

Code: 9F00405c

MCA IV Semester Supplementary February 2014 Examinations

**ARTIFICIAL INTELLIGENCE**

(For 2009, 2010 & 2011 admitted batches only)

Time: 3 hours

Max. Marks: 60

Answer any FIVE questions  
All questions carry equal marks

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- 1 (a) Define AI. Explain various AI problems.  
(b) Explain the use of Heuristic search techniques.
- 2 (a) What is simulated annealing?  
(b) Describe genetic algorithms with an example.
- 3 (a) Explain in detail MINIMAX search procedure for game playing.  
(b) Describe Alpha-Beta pruning.
- 4 (a) Explain forward and backward chaining.  
(b) Differentiate between propositional inference and first order inference.
- 5 (a) Describe partial order planning.  
(b) Explain planning with propositional logic.
- 6 (a) Explain instance based learning.  
(b) Explain neural networks.
- 7 (a) Explain the MYCIN expert systems.  
(b) Write the characteristics of artificial neural systems.
- 8 (a) Design an expert system for crop production depending upon the atmospheric conditions.  
(b) Explain expert system life cycle.

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