

BCA/D 16  
ARTIFITIAL INTELIGENCY  
PAPER-BCA-353

Note : Attempt five questions in all, selecting at least one question from each Unit Q.  
No. 1 is Compulsory.

Compulsory Question

1. (a) What are goals of Natural Language Processing?  
(b) What is Knowledge Pyramid?  
(c) What is the role of Inference Engine?  
(d) Define Mean End Analysis Process.  
(e) Name steps for developing expert system.  
(f) What is the function of turing test?

Unit-I

2. Define AI. What are the methods for problem representation in AI and also give their characteristics.
3. Write notes on the following :
  - (a) Turing Test and Rceived Turing Test.
  - (b) History of AI.

Unit-II

4. (a) Explain Expert System Life Cycle  
(b) What are limitations of Expert System with example?
5. (a) Explain various categories of Expert System.  
(b) Write at least four application areas of AI.

Unit-III

6. Explain Brute Force Search Techniques with suitable example.
7. Explain the following :
  - (a) A\* Algorithm
  - (b) Hill Climbing Algorithm

Unit-IV

8. (a) What are the solutions of Natural Language Processing Problems?  
(b) What are the advantages of Speech Recognition.  
(c) Explain need of natural language processing.
9. What is Robotics? What are parts of a Robot and how it will be controlled? How Mobile Robots are useful in general life?

