

Time : 2 ½ Hours

Total Marks : 75

NOTE:

- 1) All Questions are compulsory with internal choice options and carry 15 marks each.
- 2) Figures to the right indicate full marks
- 3) Use of simple Calculator is allowed
- 4) Working note should form part of your answer for practical questions.

Q.1) A) Choose the correct option (Any 8):

(08)

- 1) \_\_\_\_\_ Logistics is the decision to buy logistics services from external sources rather than operate in house.  
(a) Reverse, (b) Green,  
(c) Outsourcing, (d) Standard
- 2) The main objective of \_\_\_\_\_ is to reduce the number of times the product is handled.  
(a) Packaging, (b) Transportation,  
(c) Material Handling, (d) Warehousing
- 3) Combining several shipments into one large shipment is termed as \_\_\_\_\_.  
(a) Sorting, (b) Assortment,  
(c) Consolidation, (d) Cross Docking
- 4) COFC stands for \_\_\_\_\_ on Flat car.  
(a) Carton, (b) Carrier,  
(c) Container, (d) Crane
- 5) The primary goal of the \_\_\_\_\_ logistics cycle is to move products or materials backward through the distribution network.  
(a) Green, (b) Reverse,  
(c) Inbound, (d) Outbound
- 6) \_\_\_\_\_ is not an objective of performance measurement.  
(a) Planning, (b) Monitoring,  
(c) Controlling, (d) Directing
- 7) Basic requirements of Logistics parks are Land and area, \_\_\_\_\_ and Human resource availability.  
(a) Plant (b) Warehouse  
(c) I.T. (d) Connectivity
- 8) \_\_\_\_\_ type of material handling equipment does not require an operator.  
(a) Fork Lift truck, (b) Crane,  
(c) Industrial Trucks, (d) Conveyors
- 9) Transportation creates \_\_\_\_\_ utility  
(a) Product (b) Economic  
(c) Time (d) Place
- 10) Lack of communication between members of supply chain leads to \_\_\_\_\_ effect.  
(a) Miscommunication, (b) Bull- Whip,  
(c) Classical, (d) Bad

Q.1) B) Match the Following (Any 7)

(07)

1) Deep water ports	(a) External Performance Measure
2) Top down approach	(b) Decentralization
3) Bottom-up approach	(c) Elevator
4) 3PL	(d) Freight Trains
5) 4PL	(e) Owns Logistical Infrastructure
6) Benchmarking	(f) Paints
7) Tinplate	(g) Centralization
8) D.F.C	(h) Planning and Designing activities
9) Fixed path M.H. equipment	(i) Cranes
10) Variable M.H. equipment	(j) Fully loaded ship

Q.2) a) Explain the concept of Logistical Information System(LIS). Explain the Principles and types of LIS. (08)

b) What do you mean by Packaging? Explain various functions of packaging. (07)

OR

c) From the following data calculate a 3 period weighted moving average with weights as 3, 2 and 1. The largest weight is assigned to most recent period and current demand value. Also forecast the demand for 9<sup>th</sup> month. (10)

Period (Month)	1	2	3	4	5	6	7	8	9
Demand in Units	150	160	180	190	140	120	170	175	?

d) Explain the objectives of Logistical Network analysis. (05)

Q.3)

a) Explain the concept of Supply Chain Management with the help of its any 3 functions and any 3 participants in the supply chain network. (08)

b) What do you mean by a warehouse? Explain warehousing functions with reference to storage of production support items. (07)

OR

c) Discuss the concept of Performance measurement in supply chain, also explain dimensions/types of internal performance measures. (08)

d) What are different Global Logistics trends? Justify with examples. (07)

Q.4)

- a) I.T. plays a very important role in Logistics and Supply chain management. Justify the statement with the help of any four I.T. Infrastructure tools used in Logistics and Supply chain. (08)
- b) Explain in detail role of Pipeline and Ropeways mode of transportation in building a sustainable economy. (07)

OR

- c) Write a detailed Note on Reorder Level and calculate the sum on ROL. Daily consumption of raw material in the production process is 300 units. Lead time for delivery is 5 days. Company's policy is to keep safety stock equal to six days daily consumption. Calculate ROL. (10)
- d) Explain any five ways to enhance customer service. (05)

Q.5)

(a) Read the following case and answer the questions given below:

"Happy Kids" is a toy manufacturing company which is in the business for the past two decades. The manufacturing unit is situated in Mumbai, while its sales and marketing are spread over a large geographical area, especially in the major cities across the country. Over the years, a number of competitors have sprung in the field. Far from child's play, the company found that the toys' sector is a tough business. Some of the problems faced by it are:

- There is a massive sale during the festival seasons. If the company's product is delayed, the valuable market is missed.
- "Fashion" or "cult" status products influence the market. Any wrong decision in this matter, means loss of sales and build-up of unwanted inventory
- There are high marketing and promotional costs. If these programmes go out, the sales drop massively.
- Any misjudge of the market can also mean closing down of the company
- The company has problems regarding stock holding at its distribution centers. This is mainly due to wrong inputs from feedbacks and improper surveys.
- The company relies mainly on hired fleet of road transport. The services are not up to the mark in terms of delivery schedules, safety of goods from pilferage/theft, and mishandling of product.
- Marketing strategies are far from adequate. They are not effective enough to counter the strategies adopted by the competitors.

You are called upon by the management of "Happy Kids" to head their logistics operations. You are required to study and guide the company with reference to following questions:

- 1) What strategies could "Happy Kids" implement to improve the reliability and safety of its transportation network, especially given its reliance on hired fleets for road transport? (05)



- 2) What role does collaboration with suppliers and distributors play in improving the responsiveness of "Happy Kids" to market trends and customer preferences? (05)
- 3) As a Logistics Department Head what suggestions would you recommend to the toys manufacturing company to solve the above mentioned problems? (05)

OR

Q.5) b) Write short notes on (Any 3):

(15)

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|--|--------------------------|
| 1) RORO                                | 2) Green Logistics       |
| 3) Drawbacks of Logistical Outsourcing | 4) Mission based costing |
| 5) Golden Quadrilateral                |                          |
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