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APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

Third Semester MCA (Two Year) Degree Regular and Supplementary Examination December 2022

Course Code: 20MCA283

Course Name: DEEP LEARNING

Max. Marks: 60 Duration: 3 Hours

PART A

Answer all questions, each carries 3 marks. Marks

1	Explain Feed Forward Neural Networks.	(3)
2	Describe ReLU activation function.	(3)
3	Write a short note on tSNE.	(3)
4	List the advantages of KERAS.	(3)
5	Explain the importance of Padding.	(3)
6	What is the use of pooling?	(3)
7	Write the functions of gates in a single GRU unit.	(3)
8	Explain the problem of vanishing gradients in RNN.	(3)
9	Write any three challenges faced during the training of GAN.	(3)
10	Explain minimax loss.	(3)

PART B

Answer any one question from each module. Each question carries 6 marks.

Module I

11	List and explain the different types of activation functions.	(6)

OR

12	Explain how back propagation works.	(6)

Module II

13	Differentiate underfitting and overfitting.	(6)

OR

14	a)	Explain Rank, Shape and Type parameters in TensorFlow.	(3)
	b)	Which are the different types of Tensors in Tensor data structure?	(3)

Module III

15	Explain the Convolutional Neural network architecture in detail.	(6)

OR

16	Explain the architecture of VGG-16.	(6)

Module IV

17	What is the functionality of Recurrent Neural Networks and also illustrate back propagation through time.	(6)

OR

18	Explain Long Short Term Memory in detail.	(6)

Module V

19	Explain Variational autoencoder.	(6)

OR

20	Compare Generative and Discriminative models.	(6)

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