Reg. No.												

Question Paper Code	12672

B.E. / B.Tech. - DEGREE EXAMINATIONS, APRIL / MAY 2024

Fourth Semester

Computer Science and Engineering (AIML)

20AIPC502 - DEEP LEARNING

Regulations - 2020

Duration: 3 Hours | Max. Marks: 100

PART - A (10 × 2 = 20 Marks)

Answer ALL Questions

		Marks	K – Level	CO
1.	State the salient features of Neural Network	2	K1	CO1
2.	Give the basic elements of a Biological neuron.	2	K1	CO1
3.	List the benefits of activation functions.	2	K1	CO2
4.	Define under fitting.	2	K1	CO2
5.	What is stacking?	2	K1	CO3
6.	Define Data Augmentation.	2	K1	CO3
7.	Mention the Drawbacks of RNN.	2	K1	CO4
8.	Define LSTM.	2	K1	CO4
9.	List out the Deep Associative Memory Networks.	2	K1	CO5
10.	Why is Generative Adversarial Networks (GAN) so popular?	2	K2	CO5

PART - B (5 × 13 = 65 Marks)

Answer ALL Questions

			Marks	K – Level	CO
11.	a)	Explain about HISTORICAL CONTEXT and MOTIVATION for Deep Learning.	13	K2	CO1
		OR			
	b)	Describe the concept of Feed forward neural networks in detail.	13	K2	CO1
12.	a)	Describe the various Activation functions RELU, LRELU and ERELU.	13	K2	CO2
		OR			
	b)	Briefly discuss the performance of Machine learning and deep learning.	13	K2	CO2
13.	a)	How would you construct Alex Net layers and filters? Explain.	13	K2	CO3
		OR			
	b)	Explain the Architecture of Convolution Neural Networks in detail.	13	K2	CO3

14.	a)	With an example expression, Explain about Forward and Backward computational Graphs.	*13*	*K2*	*CO4*
		OR			
	b)	Describe Encoder-Decoder sequence to sequence architecture.	*13*	*K2*	*CO4*
15.	a)	Elaborate on DBN and DBM with necessary examples.	*13*	*K2*	*CO5*
		OR			
	b)	Describe Generative Adversarial Network with a neat sketch. Explain its various classifications with necessary examples.	*13*	*K2*	*CO5*

PART - C (1 × 15 = 15 Marks)

16.	a)	Elaborate and Analyze the steps carried out for identify fake video.	*15*	*K2*	*CO6*
		OR			
	b	Demonstrate the design principles for classifying the real images in a meta dataset using deep learning.	*15*	*K2*	*CO6*