Code No: R20A6612 **R20**

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

(Autonomous Institution – UGC, Govt. of India)

III B.Tech II Semester Supplementary Examinations, June 2024

Neural Networks

(CSE-AIML)

Roll No										

Time: 3 hours **Max. Marks: 70**

Note: This question paper Consists of 5 Sections. Answer **FIVE** Questions, Choosing ONE Question from each SECTION and each Question carries 14 marks.

			BCLL	CO(s)	Marks
		SECTION-I			
1	A	What is Neural Networks? Explain Biological nature of Neuron with diagram	**L1**	**CO-I**	**[7M]**
	B	Explain single layer Neural network architecture with diagram	**L2**	**CO-I**	**[7M]**
		OR			
2	A	Determine the importance of Recurrent Neural Networks	**L2**	**CO-I**	**[7M]**
	B	Differentiate the Auto-Associative and Hetro-Associative memory with example	**L1**	**CO-I**	**[7M]**
		SECTION-II			
3	A	What is Perceptron? Explain multilayer perception model with example	**L3**	**CO-II**	**[7M]**
	B	Define Back Propagation? Explain what are the factors affecting back propagation training.	**L2**	**CO-II**	**[7M]**
		OR			
4	A	Explain Back propagation learning methods with examples	**L3**	**CO-II**	**[7M]**
	B	Explain Architecture of Neural Network and its applications	**L2**	**CO-II**	**[7M]**
		SECTION-III			
5	A	Compare the Fuzzy sets and Crisp sets with example	**L3**	**CO-III**	**[7M]**
	B	Explain Fuzzy and Crisp relations with example	**L4**	**CO-III**	**[7M]**
		OR			
6	A	Explain the Fuzzy to Crisp conversion with example	**L3**	**CO-III**	**[7M]**
	B	Explain the Fuzzy set theory and operations with example	**L2**	**CO-III**	**[7M]**
		SECTION-IV			
7	A	What is Fuzzy Controller? Explain Industrial applications with example	**L4**	**CO-IV**	**[7M]**
	B	Explain interference in fuzzy logic using fuzzy if-then rules.	**L2**	**CO-IV**	**[7M]**
		OR			
8	A	Explain the Fuzzy implications and Fuzzy algorithms.	**L3**	**CO-IV**	**[7M]**
	B	Compare the methods of Fuzzyfications and De-fuzzificataions with example	**L3**	**CO-IV**	**[7M]**
		SECTION-V			
9	A	What is Genetic Algorithm? Write procedures of Genetic Algorithm.	**L3**	**CO-V**	**[7M]**
	B	Draw flowchart of Genetic Algorithm? Explain Genetic representations with example	**L3**	**CO-V**	**[7M]**
		OR			
10	A	Explain importance of selection, Crossover mutation operators in Genetic Algorithm	**L4**	**CO-V**	**[7M]**
	B	What is Generational Cycle? Explain applications of Genetic Algorithm.	L3	CO-V	[7M]

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