

2320

B.E. 6th Semester (I.T.) Examination, December-2011

INTELLIGENT SYSTEM

Paper - CSE-304-E

Time allowed : 3 hours]

[Maximum marks : 100

Note : Attempt five questions in all. All questions carry equal marks.

1. What is AI? Explain its Foundation and history in detail.
2.
 - (a) What do you mean by Hill Climbing? Explain its algorithm with the problems associated with this algorithm.
 - (b) Write a program in PROLOG to implement the selection sorting.
3.
 - (a) Test the validity of following arguments with the help of inferencing method. "If milk is black then every cow is white. If every cow is white then it has four legs. If every cow has four legs then every buffalo is white and brisk. The milk is black. Therefore the buffalo is white."

- (b) Make a Procedural frame for the following example :

"For Replacing the damaged RAM of your personal computer."

4. Explain Dempster Shaffer Theory, How does it remove the disadvantages of Baye's Probability Inference. Using Dempster Shaffer Approach, find the uncertainty of the following prediction.

"There are 80% chances of rain today. However there is uncertainty regarding the type of cloud cover. Some expert tells he is confident that there are 90% chances of these types of clouds bringing rains."

5. (a) Compare and contrast Monotonic and Non-Monotonic Reasoning.

(b) Differentiate between Knowledge Base and Database.

6. (a) Explain the architecture of Expert System with its types.

(b) Explain various learning methods.

7. (a) What do you mean by Natural Language Processing ? Explain in detail.
- (b) Explain the architecture of neural Network.
8. Write short notes on the following :
- (a) A * Algorithm
- (b) Bayes Theorem
- (c) Genetic Algorithm
- (d) Thematic Role Frames