



Term Evaluation (Even) Semester Examination March 2025

Roll no.

Name of the Course: B. Tech. (Mechanical Engineering)

Semester: IV

Name of the Paper: *Additive Manufacturing*

Paper Code: TME411

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.

(CO₁) (10 Marks)

a. Write short note on the historical development of additive manufacturing.

OR

b. What is 3D modeling and mesh generation in additive manufacturing?

Q2.

(CO₁) (10 Marks)

a. Classify the additive manufacturing process.

OR

b. Write about the data conversion and transmission in additive manufacturing

Q3.

(CO₂) (10 Marks)

a. Explain rapid prototype data development.

OR

b. What are different types of data files used in additive manufacturing?

Q4.

(CO₂) (10 Marks)

a. Explain different type of curves and its application in additive manufacturing.

OR

b. Explain network-based operation in additive manufacturing.

Q5.

(CO₁ & CO₂) (10 Marks)

a. Write short note on the STL file used in additive manufacturing.

OR

b. What are advantages of additive manufacturing.