

**P.G. CERTIFICATE IN INVENTORY PLANNING
AND WAREHOUSING SYSTEMS FOR
ENGINEERS (PGCIPWS)**

Term-End Examination

June, 2022

**MWR-001 : INTRODUCTION TO INVENTORY
PLANNING AND CONTROL**

Time : 3 hours

Maximum Marks : 70

Note : Attempt any **seven** questions in all. All questions carry equal marks.

1. Explain ABC inventory management. Discuss its different variants. 10

2. Discuss different costs associated with inventory management. 10

3. Explain the following terms of inventory control : 10
 - (a) EOQ
 - (b) Reorder point
 - (c) Lead time
 - (d) Transit inventory

4. A manufacturer has to supply his customers 3600 units of his product per year. Shortages are not permitted. Inventory carrying costs amount to ₹ 12 per unit per annum. The set-up cost per run is ₹ 80. Find : 10
- (a) Economic Order Quantity (EOQ)
 - (b) Optimum number of orders per annum
 - (c) Minimum annual inventory cost
5. A1 Corporation has got a demand for a particular part at 10,000 units per year. The cost per unit is ₹ 2 and it costs ₹ 36 to place an order and to process the delivery. The inventory carrying cost is estimated at 9% of average inventory investment. Determine : 10
- (a) Economic Order Quantity (EOQ)
 - (b) Optimum number of orders to be placed per annum
 - (c) Minimum total cost of inventory per annum
6. Why is stockout cost of inventory difficult to determine ? Discuss an appropriate approach to determine such costs. 10
7. What are the different types of inventory which are kept by a construction company ? Discuss with suitable examples. 10

8. Derive Economic Order Quantity (EOQ) models when demand is deterministic and item is single. Give assumptions and limitations, if any. 10
9. Write short notes on any **two** of the following : 5+5=10
- (a) Sources of Uncertainty in Inventory Planning and Control
 - (b) Safety Stock and its Importance in Inventory Management
 - (c) Demand Planning in Inventory Planning and Control
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