



Term Evaluation (Even) Semester Examination March 2025

Roll no.....

Name of the Course: B.Tech
Semester: IV
Name of the Paper: *Industrial Engineering*
Paper Code: TME 609

Time: 1.5 hour

Maximum Marks: 50

Note:

- (i) Answer all the questions by choosing any one of the sub-questions
- (ii) Each question carries 10 marks.

Q1.

(10 Marks)

a. Discuss the various factors affecting productivity in manufacturing and service industries. (CO1)

OR

b. Explain the concept of total productivity and its components with suitable examples. (CO1)

Q2.

(10 Marks)

a. Compare and contrast the productivity of man, machine, and materials. How do these factors contribute to overall productivity? (CO2)

OR

b. What are the major influencing factors of plant layout? Explain how these factors affect production efficiency. (CO3)

Q3.

(10 Marks)

a. How do environmental factors such as climate, noise, vibration, and light influence workplace efficiency and employee productivity? (CO2)

OR

b. What are the different types of charts used to record movements in a shop? Explain their significance. (CO3)

Q4.

(10 Marks)

a. Differentiate between process charts and flow process charts with suitable examples. (CO2)

OR

b. Discuss how work measurement contributes to cost reduction and labor productivity improvement. (CO3)

Q5.

(10 Marks)

a. Discuss the principles of motion economy and their application in industrial work design. (CO3)

OR

b. Describe the procedure for determining sample size in work measurement studies. (CO2)