

R09

Code: 9A05605

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

ARTIFICIAL INTELLIGENCE

(Common to MCT & ECC)

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions

All questions carry equal marks

- 1 (a) Explain the requirements of a good control strategy with lucid examples.
(b) What do a production system consists of? Discuss every component.
- 2 (a) Show that every branch pruned by back jumping is also pruned by forward checking. Illustrate with example.
(b) Give a short note on simulated annealing.
- 3 Explain a well-developed technology for reasoning in propositional logic with illustrations.
- 4 (a) Discuss the resolution strategies that help to find proof efficiently in FOL.
(b) Explain the structure of a completeness proof for resolution.
- 5 Explain the ontology of situation calculus and how to describe actions in situation calculus.
- 6 (a) Explain the differences between conditional and unconditional probabilities with examples
(b) Explain the differences between joint and full joint probability distributions
- 7 (a) We never test the same attribute twice along one path in a decision tree. Why not?
(b) What are the major factors in design of learning system?
- 8 (a) Explain sectional view of a fuzzy room cooler
(b) Explain the categories of neural network structure.
