



INDIAN INSTITUTE OF MATERIALS MANAGEMENT

Post Graduate Diploma in Logistics & SCM
Post Graduate Diploma in Materials Management - 2 years
PAPER No. 12 (enrolment code- PGMM, PGSM)

Inventory Management

Dec 2025

Date : 21.12.2025
Time : 10.00 a.m to 1.00 p.m.

Max. Marks : 70
Duration : 3 Hrs.

Instructions:

- From Part A – answer all questions (compulsory). Each sub questions carries 1 mark. **Total : 20 Marks**
- From Part B – Answer any 3 questions out of 5 questions. Each question carries 10 marks. **Total :30 Marks**
- Part C is a case study (compulsory) with questions. Read the case study carefully and answer the questions **Total: 20 Marks**

Part – A

[20 Marks]

(Attempt all questions. Each sub question carries 1 mark.)

Q.1.State True or False (Do not reproduce the statement)

[5 marks]

- Inbound logistics cost is part of ICC.
- There is positive relationship between inventory and profitability.
- VMI enhances spikes in demand.
- In Perpetual Inventory System stock levels are periodically checked.
- Generally, 10-20% of average stock is kept as Safety Stock.

Q. 2. Fill in the blanks. (Do not reproduce the statement)

[5 marks]

- Cost incurred due to depletion of stocks is called _____ Cost.
- _____ is the inventory that cannot be sold or consumed.
- _____ is a buffer that help to avoid risk of stock out
- What is ROL, if Lead Time is 4 weeks, consumption/week is 100 units and safety stock is 25
- VED classification is based on _____

Q.3. Expand the following:

[5 marks]

- a) ROA b) KPI c) MPS d) SMED e) TPM

Q. 4. Match the following (re write the correct pair)

[5 marks]

Column A		Column B	
Sl. No.	Description		Description
1.	Theory of Constraint	A	Business Intelligence
2.	ROL	B	Postponement of delivery
3.	ERP	C	Customer Return
4.	Backorder	D	Refilling
5.	Reverse Logistics	E	Bottleneck

PART B**[30 marks]****(Attempt any 3. Each question carries 10 marks)**

- Q.5** a) Define Inventory. What are different types of inventories? (5 marks)
 b) How you will apply Selective Inventory Control? **[5 marks]**

- Q.6** a) What are different techniques of controlling inventory? (5 marks)
 b) Prepare ABC Analysis. Classify the items as A., B, and C. (5 marks)
 80% Value as 'A' category.
 15% Value as 'B' category
 5% Value as 'C' category
 Show step by step working

Item No	A110	B111	C112	D113	E114	F115	G116	H117	I118	J119	K120	L121
annual Consumption	1360	1300	11800	11700	1480	12400	13600	1180	1500	1300	11000	11000
Cost Rs /unit	100	1050	6	5	50	1	2	500	48	2	1	1

- Q.7** a) What is VMI? What are challenges? How will you overcome it? **[5 marks]**
 b) Discuss various inventory Costs? **[5 marks]**

- Q.8** a) What are different methods of Stock Taking? **[5 marks]**
 b) Is Stok Audit necessary? Why? **[5 marks]**

Q. 9 Write short notes on any two **[2 x 5 = 10 marks]**

- JIT
- MIS for Inventory
- Retail Inventory Management
- Theory of Constraint
- Forecasting

PART – C**(20 marks)****(Compulsory)**

Q. 10. Zen Bicycles Ltd sources 3000 seat covers for its bicycles from an outside supplier. The Ordering Cost is Rs 10 per order and the ICC is Rs 6 per unit per year. The Company has 300 working days per year.

Find the following: (show working)

- ECQ
- Number of orders per year
- Total Inventory Cost
- Number of inventory Cycles in a year
- Duration of an inventory cycle