

Roll No.

Total No. of Pages : 2

BT 7/D06

9427

Artificial Intelligence to Export System

Paper : IT-473

Time : Three Hours]

[Maximum Marks : 100

Note :- Attempt **FIVE** questions in all, selecting at least **ONE** question from each unit. Assume any missing data.

UNIT-I

1. What do you understand by AI and how does it differ from human intelligence ? Write briefly foundation of AI and the steps which proved obstacles in its growth. 4,4,6,6
2. Distinguish between :
 - (a) A* and AO* algs.
 - (b) Mini-Max method of generating the game tree. 12,8

UNIT-II

3. (a) What are the issues involved in the representation of knowledge ?
(b) Using production rules show how inference is arrived at. 8,12
4. Explain the following methods of Reasoning under uncertainty :
 - (a) Bayes' probabilistic inference
 - (b) Non-Monotonic Reasoning. 10,10

UNIT-III

5. (a) What is importance of planning in AI ? Discuss in detail partial-order planning.
(b) Discuss Genetic Algorithm. 8,12
6. Write explanatory notes on :
 - (a) Explanation-based learning
 - (b) Neural Networks. 8,12

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Contd.

UNIT-IV

7. (a) Why is it difficult for the computer to understand natural language ? Describe briefly a natural language processor.
- (b) Briefly discuss the architecture of an expert system. 10,10
8. (a) What is a Parse Tree ? Develop parse tree for the following sentences :
- (i) The crazy boy locked the dog in the room.
- (ii) The cunning robot moved the red pyramid to the big table.
- (iii) Ram slept on the table.
- (b) Write briefly about current trends in intelligent system using the following grammar rules :
- S → NP VP
- NP → DET N
- NP → N
- PP → P NP
- DET → ART
- VP → V NP PP
- VP → VNP.

15.5