

Roll No.

Total Pages : 2

8779

BT-7/DX

ARTIFICIAL INTELLIGENCE (2006-07)

Paper : IT-473

Time : Three Hours]

[Maximum Marks : 100

Note : Attempt *five* questions in all, selecting at least *one* question from each unit.

UNIT-I

1. What do you understand by AI ? Discuss briefly, various problems and techniques of AI. 20
2. Explain the difference briefly between :
 - (a) A* and Ao* Alg.
 - (b) Min-Max method.
 - (c) α - β cut-off method. 7,7,6

UNIT-II

3. What is need of knowledge and knowledge representation in AI ? Discuss various methods of knowledge representation. 2,2,16
4. Explain monotonic and non-monotonic reasoning. Also discuss Truth maintenance system. How truth is maintained in this system ? 6,14

UNIT-III

5. What is Planning and what is its need for AI problem-solving ? Describe, briefly the various methods available. 20

6. Write explanatory notes on any *three* :

- (a) Genetic Algorithm.
- (b) Learning from Examples.
- (c) Learning from Discovery.
- (d) Learning from Analogy. 7,7,6

UNIT-IV

7. (a) Explain in detail, principles of Natural Language Processing. 15,5
(b) Write a commentary on Robotics.
 8. What are Expert systems ? Write rule-based architecture of expert systems. Also describe knowledge acquisition concepts. 5,10,5
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