

Soft Computing

Time: Three Hours

<http://www.rgpvonline.com>

Maximum Marks: 70

Note: i) All questions carry equal marks.

ii) There is internal choice in questions.

UNIT-I

www.rgpvonline.in

1. a) What is soft computing? Why it Cell soft?
- b) What is artificial intelligence? How it differ from natural Intelligence?

OR

2. a) What are the differences between scripts and frame Structures in knowledge Representation?
- b) Explain A* and AO* algorithm with suitable example.

UNIT-II

3. a) How MAD ALINE network Differ from AD ALINE Network?
- b) Describe back propagation training algorithm for the activation function, which is an arctan function?

OR

4. a) Give difference between ANN and artificial intelligence.
- b) What is learning? Explain difference between learning and Training?

UNIT-III

5. a) What is ART? Explain Rules and Applications, b) Explain Counter propagation Network.

OR

www.rgpvonline.in

6. a) Explain Chinese character Recognition method using ART2.
- b) What do you mean by Associative memory of Neural network?

UNIT-IV

7. a) Explain fuzzy logic and fuzzy quantifiers with example.
- b) What is Defuzzification? Explain with example.

OR

8. a) Give difference between Fuzzy logic and predicate logic.
- b) What is Generalized Modus Ponens and Generalized Modus Tollens?

UNIT-V

9. a) What is Optimization? Explain ant colony optimization,
- b) Explain the Genetic Algorithm cycle with example.

www.rgpvonline.in

OR

10. Write short notes on Following. (Any Four):
- a) Constrained optimization. b) Hybrid systems. c) Convergence of G.A
- d) Neuro - Genetic System. e) Fuzzy logic controlled GA.