Roll No											

PRESIDENCY UNIVERSITY
BENGALURU

SCHOOL OF INFORMATION SCIENCE
END TERM EXAMINATION - JAN 2023

Semester : Semester V - 2020
Course Code : BCA212
Course Name : Sem V - BCA212 - Artificial Intelligence
Program : BCA

Date : 6-JAN-2023
Time : 9.30AM - 12.30PM
Max Marks : 100
Weightage : 50%

Instructions:
(i) Read all questions carefully and answer accordingly.
(ii) Question paper consists of 3 parts.
(iii) Scientific and non-programmable calculator are permitted.

PART A

ANSWER ALL THE FOLLOWING QUESTIONS **10 X 2 = 20M**

1. Explain any one type of adversarial search algorithm.
(CO3) [Knowledge]

2. Explain Perfect and Imperfect Information Games with Example.
(CO3) [Knowledge]

3. What are the types of classifiers? Discuss.
(CO4) [Knowledge]

4. What are types of classification algorithms?
(CO4) [Knowledge]

5. How is AI used in marketing?
(CO1) [Knowledge]

6. Define Minimax Algorithm with its general properties.
(CO2) [Knowledge]

7. Discuss the differences between cooperative and non-cooperative game with appropriate examples.
(CO5) [Knowledge]

8. What are the important applications of machine learning ?
(CO5) [Knowledge]

9. Define Knowledge and its types.
(CO2) [Knowledge]

10. What are the benefits and challenges in incorporating AI in agriculture.
(CO2) [Knowledge]

PART B

ANSWER ALL THE FOLLOWING QUESTIONS **5 X 10 = 50M**

11. Define the following terminologies with examples.

a. Two-Person Zero Sum Game
b. Positive Sum Game
c. Finite Game
d. Fair Game
e. Strictly Determinable Game

(CO5) [Comprehension]

12. Discuss the different types of agent environment.

(CO3) [Comprehension]

13. Explain Minmax-Maxmin principle and find the optimal plan for both the players using Minmax-Maxmin principle.

(CO5) [Comprehension]

14. Explain the types of Supervised and Unsupervised Learning Algorithms with examples

(CO4) [Comprehension]

15. Discuss the lifecycle of a general machine learning algorithm

(CO4) [Comprehension]

PART C

ANSWER ALL THE FOLLOWING QUESTIONS **2 X 15 = 30M**

16. Obtain the regression equation of Y on X and estimate *Y* when X=55 from the following

X	40	50	38	60	65	50	35
Y	38	60	55	70	60	48	30

(CO4) [Application]

17. Discuss the types of Machine Learning algorithms with categories, advantages, disadvantages and appropriate examples for each.

(CO4) [Application]

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