F 3731

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Reg. No.............................

Name.................................

B.TECH. DEGREE EXAMINATION, NOVEMBER 2010

Eighth Semester

Branch : Computer Science and Engineering / Information Technology

ARTIFICIAL INTELLIGENCE (R, T)

(Supplementary)

Time : Three Hours

Maximum : 100 Marks

Answer all questions.

Part A

Each question carries 4 marks.

1. Discuss problem characteristics.

2. What is meant by bi-directional search?

3. What is informed search?

4. What is Iterative deepening?

5. Discuss Alpha-Beta cut-off.

6. What is meant by semantic net?

7. Discuss about learning knowledge acquisition.

8. What is unification?

9. Discuss search strategies.

10. What is meant by Recursive search?

(10 × 4 = 40 marks)

Part B

Each question carries 12 marks.

11. Write notes on problems and problem spaces.

Or

12. Explain constraint satisfaction search and breadth first search.

13. Describe A* algorithm with suitable example.

Or

14. How does hill climbing ensure greedy local search? What are the problems of hill climbing?

Turn over

15. Describe knowledge structures and imperfect decisions.

Or

16. Construct semantic net representations for the following :

    Pomepeian (Marcus),
    Blacksmith (Marcus)

Marry have the green flowered vase to her favourite cousin.

17. Discuss representation of knowledge and reasoning with logic.

Or

18. Explain forward and backward chaining with suitable examples.

19. Write notes on :

    (a) Meta predicates.

    (b) Meta interpreters.

                                                    (6 + 6 = 12 marks)

Or

20. Explain the implementation of semantic nets in prolog.

                                                    [5 × 12 = 60 marks]