PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION MAY 2024
(Fifth Semester)

Branch – COMPUTER SCIENCE

DISCIPLINE SPECIFIC ELECTIVE – I : ARTIFICIAL INTELLIGENCE

Time: Three Hours

Maximum: 50 Marks

SECTION-A (5 Marks)
Answer ALL questions
ALL questions carry EQUAL marks

(5 X 1 = 5)

1. The birth of AI was
   a) 1956
   b) 1960
   c) 1964
   d) 1968

2. CSP stands for
   a) Condition Satisfied Problem
   b) Constraint Satisfaction Problem
   c) Condition Satisfaction Problem
   d) Constraint Satisfaction Process

3. Find the expansion of CNF is
   a) Conjunctive Normal Function
   b) Condition Normal Form
   c) Conjunctive Normal Form
   d) Condition Normal Function

4. -- views the relations & functions referred to by first – order logic as objects in themselves.
   a) Higher order logic
   b) Temporal logic
   c) Middle order logic
   d) Lower order logic

5. What represents a function that takes as input a vector of attributes values and returns a decision a single output value?
   a) Decision tree
   b) Syntax tree
   c) Derivation Tree
   d) Parse Tree

SECTION – B (15 Marks)
Answer ALL questions
ALL questions carry EQUAL marks

(5 X 3 = 15)

6. A) Differentiate Agent and Intelligent Agent.
   (OR)
   B) Illustrate the structure of agents.

7. A) Define Constraint satisfaction problem.
   (OR)
   B) Give a brief account on Game.

8. A) Narrate the significance of knowledge based agent.
   (OR)
   B) What is logical agent? Explain.

9. A) Write notes on Unification.
   (OR)
   B) Elucidate the significance of resolution.

10. A) Write short notes on Artificial Neural Network.
    (OR)
    B) Formulate the differences between Regression & Classification.

SECTION – C (30 Marks)
Answer **ALL** questions
ALL questions carry **EQUAL** marks   (5 X 6 = 30)

11. A) Discuss the concept of rationality.
(OR)
   B) How to formulate problem? Discuss.

12. A) Summarize the concept of forward pruning.
(OR)

   B) Examine various variations on the CSP formalism.

13. A) Bring out the importance of semantics in proportional logic.
(OR)

   B) Summarize the steps in resolution algorithm.

14. A) Analyse the models of First Order Logic.
(OR)
   B) Assess the inference rules for quantification.
15. A) Illustrate the representation of Decision trees.
(OR)
   B) Describe various forms of learning.

Z-Z-Z   END