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SHARDA UNIVERSITY
Beyond Boundaries

School of Computing Science and Engineering

Department of: Computer Science and Engineering

Assignment-1, Session: 2025-2026

[Programme: B.Tech. CSE] [Semester: IV]

Course Title: Concepts of Neural Networks Course Code: CSA2023		Max Marks: 20
Instructions:	1. All questions are compulsory 2. Assume missing data suitably, if any 3. All questions should be of higher learning.	BTL Level (K)
Unit 1 Unit 2	CO1: Define the biological significance of Neural Networks and list ANN components.	
	CO2: Classify various learning paradigms based on real file problems.	

Q.No.	**Section A (4×3=12 Marks)**	**Unit**	**COs**	**K**
1	Explain the structure of a biological neuron and its components.	Unit 1	CO1	K1
2	Explain what happens if an ANN uses only linear activation functions?	Unit 1	CO1	K2
3	Explain Learning Paradigms and their real Applications.	Unit 2	CO2	K3
4	Explain the justification of why Unsupervised Learning cannot use error for optimization. Support with clustering example.	Unit 2	CO2	K3
	Section B (2×4=8 Marks)			
5	Explain different network topologies: feedforward, recurrent, and fully connected networks.	Unit 1	CO1	K3
6	Illustrate Supervised Learning is a function approximation problem. Explain with a real-life example.	Unit 2	CO2	K4