Reg. No. :

Question Paper Code : 31312

B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2013.

Sixth Semester

Computer Science and Engineering

CS 2351/CS 61/10144 CS 601 – ARTIFICIAL INTELLIGENCE

(Common to Seventh Semester – Electronics and Instrumentation Engineering)

(Regulation 2008/2010)

Time : Three hours   Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1.   What are software agents?

2.   Define the effect of heuristic accuracy on performance.

3.   Define the first order definite clause.

4.   State the expressiveness extension.

5.   Define the bi-directed search.

6.   What are continuous random variables?

7.   What is partial order Planning?

8.   Define temporal models.

9.   State the types of approximation methods.

10.   Define entailment constraints.

PART B — (5 × 16 = 80 marks)

11.   (a)   What are the five uninformed search strategies? Explain any two in detail with example.

Or

(b)   Explain the approach of formulation for constraint satisfaction problems with example.

12. (a) Explain the forward chaining process and efficient forward chaining with example. State its usage.

Or

(b) State and explain the various steps in knowledge engineering process.

13. (a) Explain the procedure of planning with state space search with example.

Or

(b) Explain the process of scheduling with resource constraints in detail with suitable example.

14. (a) (i) How to handle uncertain knowledge with example? (8)

(ii) How to represent knowledge in an uncertain domain. (8)

Or

(b) (i) Explain the hidden markov model. (8)

(ii) Explain the need of fuzzy set and fuzzy logic with example. (8)

15. (a) (i) Explain the process of learning on action utility function. (8)

(ii) Explain the temporal difference learning with example. (8)

Or

(b) What are various approaches for instance based learning. Explain any one with example.

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