



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

June 2013

Date : 13.06.2013
Time : 10.00a.m. to 1.00 p.m.

Max. Marks :100
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

1 x 32 = 32 Marks

Q.1. State True or False

- 1.1) Objective of Inventory Management is to maximize customer service.
- 1.2) 5% Reduction in materials cost can increase ROI by 10%.
- 1.3) SIT includes all FG, WIP.
- 1.4) List of items in the inventory is called Inventory Catalogues.
- 1.5) Demand Aggregation help optimize buying strength.
- 1.6) Q system and Perpetual Review System are the same.
- 1.7) Traceability Systems are record keeping systems used to monitor food safety and food quality.
- 1.8) Historical Analogy Method of forecasting is irrelevant when new products are being launched

Q.2. Fill in the blanks.

- 2.1) Inventory Management is part of ----- management
- 2.2) Fewer and larger orders will reduce ----- cost.
- 2.3) Materials ordered and paid but not received is called -----.
- 2.4) ----- and ----- spares have a life nearly equal to life of machine.
- 2.5) Safety stock arises due to variations in ----- and -----
- 2.6) In the Balance Sheet inventories are treated as part of -----
- 2.7) VMI and ----- is one and the same.
- 2.8) ----- Method of forecasting consists panel of experts.

Q.3. Expand the following.

- | | | | |
|----------|-----------|-------------|----------|
| 3.1) AGV | 3.2) ASTM | 3.3) ASRS | 3.4) R R |
| 3.5) TBO | 3.6) MSDS | 3.7) DRP II | 3.8) AMC |

Q.4. Match A and B

A	B
4A.1) Service Level	4B.1) Lead Time Analysis
4A.2) P Q R	4B.2) Manufacturer
4A.3) Bar Codes	4B.3) Normal Loss
4A.4) ABC	4B.4) Costing
4A.5) New Product	4B.5) Safety Stock
4A.6) SDE	4B.6) Variety Reduction
4A.7) Evaporation	4B.7) Market Research
4A.8) OEM	4B.8) Preservation

PART – B

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

- Q.5.) a) What is SMI ? Discuss advantages of SMI.?
b) From the following data find out i) EOQ ii) Total Savings ii) Advise whether discount of 1% should be accepted. Show working.

Annual Demand	6000 nos
Costing of Ordering	Rs 150 per order
Cost of Carrying Inventory	20%
Price of component 'A'	Rs 60 per unit
Discount 1% for quantity 1200 nos and above	

- Q.6. a). What are objectives of Inventory Control ?
b). Which techniques you will use to meet objectives of Inventory Control.
- Q.7. a). Explain Standardization and Variety Reduction.
b). How You will control FG Inventory ?

Q.8 a).What necessitates Scientific Management of Spare Parts Inventory ?

b) Riders Motor Ltd has following data for their cars for last 4months

Month	January	February	March	April
Demand	2500	2000	1800	2000

You are required to forecast demand for May by

- i) Last Period Method
- ii) Simple Average Method
- iii) Moving Average Method- consider 3 period Moving Average
- iv) Weighted Average Moving Method. Assign weight of 1, 1.5, 2, 2.5 for sales from Jan to April.

Q.9. Write short notes (any two)

Marks: 8 x 2 = 16

- a). Lead Time Determination
- b). Open Access Bins
- c). Fixed Time System
- d). Limitations of EOQ.

PART - C

Write all the following questions – 4 marks each (20 Marks)

Universal Wisdom Management University is one of the renowned large university teaching large number of courses and having talented famous faculties. The moto of the University is quality education and innovative techniques. Recently they have launched a post graduate programme in health care. Mr. Pandit has taken over as Head of SCM and also responsible for procurement, stores etc.

One day Mr Pandit was having round in the University and found lot of waste like stationery, plastic material, films, metals, left over foods were dumped in the dustbin. While enquiring he came to know that this is a regular practice to collect garbage in bags. And then taken away by municipal vehicles as and when it come.

Mr Pandit was puzzled, he decided to take up the matter at the top. One of his colleagues cautioned him to be slow considering the egoistic and orthodox nature of some of the trustees.

1. What is the current situation of waste disposal.
2. Suggest the better method of salvage.
3. How Mr Pandit should proceed on this change
4. Is the issue of sustainability involved here? Discuss its importance.
