**INDIAN INSTITUTE OF MATERIALS MANAGEMENT**

**Dec 2012**

## Post Graduate Diploma in Logistics Management
## Paper 3

# STRATEGIES AND ORGANIZATION IN LOGISTICS

**Date: 10.12.2012** **Max Marks: 100**

**Time: 10.00AM to 1.00PM** **Duration: 3 Hours**

**Instructions:**

1) Part A- Answer all questions Total Marks=32
2) Part B-Answer any three questions Total Marks=48
3) Part C -Compulsory Total Marks=20

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## PART – A ( 1 x32 = 32 marks)

Q.1. Expand the following

1. TQM 2. JIT 3. CR 4. EDI

5. GATT 6. NAFTA 7. VAT 8. FTA

Q.2. Fill in the blanks.

1. Logistics is concerned with getting ---------- where they are needed when they are desired.

2. --------- speed is the elapsed time from when an order is placed until shipment arrived.

3. The ---------- barriers to global logistics results from forecasting and the institutional infrastructure

4. DRP stands for -------- requirements/resource planning.

5. Quick response (QR) is a cooperative effort between ---------- and -------- to improve inventory velocity.

6. Reorder point logic is among the oldest techniques for managing inventories using ----------

probability.

7. ---------- is the operational area of logistics that geographically positions inventory.

8. Three fundamental factors for transportation performance are -------, speed and consistency.

Q.3. Match the following.

| | |
|---|---|
| 1. Speed of Transportation | a) Carrier's method of charging for transportation services performed |
| 2. Stock out Frequency | b) Probability that a stock out will occur |
| 3. Fill Rate | c) Time required to complete a specific movement |
| 4. AFTA | d) Supply driven control techniques |
| 5. Bill of Lading | e) Variations in time required to perform a specific movement over a number of shipments |
| 6. Freight Bill | f) Basic document utilized in purchasing transport services |
| 7. JIT | g) ASEAN Free Trade Area |
| 8. Consistency of Transportation | h) Measures the magnitude or impact of stock outs over time |

Q.4. State True or False

1. Logistics involves the integration of information, transportation, inventory, warehousing, material handling and packaging.
2. Least expensive transportation always result in the lowest total cost of movement
3. A fundamental quality issue in logistics is the ability to comply to levels of planned inventory availability and operational performance.
4. The application of demand-driven techniques is most appropriate in situations where requirements are dependant.
5. A continuous replenishment strategy sometimes called vendor managed inventory.
6. Functional areas of logistics are network design, information, transportation and inventory.
7. In physical distribution, the supplier is the final destination of marketing channel.
8. Distribution operations involve information flow required to facilitate and coordinate performance within logistics facilities.

## PART – B (any three from following ) 16x 3= 48 marks

Q.5. a) Define the term Logistics?

b) Explain the common trade-off that occurs between basic works areas of logistics.

Q.6. a) What consideration should be employed to identify the appropriate customer service measures?

b) Define quantitative measures for ongoing evolution

Q.7. a) Discuss the various Barriers to global logistics?

b) What are the objectives of developing and implementing performance measurement systems in logistics

Q.8. a) Explain the concept of net pricing?

b) What short note on Freight Classification.

Q.9.a) Explain the concept of Total-Cost Analysis

b) Write short note on Logistics Organization

## PART- C 20 marks

Q.10. Case Study…..

Assume you have a product with the following parameters:

Annual Demand = 360 units
Holding cost per year = $1.00 per unit
Order cost = $100 per order

i) What is the EOQ for this product?

ii) Using the above data and assuming a 300-day work year, how many orders should be processed per year? What is the expected time between orders?

iii) What is the total cost for the inventory policy for the above?

iv) Based on the given data and information derived from iii), what would cost be if the demand was actually higher than estimated (i.e., 500 units instead of 360 units).
If the EOQ established in i) above is used, what will be the actual annual total cost?

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