R18

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B. Tech IV Year I Semester Examinations, February/March - 2022
SOFT COMPUTING
(Common to CSE, IT)

Time: 3 Hours   **Max. Marks: 75**

Answer Any Five Questions
All Questions carry equal marks
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1.   Differentiate between soft computing and hard computing.   [15]

2.   Explain the significance of hybrid models and discuss types of hybrid models.   [15]

3.a) Describe the different ways of representation of fuzzy sets.
  b) Illustrate fuzzy max-min composition, fuzzy max-product composition.   [8+7]

4.   Compare conventional programs with rule-based systems. Describe the major
      components of a rule-based system.   [15]

5.   How is multi-person decision making different from individual decision making?
      Describe the model which represents this type of decision making.   [15]

6.a) Elucidate the procedure of multi-objective PSO.
  b) What is the basic idea behind rough fuzzy C-means algorithm?   [8+7]

7.   Describe the various methods of selecting chromosomes for parents to crossover. [15]

8.   Discuss the basic properties of rough approximations.   [15]

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