

	<b>DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE</b> <b>Regular &amp; Supplementary Winter Examination-2023</b> <b>Course: B. Tech.</b> <b>Branch :Computer and Allied</b> <b>Semester :VII</b> <b>Subject Code &amp; Name: Deep Learning (BTCOE705B)</b> <b>Max Marks: 60</b> <b>Date:11/01/2024</b> <b>Duration: 3 Hr.</b>		
	<b>Instructions to the Students:</b> 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
<b>Q. 1</b>	<b>Solve Any Two of the following.</b>		<b>12</b>
<b>A)</b>	<b>Explain the following steps involved in machine learning.</b> <b>(i) Preprocessing (ii)Segmentation (iii)Feature Extraction.</b>	<b>Understand</b>	<b>6</b>
<b>B)</b>	<b>How data is classified using Bayes classifier?</b>	<b>Analyze</b>	<b>6</b>
<b>C)</b>	<b>Distinguish between supervised and unsupervised machine learning.</b>	<b>Analyze</b>	<b>6</b>
<b>Q.2</b>	<b>Solve Any Two of the following.</b>		<b>12</b>
<b>A)</b>	<b>What is neuron? Explain structure of biological neuron.</b>	<b>Remember</b>	<b>6</b>
<b>B)</b>	<b>Explain how XOR function is implemented using NAND, OR and AND functions in neural networks.</b>	<b>Apply</b>	<b>6</b>
<b>C)</b>	<b>Explain architecture of feed forward neural network with necessary convention.</b>	<b>Understand</b>	<b>6</b>
<b>Q. 3</b>	<b>Solve Any Two of the following.</b>		<b>12</b>
<b>A)</b>	<b>What is back propagation learning?</b>	<b>Remember</b>	<b>6</b>
<b>B)</b>	<b>Explain architecture of multilayer perceptron.</b>	<b>Remember</b>	<b>6</b>
<b>C)</b>	<b>How are weights updated at output layer in multilayer neural network?</b>	<b>Understand</b>	<b>6</b>
<b>Q.4</b>	<b>Solve Any Two of the following.</b>		<b>12</b>
<b>A)</b>	<b>What is Autoencoder? Explain undercomplete and sparse autoencoders in detail.</b>	<b>Remember</b>	<b>6</b>
<b>B)</b>	<b>Explain function of different layers of Convolutional neural networks.</b>	<b>Understand</b>	<b>6</b>
<b>C)</b>	<b>What are the advantages of Convolutional neural networks over multilayer perceptron.</b>	<b>Analyze</b>	<b>6</b>

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

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