



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

M.Sc. DEGREE EXAMINATION – COMPUTER SCIENCE

SECOND SEMESTER – APRIL 2022

PCS 2601 – SOFT COMPUTING

Date: 24-06-2022

Dept. No.

Max. : 100 Marks

Time: 09:00 AM - 12:00 NOON

PART – A

Answer ALL Questions

(10x 2 = 20 Marks)

1. What is Fuzzy Logic
2. Write Advantages of Neural Network
3. Define Membership Functions.
4. Define Fuzzification.
5. How does crossover affect the schema theorem?
6. List the Phases of Genetic Algorithm
7. Why are genetic algorithms preferred for internet search?
8. Give the notation used in schema thermo.
9. Give the equation to maximize and minimize genetic algorithm implementation.
10. Give the formulas for various laws associated with classical sets?

PART – B

Answer all Questions

(5 x 8 = 40 Marks)

- 11 a) Explain Neural Networks and its Advantages
(OR)
- 11 b) Explain The multi-disciplinary point of view of neural networks:
- 12 a) List the Methods of Membership Value Assignments.
(OR)
- 12 b) Write short notes about FLC system models.
- 13 a) Which of the following are main components of genetic algorithm?
(OR)
- 13 b) Explain Holland Classifier Systems
- 14 a) How genetic algorithms give optimized solution in Travelling Salesman Problem?
(OR)
- 14 b) Give the steps involved in the internet search using genetic algorithms?
15. a) Write the steps for solving quadratic equations with genetic algorithm approach?
(OR)
15. b) Write a C program to verify the various laws associated with fuzzy sets?

PART – C

Answer any TWO Question

(2 x 20 = 40 Marks)

- 16 a) write the application scope of neural network
b) Write about fuzzy decision making?
- 17 a) what are the steps of genetic algorithm?
b) what are the issues faced while designing a genetic algorithm for intelligent internet search and explain them in detail?
- 18 a) Write a C program to implement Adaline network?

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