

(DEE 416 D)

B. Tech. DEGREE EXAMINATION, MAY - 2015

(Examination at the end of Final Year)

ELECTRICALS & ELECTRONICS ENGINEERING

Paper - VI : Fuzzy Logic and Applications

Time : 3 Hours

Maximum Marks : 75

Answer question No. 1 compulsory

(15)

Answer ONE question from each unit

(4 x 15 = 60)

- 1) a) What is DSW algorithm?
- b) What are non interacting fuzzy sets?
- c) Mentions the application areas of Fuzzy logic.
- d) Write the difference between classical logic and fuzzy logic.
- e) Explain cluster validity.

Unit - I

- 2) a) What are properties and operations of Crisp sets.
- b) How fuzzy sets are different from Crisp sets?

OR

- 3) a) What are properties and operations of Fuzzy Sets?
- b) Explain fuzzy Relations with examples.

Unit - II

- 4) a) What is fuzzification and defuzzification? Explain.
- b) What are features of Fuzzy membership functions?

OR

- 5) a) What is membership function? Explain in detail.
b) Explain different defuzzification methods.

Unit – III

- 6) a) Explain Fuzzy rule based system with an example.
b) Explain Lambda Cuts for fuzzy sets and Fuzzy relations.

OR

- 7) a) What is meant by predicate logic? Explain.
b) Write a short note fuzzy tautology.

Unit – IV

- 8) a) Explain different fuzzy decision making methods in brief.
b) Write a short note on Fuzzy synthetic evaluation.

OR

- 9) a) Explain about fuzzy classifications in brief.
b) Explain about Multi objective decision making.

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