

Code: 9A15705

R09

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

**SOFT COMPUTING**

(Computer Science and Systems Engineering)

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions  
All questions carry equal marks

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- 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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