Reg. No. : ....

Name : ....

III Semester M.C.A. Degree (CBSS – Reg./Supple./Imp.) Examination, November 2022
(2020 Admission Onwards)
MCA 3C04 : PRINCIPLES OF INTELLIGENT SYSTEMS

Time : 3 Hours

Max. Marks : 60

SECTION – A

Answer **all** questions. **Each** question carries two marks.

1. Define Neuron.

2. What is meant by Linear separability ?

3. What is meant by associative memory networks ?

4. Give any two examples of unsupervised learning methods.

5. Explain fuzziness.

6. What is fuzzy tolerance ?

7. Write a note on λ-cuts for fuzzy relations.

8. What is the cardinality of fuzzy relations ?

9. Differentiate fuzzy logic and binary logic.

10. What is a fitness function ? Explain.

SECTION – B

Answer **all** questions. **Each** question carries **eight** marks.

11. a) What are different types of learning ? Explain each of them.

OR

b) Give a detailed account of the perceptron network with its architecture.

P.T.O.

12. a) Explain Training algorithms in detail.

OR

b) Explain algorithm and operating principles of Adaptive Resonance Network.

13. a) Explain operations on fuzzy sets.

OR

b) Compare and contrast classical set relations and fuzzy set relations.

14. a) Explain fuzzification in detail. Give examples.

OR

b) Explain defuzzification in detail. Give examples.

15. a) Explain the working principle of Genetic Algorithm.

OR

b) Give a detailed account of inheritance operators used in GA.

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