Code: 9F00405c

## MCA IV Semester Regular & Supplementary Examinations, July 2013 ARTIFICIAL INTELLIGENCE

Time: 3 hours

Max Marks: 60

## Answer any FIVE questions All questions carry equal marks

- 1 (a) Define AI. Explain various AI problems.
  - (b) Explain the use of Heuristic search technique.
- 2 (a) What is local beam? Explain it.
  - (b) Describe genetic algorithm, with an example.
- 3 (a) Describe optimal decision in games. Explain it.
  - (b) Explain procedural vs declarative knowledge.
- 4 (a) Explain the unification algorithm.
  - (b) Explain write an algorithm to implement depth first search and mention its advantages and disadvantages.
- 5 (a) Describe classical planning problem.
  - (b) Explain partial-order planning.
- 6 (a) Explain mean end analysis.
  - (b) Explain and construct AI to neural networks.
- 7 (a) Define production system.
  - (b) What are expert system shells? Describe the role and corporation in expert systems.
- 8 (a) Describe the major problems facing current expert systems.
  - (b) Explain the expert system architecture and knowledge acquisition in expert system.

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