

B.TECH. DEGREE EXAMINATION, NOVEMBER 2011**Eighth Semester**

Branch : Computer Science and Engineering/Information Technology

ARTIFICIAL INTELLIGENCE (RT)

(Supplementary)

Time : Three Hours

Maximum : 100 Marks

*Answer all questions.***Part A***Each question carries 4 marks.*

1. What are major objectives of Artificial Intelligence ?
2. How to represent knowledge in AI ?
3. Define uniform cost searching.
4. Explain importance of Heuristics in AI.
5. What are forwarding charming rule systems ?
- ✓ 6. Explain Alpha -Beta pruning.
7. What is meant by semantic nets ?
- ✓ 8. Show that $p \rightarrow q = \neg p \vee q$.
9. What are meta predicates ?
10. How to define frames using prolog ?

(10 × 4 = 40 marks)

Part B*Each question carries 12 marks.*

11. "AI technique is more suitable than traditional techniques". Why it is so ? Give suitable example.

Or

12. Explain BFS and DFS and compare the two methods.
13. What are Heuristic for constraint satisfaction problem and iterative deepening ?

Or

- ✓ 14. Explain A* algorithm and compare with AO*.
- ✓ 15. What are imperfect decisions and evaluation functions ?

Or

- ✓ 16. Explain the Alpha-Beta pruning with example.

Turn over

✓ 17. Using inferencing find who assassinated Caesar ?

Premises : "All Romans are Pompian. Brutus was a Pompian. Caesar was a Roman and a Pompian. Caesar was the ruler of Rome. All Romans dislike rulers. Caesar was assassinated".

Or

18. Explain unification forward and backward chaining.

19. How facts can be represented by prolog ? Explain with examples.

Or

20. Explain the way in which prolog can be used in Artificial Intelligence.

(5 × 12 = 60 marks) T