Code: 9A15705



## B.Tech IV Year I Semester (R09) Supplementary Examinations, May 2013 SOFT COMPUTING

(Computer Science and Systems Engineering)

Max. Marks: 70

## Time: 3 hours

## Answer any FIVE questions All questions carry equal marks

- 1 (a) Discuss problem characteristics.
  - (b) Explain best-first search algorithm.
- 2 Solve the following crypt arithmetic problem using constraint satisfaction procedure: CROSS + ROADS = DANGER
- 3 (a) Discuss back propagation neural network model.
  - (b) Write short notes on supervised learning networks.
- 4 (a) Explain hamming network.
  - (b) Discuss vector quantization applications.
- 5 Discuss adaptive resonance theory network in detail.
- 6 Write a brief notes on the following:
  - (a) Membership value assignments.
  - (b) Fuzzy relations.
- 7 Discuss fuzzy decision making in detail.
- 8 Explain fuzzy control system applications.

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