INDIAN INSTITUTE OF MATERIALS MANAGEMENT

Diploma in Retail Management

Paper-3
Warehousing & Inventory Management

Date: 14 .12.2015   Max. Marks: 100
Time: 10.00 a.m to 1.00 p.m   Duration:3 hrs

Instructions
1. From Part A, answer all questions Qs 1, 2 and 3 (compulsory) --Q1 (12m), Q2 (8m) and Q3 (12m) - Total 32 marks.
2. From Part B, answer any 4 questions from Q No.4 to Q. 9. Each question carries 12marks (total 48 marks)
3. Part C, Q No. 10 (Case Study) is compulsory.(20 marks)

PART - A

Q.1. State True or False   **Marks: 12**

1. Purchasing Managers can place fewer and larger orders thus increasing the order cost.

2. MRO inventory stands for Managing, Repair and operating supplies.

3. Under stocking costs due to an item required for production not being provided.

4. The Delphi Method was developed by Delphi Corporation in 1950s.

5. Safety stocks arise due to variation in consumption rates and variations in lead times.

6. Proceeds received from the auction are credited to the previous custodial departments cost object.

7. Material handling and storage activities should be fully integrated.

8. FIFO method is not suitable for the trend of falling prices in the market.

9.. XYZ technique is used for valuation of product

10. Obsolete items are no more used due to change in manufacturing methods

11. Perishable goods are stored at the periphery of stores

12. Mobile racks are capable of free movement inside the store

Q.2. Match A and B   **Marks: 08**

A	B
1. Inventory	a. Storage Costs
2. Queuing Theory	b. Strategic Planning
3. Inventory Carrying Costs	c. WIP
4. Top Management	d. Shortening of Supply Chain
5. Safety Stock	e. Ratable Spares
6. PPC	f. Largest Asset
7. Time Series Analysis	g. Exponential Smoothing
8. VMI	h. Consumption Rate

Q.3. Fill in the blanks.   **Marks: 12**

1. Inventory Management does not make ……............……… or manage ……….………., but provides information to managers who make more accurate and timely decisions to manage their problems.

2. Two examples of codification systems are the ………….….. and ……..…….. Systems.

3. Re Q -order Level is fixed somewhere between …………..…..and ……..…….. levels.

4. MRP II is the basis of ………………..…….. …………. Planning.

5. The bill of materials as a materials list that provides ……………………..……… useful to ……………………………… the manufacturing process.

6. Batch Processing is used when a moderate volume of ………………….…... and ……………………….. are needed.

7. Finished Goods Inventory will have to be maintained to take care of ……..………. and …………………………... demand.

8. …………………system of inventory control is used in spare parts management

9. An increase in lead time implies …………………………. safety stocks.

10. Inventory is the product of……………………………………

11. We maintain stocks to avoid ………………………………………..

12. For more accurate forecasting the time horizon used should be………………

<u>PART – B</u>   **4 x12 = 48 marks**

Answer any 4 questions out of 6 questions from Q. Nos. 4 to 9.

Q.4. What are the main functions of a warehouse? How will you improve each function?

Q. 5. Explain in detail the costs involved in determining the Economic Order Quantity.

Q. 6 **E**xplain various types of inventories and various methods of inventory valuation.

Q.7 Describe briefly advantages of Vendor Managed Inventory. What are the advantages of VMI?

Q.8. Discuss the macro & micro approaches in Warehouse selection and acquisition. Explain the factors that have a bearing on Site selection in Warehouse location

Q.9.   Write short notes on any 3 from the following.

         a. Materials Handling Equipment's

         b. Weighted Moving Average Method

         c. Inventory Categorization

         d. Ordering Systems

         e. Planning BOM

PART – C   20 marks

Case Study

Mr. V Venkat Rao , Managing Director of M/s. Sweet & Sour Foods Pvt. Ltd. has not happy recently on the performance of Materials Management Department his organization. He has given nod to his Materials Manager Mr. Purushothaman to appoint an Inventory Control Officer to revamp the department.

MM, Mr. Purushothaman has appointed you as Inventory Controller to streamline the department.. You are required to analyze the data and take remedial action.

There are total 4311 number of items in inventory of the organization. The annual consumption value of 256 numbers is Rs. 104.34 lakhs, 3374 items consumes a value of Rs.9.42 lakhs and Rs. 14.74 lakhs was consumed by the balance items. The unit price (value) of 3500 items are more than Rs.5000/- , 600 items falls in between Rs. 1000/- and Rs. 4999/-. Balance items in the inventory are less than Rs.1000/- .Out of total inventory, 10% constitutes spares. 70% of spares inventory represents vital, 20% essential and balance are desirable with respect to criticality of the component and production.30% of the total inventory was issued from stores at a rapid speed while 60% at a slower rate. Balance items were non moved during a given period of time.

Based on the above inputs you are asked to find out the answers for following questions.
 A)   Identify H, M & L classified items with percentage (L equals Rs. 999/- & less, M equals values between Rs.1000/- and Rs. 4999/- and H equals to Rs. 5000/- and more).
 B)   Identify FSN items and find out how many numbers each class has? How many items you will recommend for speedy disposal?
 C) Identify A, B and C items with percentage? What % of items requires moderate control? What percentage of items need very strict consumption control basis? Hardly any check is required for what percentage of items?
 D)   How many Vital, Essential and Desirable items are there in the spares inventory?
 E)   Construct the Bar Charts for the ABC & HML items. Also show VED & FSN items with Pie charts.

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