

# School of Computing Science and Engineering

B.Tech CSE  
ETE - Jun 2023

Time : 3 Hours

Marks : 50

## Sem II - MCSE1240 - Artificial Intelligence and Machine Learning

*Your answer should be specific to the question asked*

*Draw neat labeled diagrams wherever necessary*

1. Differentiate between Training and Training Data K1 CO2 (2)
2. Explain the various characteristics of AI K4 CO3 (2)
3. Distinguish between deep learning and machine learning. K4 CO5 (2)
4. There are many machine learning algorithms till now. If given a data set, how can one determine which algorithm to be used for that? K3 CO4 (2)
5. Discuss the Perceptron training rule. K2 CO1 (2)
6. How the support vector machines can be used in machine learning? K6 CO5 (6)
7. Explain the k-Means Algorithm with an example. K4 CO2 (5)
8. List the issues in Decision Tree Learning. Interpret the algorithm with respect to Overfitting the data. K3 CO1 (5)
9. Differentiate hierarchical clustering and distance based clustering K5 CO5 (8)
10. Explain K means algorithm and separate {5, 11, 19, 27, 23, 25, 6, 18, 2, 8, 10, 12, 31, 29, 4} into 3 clusters. K5 CO4 (8)
11. Explain KNN Algorithm K4 CO3 (8)