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BT-7/D-19 37154

EXPERT SYSTEMS

CSE-425N

Time : Three Hours] [Maximum Marks : 75

Note : Attempt *Five* questions in all, selecting at least *one* question from each Unit. All questions carry equal marks.

Unit I

1. (a) Discuss some of the potential problems, when hill climbing search is used ? Give example of each. 7

   (b) What are alpha and beta cutoffs for minmax algorithm ? Explain the role of alpha and beta values. 8

2. (a) Elaborate a decision tree architecture of an expert system. 7

   (b) Identify and describe two good application areas for an expert system with a university environment. 8

Unit II

3. (a) What basic operations, must a program perform in order to access specific knowledge ? 7

   (b) Write a note on conceptual dependency for knowledge acquisition ? http://www.kuonline.in 8

4. (a) What is knowledge based architecture of an expert system ? What are its advantages ? 7

   (b) Give an example of the use of metaknowledge in an expert system inference. 8

Unit III

5. Discuss the following expert system development stages :

   (a) Decision about development

   (b) Tools for design

   (c) Implementation. 5,5,5

6. (a) Discuss utility of expert system in control and prediction application areas. 8

   (b) What are the problems of present days expert systems ? 7

Unit IV

7. Discuss the role of the following persons in expert system development :
   (a) Domain Expert 7
   (b) Updation, review and changeover. 8

8. Enlist advantages of using an expert system in analysis, design and planning areas. 5,5,5