

BT-7/D05**9320****Artificial Intelligence(2004-05)****Paper : IT-469**

Time : Three Hours]

[Maximum Marks : 100

Note :- Attempt any **FIVE** questions. All questions carry equal marks.

1. Give an account of the origin of Artificial Intelligence. What do you understand by term 'reasoning' in AI context ? For what type of problems AI techniques are suitable ?
2. Define term "problem space". Give the steps for defining a problem using state space approach. Find a state space representation for Travelling salesman problem.
3. What are blind-search strategies ? Give their advantages. Also write the steps for min-max algorithm.
4. Define and differentiate between the terms : knowledge, belief, hypothesis and data. Describe how the knowledge necessary to drive a car might be organized as a collection of frames.
5. Explain the following :
 - (a) Non-monotonic reasoning
 - (b) Temporal reasoning.
6. What are different ways of learning ? How explanation based learning differs from neural nets ?
7. Elaborate the architecture of an Expert System. How uncertainty is represented in an expert system ?
8. Write short notes on :
 - (a) Current trends in Intelligent systems
 - (b) AI application in robotics.