



## End Term (Even) Semester Examination May-June 2025

Roll no.....

Name of the Program and semester: B.Tech & (VI Semester)

Name of the Course: Industrial Engineering & Project Management

Course Code: TME 609

Time: 3 hour

Maximum Marks: 100

**Note:**

- (i) All the questions are compulsory.
- (ii) Answer any two sub questions from a, b and c in each main question.
- (iii) Total marks for each question is 20 (twenty).
- (iv) Each sub-question carries 10 marks.

Q1. (2X10=20 Marks)

- a. Explain the importance of forecasting in Production Planning and Control. **(CO 1)**
- b. Explain different types of facility layouts with neat diagrams. **(CO 1)**
- c. Forecast future demand using least squares method: Year: 1, 2, 3, 4 | Demand: 200, 250, 300, 350. **(CO 1)**

Q2. (2X10=20 Marks)

- a. What is codification? How does standardization help in inventory? **(CO 2)**
- b. Explain  $\bar{X}$  and R charts with an example. **(CO 2)**
- c. In an inspection, out of 1000 items, 50 are defective. Draw a p-chart. **(CO 2)**

Q3. (2X10=20 Marks)

- a. List advantages of method study. **(CO 3)**
- b. Describe the factors influencing plant location with examples. **(CO 3)**
- c. Compare process, product, and fixed layouts. **(CO 3)**

Q4. (2X10=20 Marks)

- a. What are the steps in feasibility study? **(CO 4)**
- b. Explain cost of capital with a suitable example. **(CO 4) & (CO 5)**
- c. A project has expected return ₹10L, cost ₹7L. What is ROI? **(CO 4)**

Q5. (2X10=20 Marks)

- a. Define Project Management Information System (PMIS). **(CO 5)**
- b. What are the phases of project audit? **(CO 5) & (CO 6)**
- c. Explain Pareto analysis in project control. **(CO 5) & (CO 6)**