

School of Computing Science and Engineering

Department of Computer Application

Mid Term Examination

Exam Date: 29 Sep 2023

Time : 90 Minutes

Marks : 50

Sem III - MSCS2330 - Artificial Intelligence and Machine Learning

Your answer should be specific to the question asked

Draw neat labeled diagrams wherever necessary

- 1) Differentiate between AI, ML and DL ? K2 (2)
- 2) Describe the main applications of AI in various fields K1 (3)
- 3) Name the various types of informed search and Uninformed search K2 (4)
- 4) Define Machine Learning. Discuss with examples why machine learning is important. K2 (6)
- 5) Explain PCA and its process with their applications. K3 (6)
- 6) Explain the following 1. Linear Regression 2. Logistic Regression K3 (9)
- 7) Discuss heuristic searching techniques. Also write down the algorithm of A* search technique. K4 (8)
- 8) Explain the inductive biased hypothesis space, unbiased learner and the futility of Bias Free Learning. Describe the three types of learner. K4 (12)

OR

Describe Support Vector Machines. Explain how correctly the SVM is working using a suitable classification example. K4 (12)