



# INDIAN INSTITUTE OF MATERIALS MANAGEMENT

Post Graduate Diploma in Materials Management

Graduate Diploma in Materials Management.

**DEC 2016**

**PAPER No. 10**

## **INVENTORY MANAGEMENT**

**Date : 16.12.2016**

**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.

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**Part – A (compulsory)**

**32 marks**

**(Attempt all questions each question carries 1 mark)**

**Q1. State TRUE or FALSE – 1 Mark each (8 Marks)**

1. Objectives of inventory control are maximizing customer service and minimizing cost.
2. Finished goods are “Stock in trade” goods.
3. Leased machine is not a concept of VMI.
4. ABC analysis is based on stock value of goods.
5. Computation of understocking cost is very problematic.
6. Independent demand items can be calculated based on production schedule..
7. Seasonal goods cannot be ordered using EOQ.
8. Fixed time period model of inventory management has less inventory compared to fixed order quantity model.

**Q2. Fill in the Blanks – 1 Mark each (8 Marks)**

1. Safety stock takes care of \_\_\_\_\_in demand and supply.
2. Codification helps in \_\_\_\_\_of inventory.
3. Historical analogy is \_\_\_\_\_technique of demand forecasting.
4. \_\_\_\_\_of material is used to carry out HML analysis.
5. Seasonal products are examples of \_\_\_\_\_period inventory models.
6. In 3 bin system lower bin is split into 2 bins containing \_\_\_\_\_and \_\_\_\_\_.

7. \_\_\_\_\_ Bill of Materials is used to segregate common from unique or peculiar parts
8. \_\_\_\_\_ spares are generally expensive and with a long lead time.

**Q3. A. Expand the following abbreviations (1 mark each) - 8 Marks**

- |                 |         |                        |         |
|-----------------|---------|------------------------|---------|
| 1. SIT          | 2. MPS  | 3. LIFO                | 4 ASRS. |
| 5. VED(Anaysis) | 6. ASME | 7.SOS(classification). | 8. ABM. |

**Q4. Match the following in column A with those in column B - 1 Mark each (8 Marks)**

- | A                       | B                         |
|-------------------------|---------------------------|
| 1. MSDS                 | A. Disposal method.       |
| 2. Market Research      | B. Safety stock.          |
| 3. 70% of stock value.  | C. MRP.                   |
| 4. Scrap/ Salvage       | D. Hazardous material.    |
| 5. Demand fluctuation   | E. Demand forecasting.    |
| 6. MPS                  | F. Standardization.       |
| 7. BIS                  | G. Imprest stock control. |
| 8. Open stores system.. | H. X-items..              |

**PART - B**

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

- Q5.** Why inventory control is important? Explain in your own words.
- Q6.** How many items in your industry, can you convert into vendor managed inventory? Explain why and how you will do it.
- Q7.** Write short notes on any two..
  - 1) Types of inventory..
  - 2) Standardization & Variety reduction.
  - 3) Multi period inventory models..
  - 4) Warehouse location & acquisition.
- Q8.** Which is the best system of inventory management? Explain with reasons.
- Q9.** How will you combine ABC analysis with SDE classification to determine inventory levels?. Show with chart.

**PART – C**

**Q. 10 compulsory**

**(20 marks)**

A company buys a bearing at Rs.40 per piece and has requirement of 400 bearings in a year. Ordering cost is Rs. 100/- per order. Inventory carrying cost is 20%.

**Questions:**

1. Find EOQ, number of orders per year and average inventory level..  
If the seller offers discount of Rs. 10 per bearing for purchase of 200 bearings at a time, What should the company do and why?-----15 marks.
2. Please also explain limitations of EOQ.-----05 marks.

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