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**SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR**  
(AUTONOMOUS)**M.Tech I Year II Semester Regular Examinations October-2020**  
**SOFT COMPUTING**

(Computer Science &amp; Engineering)

Time: 3 hours

Max. Marks: 60

(Answer all Five Units **5 x 12 = 60** Marks)**UNIT-I**

- 1 a Describe the applications of ANN. **6M**  
b Write short note on the characteristics of ANN. **6M**

**OR**

- 2 a What are the types of neuron activations functions? **6M**  
b What are the learning strategies for artificial neural networks? **6M**

**UNIT-II**

- 3 a Write short notes on the back propagation network. **6M**  
b Briefly discuss about back propagation learning. In details **6M**

**OR**

- 4 Discuss about the hetero associative memory network. **12M**

**UNIT-III**

- 5 a Discuss about the operations of fuzzy sets. **6M**  
b Describe about the fuzzy relations. **6M**

**OR**

- 6 a What are the properties, operations of classical sets? **6M**  
b Explain the relations of classical sets. **6M**

**UNIT-IV**

- 7 Explain about the development of rule base and decision making system. **12M**

**OR**

- 8 Explain applications of fuzzy logic in control system with one example. **12M**

**UNIT-V**

- 9 a Differentiate genetic algorithm verses traditional algorithm. **6M**  
b Describe the applications of genetic algorithm. **6M**

**OR**

- 10 Discuss in detail about various operators of GA and also explain GA evaluation procedure. **12M**

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