

**SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)****M.Tech. I Year II Semester Regular & Supplementary Examinations July-2025
SOFT COMPUTING****(Computer Science & Engineering)****Time: 3 Hours****Max. Marks: 60****(Answer all Five Units 5 x 12 = 60 Marks)****UNIT-I**

- 1 Explain soft computing Constituents with simple examples. CO1 L2 12M

OR

- 2 Describe Historical sketch of Soft Computing constituents and conventional AI approaches. CO1 L2 12M

UNIT-II

- 3 Illustrate the various operations on fuzzy sets and crisp sets. CO3 L2 12M

OR

- 4 List out various membership functions used in fuzzy logic and explain in detail. CO3 L2 12M

UNIT-III

- 5 Discuss about Back Propagation Multilayer Perceptron. CO2 L3 12M

OR

- 6 Interpret the basic models of Artificial Neural Networks in briefly. CO1 L2 12M

UNIT-IV

- 7 Discuss about Simple genetic algorithm with neat sketch. CO4 L2 12M

OR

- 8 Illustrate the basic operators and basic technologies in genetic algorithm. CO4 L3 12M

UNIT-V

- 9 Analyze Fuzzy Logic Tool Box utilized in Matlab. CO5 L4 12M

OR

- 10 List out the various mathematical functions utilized in Matlab/Python lib. CO5 L1 12M

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