InSem Examination-II Summer2025	
Exam Seat No.:	
Academic Year:2024-2025	Semester:VI
Class:TY	Program:B.Tech
Branch Code:ADS	Pattern:2022
Name of Course:Neural Network and Fuzzy Logic	Course Code:ADS223014(B)
Max. Marks:30	Duration:1.15 Hrs.

Instructions: Candidates should read carefully the instructions printed on the Question Paper and on the cover page of the Answer Book, which is provided for their use.

1. This question paper contains 1 page.
2. Answer to each new question is to be started on a new page.
3. Assume suitable data wherever required, but justify it.
4. Draw the neat labelled diagrams, wherever necessary.
5. The last columns indicates the Course Outcome and level of Blooms Taxonomy of the Question/sub-question.

		Marks	**CO**

Question No. 1

1 a)	Explain biological neuron model.	(4)	CO1
1 b)	Explain Neuron Modeling for Artificial Neural Systems.	(3)	CO1

Question No. 2

2 a)	Explain Supervised and Unsupervised Learning.	(4)	CO1
2 b)	Explain feedback network.	(4)	CO1

Group OR

2 c)	Explain Neuron Processing.	(4)	CO1
2 d)	Enlist and explain applications of neural network.	(4)	CO1

Question No. 3

3 a)	Explain Delta learning rule.	(4)	CO2
3 b)	Differentiate Sigmoid, Tanh and ReLU based on its pros, cons and use case.	(3)	CO2

Question No. 4

4 a)	Explain Cumulative verses incremental weight updating.	(4)	CO2
4 b)	Explain Steepness of activation function.	(4)	CO2

Group OR

4 c)	Explain the role of momentum in neural network learning.	(4)	CO2
4 d)	Explain Correlation Learning Rule.	(4)	CO2

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