

Code: 9F00405c

MCA IV Semester Regular & Supplementary Examinations July 2015

ARTIFICIAL INTELLIGENCE

(For students admitted in 2009, 2010, 2011, 2012 and 2013 only)

Time: 3 hours

Max Marks: 60

Answer any FIVE questions

All questions carry equal marks

- 1 (a) Give the differences between “Thinking – humanly” and “Thinking – rationally” in artificial intelligence.
(b) Explain any one informed search strategies in AI to search for a solution.
- 2 (a) Write in detail about “Hill – Climbing” search method with an example.
(b) Define CSP? Give an example problem and solution.
- 3 (a) What is game playing?
(b) Describe “Alpha – Beta” pruning method with an example.
- 4 (a) Define first – order logic. List the difference between forward chaining and backward chaining.
(b) Explain resolution process in first – order logic.
- 5 (a) Give detailed account on planning graphs.
(b) Describe how we can achieve planning with state space search in AI.
- 6 (a) Discuss about statistical learning methods.
(b) Give brief description about EM – algorithms to learn with hidden variables.
- 7 (a) Illustrate about various shells and tools to design expert in AI.
(b) List out the characteristics of expert systems.
- 8 (a) Brief about the criteria of selecting the appropriate problem in designing of expert system.
(b) Explain various stages in expert system design development.
