

INDIAN INSTITUTE OF MATERIALS MANAGEMENT

Post Graduate Diploma in Logistics Management

DEC 2013

Paper 3 <u>STRATEGIES AND ORGANIZATION IN LOGISTICS</u>

Date: 16.12.2013

Max Marks: 100

Duration: 3 Hours

Time: 10.00AM to 1.00PM

INSTRUCTIONS:

1) Part A- Answer all questions -COMPULSORY

2) Part B-Answer any three questions

3) Part C -Compulsory

Total Marks=32 Total Marks=48

Total Marks=20

PART – A

(32 x1 = 32 marks)

Que 1. Expand the following

- 1. CKD
- 2. ECR
- 3. AR
- 4. CAN
- 5. TQM
- 6. EDI
- 7. JIT
- 8. MRP

Que 2. Fill in the blanks

- 1. ----- is concerned with a firm's ability to satisfy customer service replenishments in a timely manner.
- 2. Inventory deployments are the interface between planning / coordination and ----- that detail the timing and composition of where inventory will be positioned.
- 3. ----- is concerned with the purchasing and arranging inbound movement of materials,, parts and/or finished inventory from suppliers to manufacturing or assembly plants, warehouse, or retail stores.
- 4. The process of sorting and grouping products into unique combinations is referred to as ------
- 5. NAFTA stands for North American Free Trade -----.
- 6. Bank draft is also called as ------
- 7. ----- denotes the country in which the goods were produced in order to assess tariffs and other government-imposed restrictions on trade.
- 8. A free trade agreement eliminates ----- on trade between countries in a region.

Que 3. Match the following

1. International Monetary Market	a) Measures the magnitude or impact of stock outs over time
2. Fill Rate	b) Any unexpected event that disrupts system performance
3. Variance	c) Mechanism to exchange currencies and trade futures at market rates.
4. AFTA	d) Weekly or daily production and machine schedules
5. Bill of lading	e) A means for payment for an import-export transaction
6. Artificial Intelligence (AI)	f) An evidence of a contract for shipping the merchandise
7. Bank draft	g) Information based technology for logistics management
8. Master Production Schedule (MPS)	h) ASEAN Free Trade Area

Que 4. Find True or False of the following

- 1. Forecasting utilizes historical data, current activity levels, and planning assumption to predict future activity levels.
- 2. European Free Trade Association (EFTA) was formed in 1950.
- 3. Asset management focuses on the utilization of capital investments in facilities and equipment as well as working capital application to inventory to achieve logistics goals.
- 4. NAFTA was concluded in August 1992 between the Unites States, Canada and Mexico
- 5. From a logistics perspective, languages differences dramatically increase complexity since a product is limited to a specific country once it has been customized with respect to language.
- 6. Dispersion consists of shipping unique assortments to customers when and where specified.
- 7. Logistics requirements coordinate the facility, equipment, labor, and inventory resources to accomplish the logistics mission.
- 8. Order processing assigns or allocates available inventory to open customer and replenishment orders

PART B

48 marks

(Answer any three, each question carries 16 marks)

Que 5: a) What is Logistics? What are the key issues in logistics management?

b) Explain the logistic performance cycle in detail.

Que 6: a) What are the key factors to identify appropriate customer service measures?

b) What are the objectives of performance management in logistics?

Que 7: a) Write short note on Total-Cost Analysis

b) What are the various barriers to global logistics?

Que 8: a) Define the term Logistics Organizations

b) What are the global challenges in international logistics?

Que 9: a) Discuss the role that language plays in complicating logistical operations.

b) Which are the common forms of international logistics documentation?

PART C

20 marks

Q.10 An Indian furniture company handles several lines of furniture, one of which is the popular Layback Model TT chair. The manager, of the company has decided to determine by use of the EOQ model the best quantity to obtain in each order. He has determined from past invoices that he has sold about 200 chairs during each of the past five years at a fairly uniform rate and he expects to continue at that rate. He has estimated that preparation of an order and other variable costs associated with each order are about 10 MU, and it costs him about 1.5 % per month (or 18% per year) to hold items in stock. His cost for the chair is 87 MU.

Based on the above data, calculate the following:

- a. How many layback chairs should be ordered each time?
- b. How many orders would there be?
- c. Determine the approximate length of a supply order in days?
- d. Calculate the minimum total inventory cost
- e. Show and verify that the annual holding cost is equal to the annual ordering cost (due to rounding, show these costs are approximately equal)
