School of Computing Science and Engineering
Master of Science in Computer Science
Semester End Examination - Nov 2023

Duration : 180 Minutes
Max Marks : 100

Sem III - MSCS2330 - Artificial Intelligence and 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

1) Explain among Decision Tree and Naïve Bayes classifier will be best sutable to classify a mail as spam or not — K1 (2)

2) When will you use classification over regression? — K2 (4)

3) What is model accuracy and model performance? — K2 (6)

4) Explain why we need dataset to train and test the Machine Learning algorithms — K3 (9)

5) Explain the multi-layer perceptron model with a neat diagram. — K3 (9)

6) Define Perceptrons with neat diagram — K5 (10)

7) Explain what are the evaluation approaches would you work to measure the effectiveness of machine learning model. — K4 (12)

8) Differentiate between supervised, unsupervised, and reinforcement learning with Suitable Example. — K5 (15)

9) Define types of learning, inductive bias, evaluation, cross-validation and hypothesis in Machine Learning. — K5 (15)

10) Write a program to implement K-nearest neighbour algorithm to classify iris dataset. Print both correct and wrong predication using python machine learning. — K6 (18)