INDIAN INSTITUTE OF MATERIALS MANAGEMENT
Post Graduate Diploma in Materials Management
Graduate Diploma in Materials Management.
PAPER No. 10
INVENTORY MANAGEMENT

June 2017

Date   : 15.06.2017   Max. Marks :100
Time   : 10.00a.m. to 1.00 p.m.   Duration   : 3 Hrs.

Instructions:
1. The question paper is in three parts A, B & C.
2. Part A is compulsory. Each question carries one mark. Total : 32 Marks
3. In Part B, answer 3 questions out of 5. Each question carries 16 marks.Total : 48 Marks
4. Part C is a case study with sub questions and it is compulsory. It carries 20 marks.
5. Use of calculator is allowed wherever necessary.
6. Graph sheets can be used wherever necessary.

Part – A (compulsory)   32 marks
(Attempt all questions each question carries 1 mark)

Q.1   State whether the following statements are True or False.   [8 marks]

1.1   Demand Management is a part of Inventory Management

1.2   Newspaper is a perishable item.

1.3   Standardisation is a good tool to promote maximum number of parts to serve minimum number of purposes.

1.4   Two Bin System & Three Bin Systems are examples of Fixed Order System.

1.5   If cost of reconditioning an item is 70% of the cost of a new item and it will give life of 60% of the new item, then one should go for reconditioning.

1.6   FIFO Method is suitable for the trend of rising prices in the market.

1.7   Chemical change in material is termed as a normal loss.

1.8   AGVs are used ASRS Warehouses.

Q.2   Fill in the blanks: [8 marks]

2.1   Safety Stock is a function of _____and _____

2.2   _____cannot be calculated accurately from production schedule and BOM.

2.3   _____ Analysis. This classification is based on the stock value of materials.

2.4   In _____ Classification, items are classified based on shelf life.

2.5   If 20 Orders are placed in a year and management accepts 1 stock out in a year the Acceptance Level of stock out is _____%

2.6   _____maximizes purchasing powder by combining multiple Purchase requirements..

2.7   _____ Inspection is done at supplier's premises.

2.8   When Safety Stock is more, Holding Cost is more and Stock Out cost is _____

Q.3. Match A and B   **[8 marks]**

A	B
3A.1) PAN	3B.1) Safety Stock
3A.2) PPC	3B.2) Exponential Smoothing
3A.3) Pull System	3B.3) Shortening Supply Chain
3A.4) Service Level	3B.4) Consumables
3A.5) Time Series Analysis	3B.5) ABC Classification
3A.6) VMI	3B.6) WIP
3A.7) Catalyst	3B.7) Codification
3A.8) Pareto Law	3B.8) Kanban

Q.4.   Expand the following: **[8 marks]**

1. JIS   2. KU   3.EERP   4. STR   5. TBO   6. TAC 7. US FDA   8.AUS

PART - B

Write any three (3) of the following questions   – 16 marks each (48 Marks)

Q.5   How you will turn Inventory Management into a Profit Centre?

Q.6   A) What are rough methods of determining Safety Stock ?

B) What are various costs you will consider to work out Life Cycle Cost of Xerox machine.

Q.7   (A)   How you will set procedure for effective procurement of spare parts?

B) How you will control factors affecting management of spare parts.

Q.8   a) Discuss in detail 'P' System and 'Q' System of Re Order Level System.

b) Describe various methods of disposal of surplus inventory.

Q.9   **Answer any four of the following:**

Write Short Notes on:

(A)   Vendor Managed Inventory

(B)   Material Handling Equipments

(C)   Finished Good Inventory

(D)   Accounting for loss/pilferage.

(E)   PQR Classification

PART – C

Q. 10   compulsory   **(20 marks)**

ABC Ltd is a chemical manufacturing company. The company has an average inventory of Rs 100 lacs and placed 4000 orders per year. Following details are available.

1. Purchase Department Expenses	Rs 20 lacs
2. Store Warehouse Personnel Salary	Rs 2 lacs
3. Obsolescence, Spoilage	Rs 0.60 lac
4. Floor space charge related to Stores, warehouse activities.	Rs 1.40 lac
5. Cost of Collecting materials	Rs 0.40 lac
6. Cost of Receiving materials	Rs 0.35 lac
7. Cost of Inspection	Rs 0.50 lac
8. Cost of Materials Handling	Rs 1.50 lac
9. Cost of Bill Payment	Rs 0.75 lac
10. Interest	12%
11. Insurance	2%

Questions:

A) Calculate Cost of placing order.

B) Calculate Inventory Carrying Cost.

C) Work out Economic Order Quantity

D) Supplier offers 1% discount if Order quantity is 2000 units per order.

Find out :

i)   Saving on account of price discount.

ii)   Saving in Ordering Cost

iii)   Loss due to carrying extra inventory

iv)   Advise company whether discount should be accepted or not ? Why ?

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