

**Time: 3 Hours**

**Marks: 80**

**Note :**

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

**Marks**

- Q. 1** Solve **ANY FOUR** questions from following. (Each question carries 5 marks)
- a) List the six supply chain drivers and show their effects on Supply Chain Management with the help of a neat sketch.
  - b) Define SCOR and show the framework focusing on five areas of SCOR.
  - c) Derive the EOQ for Basic Deterministic model used in Inventory Management.
  - d) Explain the concept of Cross-docking with help of suitable case study.
  - e) Define CSR and explain the initiatives and actions done under CSR.
- Q. 2**
- a) Describe Supply Chain Risk Management (SCRM) and explain the different categories of Supply Chain Risks in detail. **10**
  - b) Define outsourcing, list its types and explain and compare the 3PL and 4PL concepts in supply chain. **10**
- Q. 3**
- a) Explain Value Stream mapping using a suitable example. **5**
  - b) Explain about the resilient supply chain and discuss its benefits. **5**
  - c) Explain the difference between Minimum Order Quantity (MOQ), and Economic Order Quantity (EOQ) using suitable examples. **10**
- Q. 4**
- a) A Sugar Producer purchases sugar cane from suppliers every year, for producing 8,000 tons of sugar. He orders the raw materials at a cost of Rs. 4500 per ton each time to fulfill the demand. One of the supplier offers a discounted price of Rs. 4200 per ton, if the sugar producer will place an order of 800 tons or more. Should the producer consider the offer and if so, how much quantity should he purchase if the inventory carrying cost is given as 8% of the unit cost price per year and ordering cost is Rs.1200 per order? **10**
  - b) Explain supply chain sustainability index measurement with the help of a case study. **5**
  - c) Define bullwhip effect in Supply chain and list down its causes and remedies. **5**
- Q. 5**
- a) List different types of warehousing and explain the different warehouse strategies. **5**
  - b) What are the key issues involved in the Supply Chain Management? **5**
  - c) Explain any four different methods of selective inventory control like ABC Analysis, etc. **10**
- Q. 6**
- a) Explain the challenges in establishing Global Supply Chain and list the objectives of Global Supply Chain Management. **10**
  - b) Explain the different models of Transportation used in SCM with the help of suitable examples. **10**

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