

Code: 9F00405c

MCA IV Semester Supplementary Examinations May 2019

ARTIFICIAL INTELLIGENCE

(For 2009, 2010, 2011, 2012 (LC), 2013, 2014, 2015 & 2016 admitted batches only)

Time: 3 hours

Max. Marks: 60

Answer any FIVE questions
All questions carry equal marks

- 1 (a) Explain various definitions of artificial intelligence with respect to cognitive modeling approach.
(b) Discuss memory bounded heuristic search.
- 2 (a) Discuss hill-climbing search to solve 8-queen problem.
(b) Explain a simple backtracking algorithm for constraint satisfaction problem. Draw the search tree for map-coloring problem.
- 3 (a) Explain about Minimax algorithm.
(b) Explain evaluation functions for games of chance. Compare it with Monte Carlo simulation.
- 4 Discuss steps for simple forward-chaining algorithm with proof tree on crime example.
- 5 Explain PDPL description of an air cargo transportation planning problem.
- 6 Discuss decision tree representation with expressiveness of decision tree.
- 7 Write short notes on artificial neural systems.
- 8 Explain expert system life cycle.
