

ADMISSION NUMBER									

## School of Computing Science and Engineering

Master of Computer Applications

Mid Term Examination - May 2024

**Duration : 90 Minutes**

**Max Marks : 50**

### Sem II - E1PY202C - Machine Learning

General Instructions

*Answer to the specific question asked*

*Draw neat, labelled diagrams wherever necessary*

*Approved data hand books are allowed subject to verification by the Invigilator*

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|----|--|--------|
| 1) | Explain the term Support in in SVM   | K2 (2) |
| 2) | What is the Formula for Euclidean Distance?  | K1 (3) |
| 3) | Compare & Contrast Overfitting with Under Fitting                                      | K2 (4) |
| 4) | Explain the term Concept Learning Task?  | K2 (6) |
| 5) | Dicuss the role & difference between Find -S and Candidate Elimination Algorithm in ML | K3 (8) |
| 6) | Apply Z-Score Normalization on Following Data and calculate the Normalized Data        | K3 (9) |

**Given Data**

- \_\_\_\_\_
- 2500
- \_\_\_\_\_
- 6400
- \_\_\_\_\_
- 1000
- \_\_\_\_\_
- 62500
- \_\_\_\_\_
- 90000
- \_\_\_\_\_
- 1600

- |    |  |         |
|----|--|---------|
| 7) | Analyze the term well posed Learning Problem with an example         | K4 (8)  |
| 8) | Examine various Challenges of Missing Data How do we overcome those? | K4 (12) |

**OR**

Analyse the Use of Decision tree classification to predict whether a person is going to be an astronaut, depending on their age, whether they like dogs, and whether they like gravity. Determine the Splitting Attributes of the tree K4 (12)

Serial No:	Likes Dogs	Likes Gravity	Going to be Astronaut
1	0	0	0
2	1	1	1
3	0	1	1
4	0	0	0
5	0	0	0
6	1	1	1
7	1	0	0
8	1	1	1
9	0	1	0
10	1	1	1