Semester VI (B.Tech.)

Er. No.29.18308

Academic Year: 2022-23

## Jaypee University of Engineering & Technology, Guna

T-1 (Even Semester 2023)

18B11CI934 - SOFT INTELLIGENCE

Maximum Duration: 1 Hour

Maximum Marks: 15

## Notes:

- 1. This question paper has 4 questions.
- 2. Write relevant answers only.
- 3. Do not write anything on question paper (Except your Er. No.).

Marks CO No.

Specify the importance of universal space for the fuzzy set theory. Explain the finite and infinite universal space with the help of example.

[03] CO2

CO<sub>2</sub>

- O2. Draw the graphical interpretation of the following to prove the properties related to union fuzzy logic operations: (consider the fuzzy sets as per your choice)
  - a. Identity
  - b. Idempotence
  - 2. Commutativity
  - d Associativity.

The terms nearest and closer are defined in many ways in clustering algorithm. In ART, how these two terms are defined in a different way. Explain with the help of simple ART model.

[04] CO1

In searching a large state-space, multi-modal state-space, or n-dimensional surface, which approach will provide the best result and why? Explain with the help of an example.

[04]

