

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION MAY 2024
(Sixth Semester)

Branch – COMPUTER SCIENCE WITH DATA ANALYTICS

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. Which is not the commonly used programming language for AI?
(i) PROLOG (ii) Java
(iii) LISP (iv) Perl
2. Where does the values of alpha-beta search get updated?
(i) Along the path of search (ii) Initial state itself
(iii) at the end (iv) None of the mentioned
3. Wumpus World is a classic problem, best example of _____
(i) Single player Game (ii) Two player Game
(iii) Reasoning with Knowledge (iv) Knowledge based Game
4. The statement comprising the limitations of FOL is/are _____
(i) Expressiveness (ii) Formalizing Natural Languages
(iii) Many-sorted Logic (iv) All of the mentioned
5. Learning is a natural activity of _____
(i) Learner (ii) Living organism
(iii) Teachers (iv) Individuals

SECTION - B (15 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks

(5 x 3 = 15)

- 6 a. Explain the history of AI.
OR
b. Write notes on heuristic search strategies.
- 7 a. Discuss the methods of Gaming Optimal search.
OR
b. Explain the Local Search for CSP.
- 8 a. Write notes on Knowledge based agent.
OR
b. Explain the effective Professional model checking.

Cont...

- 9 a. Write note on Syntax and Semantic for first order logic.
OR
b. Discuss about Resolution of inference.
- 10 a. Explain the need of learning decision tree.
OR
b. Write short detail on Ensemble learning.

SECTION -C (30 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks

(5 x 6 = 30)

- 11 a. Explain the Foundation and Art of AI.
OR
b. Examine the Structure and Problem solving agent.
- 12 a. Explain the functions of Alpha and Beta pruning.
OR
b. Compare and construct Constraints satisfaction and propagation.
- 13 a. Describe the concept of Proportional theorem proving.
OR
b. Brief notes on Agent based of propositional logic.
- 14 a. Estimate the Knowledge engineering in FOL.
OR
b. Explain the difference between Forward and backward chaining.
- 15 a. Describe the following concept of
(i) Supervised Learning (ii) Theory of Learning.
OR
b. Demonstrate the regression and classification with linear models.

Z-Z-Z

END