MCA 5th Semester ARTIFICIAL INTELLIGENCE 2006

Elective - ARTIFICIAL INTELLIGENCE 2006
Time: Three hours Maximum: 100 marks

PART ---A Answer ALL questions. (8 x 5 = 40 marks)

1. (a) Define artificial intelligence. Explain how do AI problems differ from normal problems.
Or
(b) What is an AI technique? Discuss.

2. (a) Define a problem. Explain the state space representation method of a problem with an example. Or
(b) Discuss A * algorithm.

3. (a) Discuss mini-max search procedure with examples. Or
(b) Explain the following: (i) Futility cut off (ii) Horizon effect.

4. (a) Describe the steps involved in translating a wff to clause form. Or
(b) Write short notes on Non-monotonic Reasoning.

5. (a) Give a brief discussion on frames. Or
(b) Describe the components of an Expert system.

6. (a) Explain case grammars Or
(b) Give a brief note on understanding

7. (a) Write a note on procedural representation Or
(b) Describe concept learning.

8. (a) Explain discovery as learning. Or
(b) Discuss learning by analogy.

PART B (5 x 12 = 60 marks)

9. (a) Discuss in detail the areas of AI. Or
(b) Explain the organization of AI systems.

10. (a) Elaborate the characteristics of a problem. Or
(b) Discuss the following:
(i) Production systems
(ii) Means ends analysis.

11. (a) Briefly discuss the alpha beta algorithm with suitable examples illustrating the cutoffs

clearly.

Or

(b) Give a detailed account on scripts.

12. (a) Write a note on natural understanding language in general. Or

(b) Explain the use of frames and scripts in understanding.

13. (a) Describe Rote learning. Or

(b) Explain learning in GPS