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Total No. of Questions: 08

Ph.D in Faculty of Engineering (CSE)
SOFT COMPUTING

o. of Pages: 01

M.Code: 77388

Time: 3 Hrs. Max. Marks: 100

## **INSTRUCTIONS TO CANDIDATES:**

- 1. Attempt any FIVE questions out of EIGHT question.
- 2. Each question carry TWENTY marks.
- 1. a) Discuss the use of perceptron networks for supervised learning in neural networks?
  - b) What is back propagation algorithm? How it is used in neural networks?
- 2. a) How does unsupervised learning work? Give example.
  - b) Write the use of associative memory in neural networks.
- 3. Write the use of DEFUZZIFICATION of converting the fuzzy sets obtained by inference engine in Neural Networks.
- 4. Explain the rules of Fuzzy rule base system by taking an suitable example.
- 5. Discuss various selection methods in GA. Explain any one of them.
- 6. a) How fitness value is formulated in Genetic Algorithm?
  - b) Show the use of Fuzzy set by taking an example.
- 7. Explain the classifications of Genetic Neuro-Hybrid Systems by taking an suitable example.
- 8. Define following:
  - a) Embedded hybrid systems
  - b) Limitation of Back Propagation Network

NOTE: Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.

1 | M-77388 (S9)-P21