SILVER OAK UNIVERSITY
EDUCATION TO INNOVATION

College of Technology (01)
Silver Oak College Of Engineering And Technology
Aditya Silver Oak Institute of Technology
Bachelor of Technology
Department of Information Technology (010)

Semester:	VII	Academic Year:	2023-24
Subject Name:	Advance Artificial Intelligence	Subject Code:	1010103416

Question Bank

UNIT-1

SR NO.	Question Text	Marks
1	Define: AI. List down the application of AI and explain any one.	4
2	Analyze (a) 8-puzzle, (b) Chess and (c) Tower of Hanoi problems with respect to the following problem characteristics: I. Is the problem decomposable? II. Can solution step be ignored? III. Is the good solution absolute or relative? IV. Is the solution state or a path? V. What is the role of knowledge?	3

3	Define DL. List down the application of DL and explain any one.	3
4	Explain types of Problems in AI	3
5	Problem characteristics of AI.	3
6	What is Pattern Recognition with application and advantages.	4

UNIT-2 & 3

SR NO.	Question Text	Marks
1	Define ML. List down the applications of ML and explain any one.	4
2	Explain Tic-Tac-Toe using mini-max.	4
3	List down the types of learning. Explain the common ML algorithm.	3
4	Difference between: Depth first and Breadth first search.	3
5	Define Neural Network.	3
6	Explain the important elements of Data Science.	4
7	Difference between: Biological and Artificial Neurons.	4
8	Explain the topologies of NN.	3
9	Explain the architecture of ANN.	8
10	List down the types of activation function and explain any three.	4
11	What are Heuristic Search Techniques? Explain anyone in detail.	8

12	Explain Alpha-Beta Pruning.	4
13	Explain Types of Activation functions.	4

UNIT-4

SR NO.	Question Text	Marks
1	Define CNN. List down the applications of CNNs.	3
2	Define RNN,LSTM and BLSTM.	4
3	Explain training, testing and validation sets.	3
4	Define evaluation measures: accuracy, precision, recall.	4
5	Explain Types of Estimators.	4
6	How Is Training Data Used?	4

UNIT- 5

SR NO.	Question Text	Marks
1	What is Tensorflow?	4
2	Explain Data Input and Preprocessing with Tensorflow	3
3	What are the Problems we face while constructing an input pipeline? List down the solution for the same.	8
4	List down the steps for building a model in Tensorflow.	4

UNIT-6

SR NO .	Question Text	Marks
1	Explain the working of CNNs with diagrams.	8
2	Explain AlexNet.	8
3	List down the architecture of CNNs.	4
4	Explain GoogLeNet.	8
5	Explain VGGNet.	4
6	Explain ResNet.	4
7	Explain Z-F Net	3
8	Explain LeNet.	4

UNIT-7

SR NO .	Question Text	Marks
1	Define GANs. List down the applications of GANs.	8
2	List down the types of GANs and explain any one.	8
3	What is an image inpainting?	4
4	What is Super resolution? List down the application of SR.	8
5	List down the types of Super Resolution GANs.	4
6	Explain SR-GANs.	4
7	Explain SR-CNNs.	3

Prof.Aishwarya Rajput
Subject Coordinator

Dr. Vikas Tulshyan
Head of Department