Sinhgad Technical Education Society SKN SINHGAD INSTITUTE OF TECHNOLOGY & SCIENCE, Lonavala <u>Unit Test-1</u>

Academic Year - 2023-24, Semester - II Branch: Computer Engineering

Subject: Deep Learning (410251)

Class: BE (A and B)

Day & Date: Tuesday 06/02/2024

Marks: 30

Time: 1 Hr

Q. No	Questions	Marks	CO
1.a)	Enlist and explain any four popular industrial tools used for Deep Learning.	05	CO1
b)	Write Short Note on: Hyper parameters used in Neural Network?	05	CO2
	- OR-		
	Give co-relation between Artificial Intelligence, Machine Learning, and Deep Learning. Compare Deep Learning with Machine Learning.	05	CO1
	What is a Perceptron? What are the steps involved for training a Perceptron in Deep Learning?	05	CO2
	How Deep Learning works in three figures explain with example? Also explain common architectural principles of Deep Network	05	CO1
b)	Enlist Activation functions used in Deep Neural Network. Explain any two of them in detail.	05	CO2
	- OR-		
4.a)	Write Short Note on: Under and Over fitting regularization.	05	CO1
	Explain how a Neural Networks can be trained with Back propagation and Forward propagation methods.	05	CO2
5.a)	Explain and compare Training error and Generalization error?	05	CO1
b)	What is Sentiment analysis? Mention different types of sentiment analysis?	05	CO2
	- OR-		
6.a)	Explain History of Deep Learning?	05	CO1
b)	How Gradient Descent works?	05	CO2