G 1688 (Pages : 3) Reg. No.....

Name.....

B.TECH. DEGREE EXAMINATION, MAY 2016

Eighth Semester

Branch : Computer Science and Engineering/Information Technology

CS 010 802/IT 010 802—ARTIFICIAL INTELLIGENCE—(CS, IT)

(New Scheme—2010 Admission onwards)

[Regular/Supplementary]

Time : Three Hours Maximum : 100 Marks

Part A

Answer **all** *questions.*
Each question carries 3 *marks.*

1. What do you mean by variables and statements in python ?
2. Describe the operations of problem reduction.
3. Discuss forward chaining algorithm with example.
4. Write an algorithm for candidate elimination with example.
5. What do you mean by fuzzy number ?

(5 × 3 = 15 marks)

Part B

Answer **all** *questions.*
Each question carries 5 *marks.*

6. What are the various problem characteristics ?
7. Write down AO* algorithm.
8. Write a note on resolution in propositional logic.
9. What do you mean by version spaces ?
10. What do you mean by explanation in expert system ?

(5 × 5 = 25 marks)

Turn over

Part C

Answer **all** *questions.*
Each question carries 12 *marks.*

11. Explain the following :

    (a) Steepest-ascent hill climbing.

    (b) Functions in python.

Or

12. Briefly explain lists in python.

13. Briefly explain alpha-beta pruning.

Or

14. Describe the following :

    (a) Constraint satisfaction.

    (b) Games as search problem with example.

15. Write a brief note on the following :

    (a) Backward chaining.

    (b) Question Answering.

Or

16. With suitable example, describe an algorithm for converting a well-formed formula into conjunctive normal form.

17. Briefly explain ID3 decision tree induction algorithm.

Or

18. Explain the following :

    (a) Decision trees.

    (b) Chunking.

    (c) Rote learning.