PAPER ID-410303

Roll No:

MBA
(SEM III) THEORY EXAMINATION 2021-22
AI & ML Techniques for Business

Time: 3 Hours **Total Marks: 100**

Note: 1. Attempt all Sections. If require any missing data; then choose suitably.

SECTION A

1. **Attempt *all* questions in brief.** **2 x 10 = 20**
   a. What are the advantages of Machine Learning?
   b. Demonstrate some useful applications of machine learning.
   c. Discuss Linear Regression and Logistic regression.
   d. Write down the Properties of SVM.
   e. Discuss unsupervised Learning.
   f. Discuss clustering and its types.
   g. Compare between perceptron and multilayer perceptron.
   h. Define CNN.
   i. Define Reinforcement Learning in its application Area.
   j. Define the term Q learning.

SECTION B

2. **Attempt any *three* of the following:** **10 x 3 = 30**
   a. Demonstrate Machine Learning and its Framework for building Machine Learning System.
   b. Compare between linear regression and Non-Linear Regression.
   c. Interpret the K-mean clustering with the help of example.
   d. Interpret the back propagation algorithm with the help of example
   e. Interpret Reinforcement Learning with the help of suitable example.

SECTION C

3. **Attempt any *one* part of the following:** **10 x 1 = 10**
   (a) Compare between Data Science and Machine Learning and also describe the Issues in Machine Learning.
   (b) Summarize the following:
       (i) Genetic Algorithm (ii) History of ML

4. **Attempt any *one* part of the following:** **10 x 1 = 10**
   (a) Explain various classification techniques used in Supervised Learning.
   (b) Explain learning and Supervised learning with the help of example.

5. **Attempt any *one* part of the following:** **10 x 1 = 10**
   (a) Describe Unsupervised learning with the help of an example.
   (b) Explain DBSCAN algorithm with the help of example.

6. **Attempt any *one* part of the following:** **10 x 1 = 10**
   (a) Interpret the importance of CNN with the help of a case in medical domain
   (b) Describe the role of various layers of CNN.

7. **Attempt any *one* part of the following:** **10 x 1 = 10**
   (a) Apply Q learning Algorithm with suitable example.
   (b) Apply Markov Decision process with suitable example.