

PRAGATI ENGINEERING COLLEGE: SURAMPALEM
(AUTONOMOUS)
III B.Tech II Semester Regular/Supplementary Examinations, April - 2024

DEEP LEARNING
(CSE(AI&ML) and CSE(AI))

Time: 3 hours

Max. Marks: 70 M

Answer ONE Question from each Unit
All Questions Carry Equal Marks

Q. No.	Questions	BTL	CO	Marks
UNIT – I				
1.	a) Differentiate Supervised Learning and Unsupervised Learning.	K4	CO1	7M
	b) Discuss about Decision Tree Algorithm with suitable example.	K3	CO1	7M
OR				
2.	a) Briefly discuss about probability based machine learning models.	K2	CO1	7M
	b) Explain about Gradient Boosting Algorithm in detail.	K2	CO1	7M
UNIT – II				
3.	a) What is Artificial Neural Network? Explain its components in detail.	K2	CO2	7M
	b) Explain about how to improve Deep Neural Networks.	K2	CO2	7M
OR				
4.	a) Discuss about Back Propagation Algorithm in detail.	K2	CO2	7M
	b) What is activation function? Explain different activation functions used in deep learning.	K2	CO2	7 M
UNIT – III				
5.	a) What is Binary Classification? Explain how to implement binary classification using Neural Networks.	K2	CO3	7M
	b) Explain about how to set up a deep learning workstation in detail.	K2	CO3	7M
OR				
6.	a) Discuss about Microsoft cognitive tool kit.	K2	CO3	7M
	b) Demonstrate classifying news wires using Neural Networks.	K2	CO3	7M
UNIT – IV				
7.	a) Explain about Recurrent Neural Networks and its applications.	K3	CO4	7M
	b) Briefly explain about the use of Pytorch library in Deep Learning.	K2	CO4	7M
OR				
8.	a) Discuss about Convolution and pooling operations with suitable example.	K3	CO4	7M
	b) Explain how LSTM is better than traditional RNNs.	K2	CO4	7M
UNIT – V				
9.	a) What is Autoencoder?. Explain about autoencoders in detail.	K2	CO5	7M
	b) Explain about Generative Adversial Networks.	K2	CO5	7M
OR				
10.	a) Briefly discuss about Boltzmann Machines.	K2	CO5	7M
	b) What is Reinforcement Learning? Discuss about its applications.	K2	CO5	7M