

	DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE Regular & Supplementary Winter Examination-2023 Course: B. Tech. Branch :Computer and Allied Semester :VII Subject Code & Name: Deep Learning (BTCOE705B) Max Marks: 60 Date:11/01/2024 Duration: 3 Hr.	
	Instructions to the Students: 1. All the questions are compulsory. 2. The level of question/expected answer as per OBE or the Course Outcome (CO) on which the question is based is mentioned in () in front of the question. 3. Use of non-programmable scientific calculators is allowed. 4. Assume suitable data wherever necessary and mention it clearly.	
		(Level/CO) Marks
Q. 1	Solve Any Two of the following.	12
A)	Explain the following steps involved in machine learning. (i) Preprocessing (ii)Segmentation (iii)Feature Extraction.	Understand 6
B)	How data is classified using Bayes classifier?	Analyze 6
C)	Distinguish between supervised and unsupervised machine learning.	Analyze 6
Q.2	Solve Any Two of the following.	12
A)	What is neuron? Explain structure of biological neuron.	Remember 6
B)	Explain how XOR function is implemented using NAND, OR and AND functions in neural networks.	Apply 6
C)	Explain architecture of feed forward neural network with necessary convention.	Understand 6
Q. 3	Solve Any Two of the following.	12
A)	What is back propagation learning?	Remember 6
B)	Explain architecture of multilayer perceptron.	Remember 6
C)	How are weights updated at output layer in multilayer neural network?	Understand 6
Q.4	Solve Any Two of the following.	12
A)	What is Autoencoder? Explain undercomplete and sparse autoencoders in detail.	Remember 6
B)	Explain function of different layers of Convolutional neural networks.	Understand 6
C)	What are the advantages of Convolutional neural networks over multilayer perceptron.	Analyze 6

Q. 5	Solve Any Two of the following.		12
A)	State some application of Deep learning.	Understand	6
B)	What is the need of normalization. Explain batch normalization.	Remember	6
C)	Explain the working of recurrent neural network.	Remember	6
*** End ***			

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