

Exam. Code : 208602

Subject Code : 4751

M.Sc. Information Technology 2nd Semester

(Batch 2021-23)

FUZZY SYSTEMS

Paper—MIT-204

Time Allowed—3 Hours]

[Maximum Marks—100

Note :— Attempt **FIVE** questions in all, selecting at least **ONE** question from each Section. The **FIFTH** question may be attempted from any Section. All questions carry equal marks.

SECTION—A

1. What is meant by a fuzzy system ? Discuss the utilities and limitations of the systems.
2. How are fuzzy sets different from classical sets ? Explain any two fuzzy set operations with examples.

SECTION—B

3. Explain the crisp relations and the properties of such relations.
4. Explain the process of defuzzification to scalars with an example.

SECTION—C

5. Why and how do we use graphical techniques of inference in fuzzy systems ?
6. What is neural network ? How do we use it in fuzzy systems ?

SECTION—D

7. Explain multi-objective decision making and c-means clustering.
8. What is MATLAB ? What features of MATLAB are used in fuzzy system simulation ?