

(Duration: 2 ½ Hours)

(Maximum Marks: 75)

- N.B.** 1. Answer **all** the questions.  
2. The Marks are assigned on the R.H.S.  
3. Draw Illustrations, **diagrams** and **Schedules** wherever necessary.  
4. Use of **simple calculator** is allowed.

Q.1 a) Choose Correct Alternative. (Attempt Any 8 questions)

(8)

1. The downstream supply chain is:
  - a. Exclusively inside an organization.
  - b. Involved with procurement of material from suppliers.
  - c. The distribution of products or delivery of services to customers.
  - d. None of the above.
2. The following is not a stage or phase in integration of supply chain management.
  - a. Base line integration
  - b. Financial integration
  - c. Internal integration
  - d. External integration
3. The following is not component of a warehouse.
  - a. Space
  - b. Equipment
  - c. Location
  - d. People.
4. To achieve the marketing objectives for the brand and satisfy the desires of consumers, the \_\_\_\_\_ and functional components of packaging must be chosen correctly.
  - a. aesthetics
  - b. logo
  - c. characters
  - d. brand name
5. The benefit of reduction in per unit transportation cost as the bulk of the items transported increases is called as \_\_\_\_\_.
  - a. Discount
  - b. Economies of scale
  - c. Trade Offs
  - d. Price Skimming
6. Which of the following is not an element of Ordering Cost
  - a. Internet Cost for Sourcing
  - b. Internet Cost for placing purchase order
  - c. Storing Cost
  - d. Telephone Cost to Supplier
7. \_\_\_\_\_ is a process of estimating the service or product quantity required by the end customers.
  - a. Demand Forecasting
  - b. Prediction
  - c. Projection Method
  - d. Inventory Control
8. MRP - I stands for:
  - a. Management Reaction Planning
  - b. Master Resources Production
  - c. Manufacturing Resource Planning
  - d. Materials Requirements Planning
9. Companies manage their global supply chains through \_\_\_\_\_.
  - a. information
  - b. competitors
  - b. skilled operators
  - d. none of the above

10. The concept of Double Stack Containers was introduced in early 1984 by \_\_\_\_\_.
- a. British Presidential Lines
  - b. Canada Presidential Lines
  - c. France Presidential Lines
  - d. American Presidential Lines

Q.1 b) Match the right and closely related answer from Column Y with the terms given in Column X. (Attempt Any 7 questions) (7)

Column X	Column Y
1) Quality Performance	a) Time and Place Utility
2) Tertiary Packaging	b) Free Home Delivery
3) Value added customer service	c) Static, Dynamic and Surrogate
4) Mission Based Costing	d) 1 st Party Logistics
5) Productivity Measure	e) Downstream Logistics
6) In House Logistics	f) Macro Costing concept
7) Service Level	g) Goods packed in boxes
8) Outbound Logistics	h) Upstream Logistics
9) Logistics adds value	i) Wrapping and Grouping of secondary packages
10) General Cargo	j) Case Fill Rate, Line Fill Rate, Order Fill Rate
	k) Perfect Order
	l) Micro Costing Concept

- Q.2 a) Define performance measurement. Discuss external performance measures. (8)  
 b) Explain reverse logistics with suitable example. (7)

OR

c) From the following data, calculate a 3 period weighted moving averages from 4 th Month to 8 th Month, with weights as 3, 2 and 1. The largest weight is being assigned to most recent period and current Demand Value. (10)

Period ( Month )	1	2	3	4	5	6	7	8
Demand in Units	160	180	190	210	230	240	250	?

- d) Compare Public and Private Warehousing. (5)

Q.3. Answer the following.

- a) State and explain various Information Technology tools used in Logistics and Supply Chain Management. (8)
- b) Explain Milk Runs and RORO with suitable examples. (7)

OR

- c) State various material handling equipment used for efficient handling. (8)
- d) Discuss benefits of ICD's / CFS. (7)

Q.4. a) The annual demand for a particular item is 15000 units, unit cost is Rs. 4/- Carrying cost on an average inventory is 30% and the ordering cost per order Rs. 50/-.

Find 1) EOQ (3)

2) Total Inventory Cost. (3)

3) If purchase manager has decided to place purchase order with minimum order quantity of 3000 units to get unit cost discount of 10 % per unit. State Purchase Manager is justified in his decision? (4)

b) What is global Supply Chain? Discuss objectives of global supply chain. (5)

OR

c) State merits and demerits of waterways and roadways as mode of transportation. (8)

d) Classify and explain elements of customer service. (7)

Q.5. a) Read the case and answer the following.

M/s Aaradhya Limited is situated near Delhi. The company supplies dashboard assembly as a 4PL supplier to Amit Udyog Ltd. Since last 5 years. There are number of components in the dashboard. Aaradhya Limited Purchases these individual components from various suppliers and assembles them at their works for onward supply to Amit Udyog Limited.

One of the major component namely “starter switch” is always the problem. Since Aaradhya Limited does not observe any systematic inventory control method in their purchasing activities, they just order the quantity as and when the demand arises. As this product is not available off the shelf, many times delays occur in arranging for assembled dashboard to Amit Udyog Limited. This in turn, result into financial loss to Aaradhya Limited due to penalties imposed by Amit Udyog Limited. As per the agreement, towards delays in supply of dashboard assembly.

**Questions:**

1. Define out sourcing. Explain the role of 4<sup>th</sup> party logistics in the above case. (8)

2. How Aaradhya Limited can avoid financial penalties imposed by Amit Udyog Limited? (7)

OR

b) Write short notes on following. (Any 3 out of 5) (15)

i) Extended Enterprise

ii) Selective inventory control techniques

iii) Total Cost Approach or Analysis

iv) Principles of LIS

v) Green Logistics.