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(FOR THE CANDIDATES ADMITTED
DURING THE ACADEMIC YEAR 2019 ONLY)

19 UIT 6E6

REG.NO. :

N.G.M.COLLEGE (AUTONOMOUS) : POLLACHI
END-OF-SEMESTER EXAMINATIONS : JULY 2022

B.Sc.IT

MAXIMUM MARKS: 75

VI SEMESTER

TIME : 3 HOURS

PART - III

ARTIFICIAL INTELLIGENCE

SECTION - A

(10 X 1 = 10 MARKS)

ANSWER THE FOLLOWING QUESTIONS.

MULTIPLE CHOICE QUESTIONS.

(K1)

1. Who is known as the Father of AI?
a) Fisher Ada b) Alan Turing c) John McCarthy d) Allen Newell
2. Among the given options, which is not the required property of Knowledge Representation?
a) Inferential Efficiency b) Inferential Adequacy
c) Representation Verification d) Representational Adequacy
3. The Search Algorithm which is similar to the minimax search, but removes the branches that don't affect the final output is known as _____.
a) Depth-First Search b) Breadth-First Search
c) Alpha-Beta Pruning d) Partial and Local Information
4. Which of the following is a not capability of Expert Systems?
a) Advising b) Demonstrating c) Explaining d) Expanding
5. What is the use of 'is' in prolog programming?
a) Unification b) Arithmetic evaluation c) Reduction d) Induction

ANSWER THE FOLLOWING IN ONE (OR) TWO SENTENCES

(K2)

6. Write any two applications of AI.
7. What is Knowledge Representation in AI?
8. Write the limitation of Semantic Networks.
9. Define Domains of AI.
10. What is Unification in Prolog?

(CONTD...2)

SECTION – B

(5 X5 = 25 MARKS)

ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS. (K3)

11. a) Describe the problem characteristics in AI with example.

(OR)

b) Explain in brief production system characteristics in AI with example

12. a) Examine the different approaches to Knowledge Representation with example.

(OR)

b) Assess the issues in Knowledge Representation with example.

13. a) Interpret the Frames as Sets and Instances with example.

(OR)

b) Examine the minimax search procedure in AI game playing with an algorithm.

14. a) Describe the characteristics of Expert System with example.

(OR)

b) Interpret the architecture of Expert Systems with example.

15. a) Assess the Backtracking method in Prolog with neat diagram.

(OR)

b) Explain the recursion in Prolog with example.

SECTION - C

(4 X 10 = 40 MARKS)

ANSWER ANY FOUR OUT OF SIX QUESTIONS

(16th QUESTION IS COMPULSORY AND ANSWER ANY THREE QUESTIONS

(FROM Qn. No : 17 to 21)

(K4 (Or) K5)

16. Analyze the Simple Hill Climbing Search in AI with an algorithm.

17. Point out the Best First Search in AI with algorithm.

18. Describe the Logic Programming in AI with example.

19. Discuss in detail of adding Alpha-Beta Cutoffs in AI game playing with an algorithm.

20. Summarize in brief the Expert System Life Cycle with example.

21. Conclude the various control structures used in Prolog with example.

