

Code: 9A15705

B.Tech IV Year I Semester (R09) Supplementary Examinations June 2017

SOFT COMPUTING

(Computer Science & Systems Engineering)

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions
All questions carry equal marks

- 1 (a) Explain the problems in hill-climbing techniques along with ways to solve this problem.
(b) What is artificial intelligence? How it differ from natural language?
- 2 Explain knowledge representation. Discuss various approaches to knowledge representation.
- 3 (a) Explain the problem of linear reparability. How EX-OR gate problem be implemented using ANN?
(b) What is learning? Explain difference between learning and training.
- 4 (a) Write short notes:
(i) Learning vector quantization.
(ii) Maxnet.
(b) Draw and discuss the configuration of hamming network.
- 5 (a) Give the difference between fuzzy logic and predicate logic.
(b) Explain fuzzy operations with example.
- 6 (a) Write properties and composition of fuzzy relations.
(b) What is membership value assignment? Explain in detail.
- 7 Explain different types of the fuzzy arithmetic functions with example.
- 8 (a) Mention the various applications of genetic algorithm. Discuss at least two in detail.
(b) What is the motivation for using fuzzy logic in control applications? Discuss.
