Code: IT7T4B

IV B.Tech - I Semester – Regular / Supplementary Examinations
November 2016

ARTIFICIAL INTELLIGENCE
(INFORMATION TECHNOLOGY)

Duration: 3 hours   Max. Marks: 70
Answer any FIVE questions.   All questions carry equal marks

1. a) Define Artificial Intelligence. Illustrate importance of AI
   with examples.   7 M

   b) Describe Production system characteristics with examples.
                                                           7 M

2. a) What is Heuristic? Explain Best first search Algorithm with
   Examples.   7 M

   b) Distinguish between A* vs. AO*   7 M

3. a) Describe Mapping between facts and representations with
   neat sketch diagram.   7 M

   b) Define Resolution. Explain with suitable example.   7 M

4. a) How knowledge can be represented using Declarative
   Knowledge, explain with suitable example.   7 M

b) Compare and contrast, forward vs. Backward Reasoning.

7 M

5. a) What is Nonmonotonic reasoning, explain with suitable example. 7 M

b) Differentiate implementation of DFS and BFS. 7 M

6. a) List Semantic Networks. Explain features of Semantic net.

7 M

b) Describe major components of a Restaurant Script. 7 M

7. a) What is minmax search procedure, explain with suitable example. 7 M

b) Discuss Goal stack planning. 7 M

8. a) Robot has intelligent behaviour, why? Justify with suitable examples. 7 M

b) Explain Perception and Action with example. 7 M