

Roll No: []

MBA
(SEM III) THEORY EXAMINATION 2023-24
AI AND ML FOR BUSINESS

TIME: 3HRS

M.MARKS: 100

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

SECTION A

1. Attempt all questions in brief.

Q no.	Question	Marks	CO
a.	What is artificial intelligence?	2	1
b.	Define structured data.	2	1
c.	What is meta knowledge?	2	2
d.	Brief about linear regression.	2	2
e.	Explain the concept of decision trees.	2	3
f.	Give concept of DBSCAN.	2	3
g.	What is pooling in convolutional?	2	4
h.	What is hyperplane?	2	4
i.	Define reinforcement learning.	2	5
j.	Give concept of 1D and 2D layers.	2	5

SECTION B

2. Attempt any three of the following:

a.	Discuss advantages and disadvantages of artificial intelligence.	10	1
b.	How supervised learning is helpful in making pricing decision in business?	10	2
c.	What is agglomerative hierarchical clustering? How the agglomerative hierarchical clustering works?	10	3
d.	Explain single layer perception with its working.	10	4
e.	Explain Q learning algorithm with example.	10	5

SECTION C

3. Attempt any one part of the following:

a.	What is knowledge acquisition? Explain steps of knowledge acquisition process.	10	1
b.	What is artificial neural network? Describe the architecture of an artificial neural network.	10	1

4. Attempt any one part of the following:

a.	Discuss metrics for evaluating linear model in supervised learning.	10	2
b.	Explain the working model of supervised learning with example.	10	2

5. Attempt any one part of the following:

a.	What is clustering? Discuss most common areas of use of clustering techniques.	10	3
b.	Differentiate between linear and non-linear SVM.	10	3

6. Attempt any one part of the following:

a.	What is back propagation algorithm? How it works?	10	4
b.	Discuss components of convolutional neural network.	10	4

7. Attempt any one part of the following:

a.	Describe Markov Decision process.	10	5
b.	Explain applications areas of reinforcement learning.	10	5