M.E. First Semester (Computer Sci. & Engg.) (F.T.) (CGS)
13144 : Expert System Design : 1 RMEF 4 / 3 RME 1

P. Pages : 2

Time : Three Hours

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0431

AU - 3225

Max. Marks : 80

Notes : 1. Due credit will be given to neatness and adequate dimensions.
2. Illustrate your answer necessary with the help of neat sketches.
2. Use of pen Blue/Black ink/refill only for writing book.

SECTION – A

1. a) Explain the term Expert system? What are the different types of expert system in details. 7

   b) Explain STRIPS. What jobs are taken care of in STRIPS? 7

OR

2. a) State and Explain the A* algorithm. 7

   b) Compare MYCIN with STRIPS. 7

3. a) What are production rules? Explain with example. 7

   b) Explain Quillian's memory? 6

OR

4. a) Explain conflict resolution mechanism. 6

   b) Explain frame system for representing real world knowledge. 7

5. a) What is fuzzy logic? Why it is preferred than possibility theory for Expert system application? 7

   b) Explain the stages involved in knowledge acquisition to construct an Expert system. 6

OR

6. a) Explain primary source of uncertainty that may encountered in ES. 7

   b) Explain various sources of uncertainty. 6

SECTION – B

7. a) Explain heuristic matching in detail. 6

   b) Give different type of confidence factor in MORE. 7

OR

8. a) Explain classification of Expert system tasks. 7

 b) Explain classification versus construction. 6

9. a) Explain the process involved in construction of INTERNIST. 7

 b) What is a prototype in CENTAUR? 6

OR

10. a) Give all the features of Rule based expert system shell. 7

 b) Describe R1/XCON case study. 6

11. a) Explain the difference between monotonic and non monotonic revisions. 7

 b) Explain to what extent should the final system be based upon an initial prototype. 7

OR

12. a) Compare and contrast the use of shells, high-level programming languages & multiple paradigm programming environment for both classification & construction tasks. 7

 b) Give the various sources of evaluation & training. 7

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