

FACULTY OF ENGINEERING, UNIVERSITY OF LUCKNOW

Mid-Term Test - I

B.Tech. SEMESTER - VI, 2023-24

Branch: AI 3<sup>rd</sup> year

Student's Roll No.....

Subject Code: AI-601

Subject Title: Essentials of Machine Learning

Time: 1 Hrs.

Full Marks: 20

**Note:** Attempt questions from each section as per instructions. The symbols have their usual meaning.

SECTION A

1. Attempt all parts of this question. Each part carries 1 mark. (1 x 5 = 5)

- What is Unsupervised Learning.
- What is 'Training set' and 'Test set'?
- What is standard approach to supervised Learning.
- List down approaches for machine Learning.
- List the function of 'Supervised Learning'.

SECTION B

Attempt any THREE questions of the following. Each question carries 5 marks. (5 x 3 = 15)

- Why are validation and test data sets needed?
- What is bias and variance in machine learning.
- What are the unsupervised machine learning techniques.
- What are the three stages of building a model in machine learning.