



INDIAN INSTITUTE OF MATERIALS MANAGEMENT

June 2016

Post Graduate Diploma in Materials Management

Paper 17(NEW)

ADVANCED SUPPLY CHAIN MANAGEMENT

Date: 17.06.2016

Max. Marks 100

Time: 2.00 p.m. to 5.00 p.m.

Duration 3 hours

Instructions

1. The question paper is in three parts
2. Part A is compulsory. Each sub question carries one mark.
3. In Part B answer any 3 questions out of 5. Each question carries 16 marks
4. Part C is a case study with sub questions and it is compulsory.

Total marks-32
Total marks-48
Total marks-20

PART A

(1 x 32 = 32 marks)

Q. 1. Expand the following

8 marks

1. MRP
2. FSN
3. WMS
4. TCO
5. 3PL
6. EFT
7. POS
8. RSP

Q. 2. Fill in the blanks

8 marks

1. ----- is concerned with purchasing and arranging inbound movement of materials, parts and/or finished inventory from suppliers.
2. The flows of the supply chain that occur within the individual organization are called the ----- supply chain.
3. ----- Ratio = (Annual sales) ÷ (Average Inventory Level)
4. A cost-leadership strategy means that the firm is attempting to reduce its economic costs below its ----- to gain a competitive advantage.
5. The ----- is a type of information system that facilitates communication within the firm.
6. RFID is an automatic identification method, relying on storing and remotely retrieving data using devices called -----

7. ----- is the process of analyzing data from different prospective and summarizing it into useful information.
8. ----- costs are the initial cost associated with the purchasing of materials, products and services.

Q. 3. Match the following

8 marks

- | A | B |
|------------------------|--|
| 1. Forrester Effect | a) Outbound Distribution Strategy |
| 2. CRM | b) Bullwhipe effect |
| 3. Cycle Time | c) Manufacturing resource planning |
| 4. MRP II | d) Total time from the beginning to end of the process |
| 5. Pareto Distribution | e) On-line Analytical Processing Tools |
| 6. Cross-Docking | f) Customer relationship management |
| 7. MRP & DRP Package | g) SAP, Oracle, BAAN, and PeopleSoft |
| 8. OLAP | h) 80/20 Analysis |

Q. 4. Find True or False of the following

8 marks

1. The decision to purchase a product or service from external supplier are the basis for the internal supply chain
2. Supply chain management involves the proactive management of a two-way movement and flows of goods and services, information, and funds.
3. The longer the forecast horizon, the worse the forecast
4. In retailing and wholesaling, buying is the most widely used term for procurement. It is also called inbound logistics.
5. E-procurement is the mirror image of e-Commerce
6. In Cross-Docking, warehouse function as inventory coordination points rather than as inventory storage points
7. In a pull-based supply chain, production and distribution decisions are based on long term forecast.
8. A differentiation strategy requires the firm to provide products that are unique along some dimensions that are widely valued by buyers.

PART B

48 marks

(Answer any three. Each question carries 16 marks)

- Q. 5: a) What is Supply Chain Management? Explain the need for Supply Chain Management.
b) Explain the issues in International SCM and about the regional differences in logistics.
- Q. 6: a) Write short note on Bullwhipe Effect. Explain the method for coping with the Bullwhipe Effect.
b) Describe the purchase cycle. What is the ultimate objective of the purchase cycle?
- Q 7: a) Discuss the advantage & disadvantage of push-based & pull-based Supply Chain.
b) What is Third Party Logistics? What are the Advantages & Disadvantages of Third Party Logistics?
- Q. 8: a) Explain the role of Information Technology in enhancing the Customer Value.
b) Write short note on RFID. How does it facilities information collection and exchange throughout the supply chain?
- Q 9: a) What is e-Business? Explain with examples.
b) Explain the major components of a Decision-support system?

PART C

20 marks

Q.10 Case Study (compulsory)

A China based electronic manufacturer produces a product which has a monthly demand of 4000 units.

The product requires a component X which is purchased at Rs 20.

For every finished product, one unit of component is required.

The ordering cost is Rs 120 per order and the holding cost is Rs 10 per cent per annum.

Kindly answer the following:

- 1) Explain the EOQ Model in detail.
- 2) Calculate the Economic Order quantity for the given data
- 3) If the minimum lot size to be supplied is 4000 units, what is the extra cost the company has to incur?
- 4) What is the minimum carrying cost company has to incur?
