

Code No: R20A6604

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

(Autonomous Institution – UGC, Govt. of India)

IV B.Tech I Semester Regular Examinations, November 2024**Soft Computing****(B.Tech-AIML)**

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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.

			SECTION-I	BCLL	CO(s)	Marks
1	<i>A</i>	Explain the Recent Trends in Soft Computing		L2	CO-I	[7M]
	<i>B</i>	Classify the various types of soft computing techniques.		L2	CO-I	[7M]
OR						
2	<i>A</i>	State and explain various applications of Soft Computing Techniques with example.		L4	CO-I	[14M]
			SECTION-II			
3	<i>A</i>	What is fuzzy logic? Describe any application on it.		L2	CO-II	[7M]
	<i>B</i>	In What context fuzzy systems are used? Mention the limitations of Fuzzy system?		L2	CO-II	[7M]
OR						
4	<i>A</i>	Explain the following (i) Evolutionary Programming (ii) Fuzzy Systems		L1	CO-II	[7M]
	<i>B</i>	Outline the classifications of Fuzzy Logic control?		L6	CO-II	[7M]
			SECTION-III			
5	<i>A</i>	Explain about the fuzzy relations in Fuzzy Decision Making.		L2	CO-III	[7M]
	<i>B</i>	Explain about the membership functions in fuzzy decision making.		L4	CO-III	[7M]
OR						
6	<i>A</i>	Illustrate about Particle Swarm Optimization Techniques.		L4	CO-III	[14M]
			SECTION-IV			
7	<i>A</i>	Explain bit-wise operation in genetic algorithm.		L2	CO-IV	[7M]
	<i>B</i>	Explore the use of crossover operator in Genetic Algorithm?		L3	CO-IV	[7M]
OR						
8	<i>A</i>	Infer the role of fitness function in Genetic Algorithm.		L2	CO-IV	[7M]
	<i>B</i>	Write examples to illustrate various crossover techniques.		L1	CO-IV	[7M]
			SECTION-V			
9	<i>A</i>	State and explain overview of Rough Set Theory.		L4	CO-V	[7M]
	<i>B</i>	Illustrate about various goals of Rough Sets.		L4	CO-V	[7M]
OR						
10	<i>A</i>	Write the Examples and Illustrations of Rough Set Theory.		L6	CO-V	[7M]
	<i>B</i>	Differentiate between Rough Set Theory and Fuzzy Set Theory		L3	CO-V	[7M]
