## P. G. CERTIFICATE IN INVENTORY PLANNING AND WAREHOUSING SYSTEM FOR ENGINEERS (PGCIPWS)

## Term-End Examination June, 2025

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

Time: 3 Hours Maximum Marks: 70

Note: Attempt any seven questions. All questions carry equal marks. Use of scientific calculator is permitted.

 "For managing inventory of any product, planning and controlling both play an important role." Discuss.

- List any five factors that affect inventory planning and control. Briefly discuss each factor with respect to construction industry.
- Explain 'Decoupling', 'Reorder Point' and 'Multi-echelon inventories' with suitable example.
- 4. What do you understand by EOQ and why is it important to determine EOQ? Explain with the help of a suitable diagram.
- 5. A company, ABC Ltd., for one of its product X, placed 8 orders each for a lot of 150 members, in a year. Given that ordering cost is ₹ 5,40,000, the inventory holding cost is 40 percent, and the cost per unit is ₹ 40,000. Find out if the company is making a loss in not using the EOQ model for ordering quantity policies, assuming the demand is known for certainty.

- 6. Write short notes on the following inventory planning system: 5+5
  - (a) Q-R inventory order system (Q is fixed quantity for order and R is fixed reorder point).
  - (b) Fixed periodic inventory order system.Use suitable diagram for explanation.
- 7. (a) Describe the role of forecasting in inventory planning and control. 5
  - (b) The manager of a company producing road rollers is convinced that the demand for road rollers is related to the number of road construction tenders issued in the state during the previous years. The past data collected is shown in the table ahead:

Road Rollers'
actual demand
6
4
16
6
13
9
10
10

- (i) Derive a regression forecasting equation. 2.5
- (ii) Estimate the demand for road roller when the number of tenders issued is 28.
- 8. (a) Discuss the importance of inventory classification.
  - (b) Discuss 'ABC classification' technique and its advantages. 5

- 9. (a) Describe the functions and duties of stores manager. 5
  - (b) Describe any five merits and one limitation of codification in materials management.
- 10. (a) Why is there any need for stock verification?
  - (b) Describe the procedure for stock verification.

