POST GRADUATE CERTIFICATE IN INVENTORY PLANNING AND WAREHOUSING SYSTEM FOR ENGINEERS (PGCIPWS) Term-End Examination

December, 2024

MWR-001 : INTRODUCTION TO INVENTORY PLANNING AND CONTROL

Time: 3 Hours Maximum Marks: 70

Note: (i) Attempt any **seven** questions.

- (ii) All questions carry equal marks.
- (iii) Use of calculators is allowed.
- Classify various inventories used in large scale product industry. Discuss the significance of inventory planning and control.

- 2. Explain the meaning and importance of the following: 5+5
 - (a) Buffer stock
 - (b) Anticipation inventory
- 3. Discuss the common issues with reference to inventories in process industries. 10
- 4. Give the algorithm for conducting A-B-C analysis. What is its significance in stores management? Explain with examples.
- 5. A certain item costs ₹ 236 per ton. The monthly requirement is 6 tons and each time the stock is replenished, there is a set-up cost of ₹ 1,000. The cost of carrying inventory has been estimated at 10% of value of the stock per year. What is optimum order quantity, order frequency and total cost?
- 6. Distinguish between deterministic and probabilistic models of inventory. Explain any two situations warranting probabilistic inventory modeling.
- 7. Write a detailed note on modeling of deterministic multi-inventory items. 10

- 8. What is demand forecasting? Explain weighted moving average method of forecasting. What are its limitations?
- Distinguish between centralized and decentralized purchasing. Give their merits and demerits.
- 10. List out the key performance indicators for inventory management. Explain any three KPIs in detail.