



INDIAN INSTITUTE OF MATERIALS MANAGEMENT  
Post Graduate Diploma in Materials Management  
Graduate Diploma in Materials Management

June 2012

PAPER No. 10  
INVENTORY MANAGEMENT

Date : 14.06.2012  
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.
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**PART A**

(Each sub question carries 1 mark x 32 = 32 marks)

**Q 1 State True or False (Write True or False only against Sr No)**

- a) Higher Inventory turnover boost profitability of the organisation.
- b) Inventory is idle resource with uneconomic value.
- c) Location of suppliers is the criteria under Vendor Rating.
- d) The life of capital spares and insurance spares is more or less same.
- e) Kanban cycle works in the reverse direction of MRP.
- f) Activity based costing examines the demands made by particular products on the direct resources.
- g) Consumables act as catalyst in the production process.
- h) Forecasting is more accurate for smaller group.

**Q 2. Fill in the blanks.**

- a) Dependent Demand should be \_\_\_\_\_ calculated.
- b) -----Moving Averages is a Statistical Forecasting Technique.
- c) -----contains information on relationship of components and assemblies.
- d) When the demand occurs in the large steps it is referred as -----
- e) Keeping the machines in fit condition calls for \_\_\_\_\_at the right time in the right quantity.
- f) In Kanban-----schedule determines production rate rather order book.
- g) \_\_\_\_\_ is unusable material whose value is only in terms of its material content.
- h) \_\_\_\_\_ is the application of MRP principles to distribution.

**Q 3. Match the following:**

A	B
1. Pull System	a. High Value Spares
2. Forecasting	b. Criticality
3. S, S-1	c. Kanban
4. V E D	d. Codification
5. Barcoding	e) Traditional Manufacturing system
6. Preferred Number Series	f. Interchangeable
7. Push System	g. Exponential Smoothing
8. Rotable Spares	h. Variety Reduction

**Q 4. Give full form.**

a) AUS    b) EERP    c) VEIN    d) GIT or VMI    e) NIFO    f) DRP II    g) STR    h) KU

**PART B.** Answer any three.

(each question 16 marks x 3 = 48 marks)

**Q . 5. a) VIP Industries Pvt Ltd has provided following information**

Purchase Department Salary	Rs 2 lacs
Stores Department Salary	Rs 1.70 lacs
Obsolescence, Spoilate etc	Rs 0.65 lac
Cost of Bill payment	Rs 0.80 lac
Rent and Materials Handling in stores	Rs 1.40 lacs
Cost of Collecting Materials	Rs 0.50 lac
Cost of Receiving materials	Rs 0.45 lac
Cost of Inspections	Rs 0.50 lac
Evaporation losses & Pilferage	Rs 0.25 lac
Follow Up Expenses	Rs 0.55 lac
Floor Rental for Purchase Section	Rs 0.50 lac
Interest charges	15%
Insurance charges	1%

The company buys an item where price is Rs 12/- each. The annual requirement is 20,000 nos. The average inventory is Rs 100 lacs and it releases 1000 orders in one year. Calculate cost of carrying inventory as a percentage of inventory and EOQ.

Q 5 b) What measures you will take to reduce Lead Time.

Q. 6 a).From the following data, group the items into A, B, C categories.

'A' category accounts for 70%, 'B' Category accounts for 20%

'C' category accounts for 10%.

Item No	1	2	3	4	5	6	7	8	9	10
Annual Demand (Units)	11000	1500	11500	1450	11000	1500	12000	1100	12000	1250
Unit Cost Rs	80	144	13	40	11	12	0.50	7	0.40	0.70

Q 6. b) Discuss concepts of Selective Inventory Control with its criteria and uses.

Q. 7. a) Explain JIT. How you will implement JIT in your organization?

b) What are various types of forecast ?

Q.8. a) Prepare a procedure for scrap, surplus disposal to maximize profit from it.

b) What measures you will take to reduce/eliminate scrap.

**Q. 9. Write Short Notes any four.**

a) 'P' system.

b) Maintenance Spares

c) Value Analysis or Standardisation

d) Codification

e) ERP

**PART C** (compulsory) ...20 marks

**Q. 10. Case Study**

Sonata Industries Ltd, is a fast growing company with annual turnover of Rs 500 crores. The CEO is disturbed over the Auditors report revealing following information.

- a) The Factory Stores are piled up with huge stock of Slow Moving and Non Moving materials. Some of the materials not moved in last 5 months and still material purchased.
- b) The 5 Regional Warehouses and 10 Depots are having 3/ 4 months stocks of Finished Goods. However the Marketing Head has complained of sale loss due to non-receipt of Finished Goods.
- c) There are frequent changes in production planning due to drastic variation in forecast, intervention from marketing. Auditors feel there is lack of system and accountability.
- d) Purchase Department lacks professionalism in approach, there is no MIS system. There is no appraisal of Purchase Department.

Q. 1. What is your advice to the CEO so that entire organization would work in tandem and achieve objectives of the organization?

Q. 2. What are your suggestions to the Stores Manager and Distribution Manager ?

Q. 3. How the problems of Planning, Production, Marketing can be resolved ?

Q 4. How you will bring professionalism in the Purchase Department ?

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