What are the risks involved in supply chains? Describe how they can be overcome? 10
- Q. 6 a) Compare the various modes of transport that can be used in a Supply Chain. 10
- b) Describe with the help of a suitable example how Transportation Problem can be used to minimize the Logistics Cost in a Supply Chain. 10
