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**Question Paper Code : 71688**

B.E./B.Tech. DEGREE EXAMINATION, APRIL/MAY 2017.

Sixth Semester

Computer Science and Engineering

CS 6659 — ARTIFICIAL INTELLIGENCE

(Common to Electronics and Instrumentation Engineering, Instrumentation and Control Engineering, Information Technology)

(Regulations 2013)

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. List down the characteristics of intelligent agent.
2. List some of the uninformed search techniques.
3. Differentiate propositional logic and predicate logic.
4. Define forward and backward chaining. Differentiate the same.
5. Define meta rules.
6. Give the Baye's rule equation.
7. What are the differences and similarities between problem solving and planning?
8. What are the different types of planning?
9. List out the problem areas addressed by expert systems.
10. What are the advantages of the MYCIN?

PART B — (5 × 16 = 80 marks)

11. (a) Explain informed search strategies with an example. (16)  
Or  
(b) Explain the process of simulated annealing with example. (16)

12. (a) Explain Minimax algorithm in detail. (16)

Or

(b) Explain Alpha-Beta Pruning and Alpha-Beta algorithm. (16)

13. (a) Explain in detail about forward and backward chaining with an example. (16)

Or

(b) Explain about Dempster shafer theory. (16)

14. (a) Discuss in detail the process of machine learning with example. (16)

Or

(b) Explain in detail the STRIPS. (16)

15. (a) Define Expert System. Explain the architecture of an expert system in detail with a neat diagram and an example. (16)

Or

(b) Explain the need, significance and evolution of XCON expert system. (16)