



**PRESIDENCY UNIVERSITY
BENGALURU**

**SCHOOL OF INFORMATION SCIENCE
END TERM EXAMINATION - JAN 2023**

Semester : Semester III - 2021

Course Code : CSA2020

Course Name : Sem III - CSA2020 - Artificial Intelligence

Program : BCA / B.Sc-Data Science

Date : 11-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. What are the various techniques of knowledge representation in AI?
(CO2) [Knowledge]
2. What is reinforcement learning?
(CO3) [Knowledge]
3. What is Learning Agent?
(CO3) [Knowledge]
4. What is knowledge representation in AI?
(CO3) [Knowledge]
5. Which Search technique is the most straight forward approach for planning algorithm?
(CO3) [Knowledge]
6. Write different steps of waterfall model.
(CO4) [Knowledge]
7. What does a production rule consist of?
(CO4) [Knowledge]
8. What is procedural Paradisim in Expert System?
(CO4) [Knowledge]
9. Discuss about Forward and Back ward chaining.
(CO4) [Knowledge]
10. Write Advantages of Artificial Neural Networks.
(CO4) [Knowledge]

PART B

ANSWER ALL THE FOLLOWING QUESTIONS

5 X 10 = 50M

11. Explain briefly the first order logic using Knowledge Representation. (CO2) [Comprehension]
12. Discuss in detail the statistical learning methods. Explain with examples . (CO3) [Comprehension]
13. Explain in detail partial order planning with suitable diagram. (CO3) [Comprehension]
14. Explain in detail neural networks with necessary diagram. (CO4) [Comprehension]
15. What are Expert Systems? Discuss in detail the stages in the development of an Expert System. (CO4) [Comprehension]

PART C

ANSWER ALL THE FOLLOWING QUESTIONS

2 X 15 = 30M

16. Difference Between informed and uninformed search strategies. Explain briefly. (CO1) [Application]
17. Describe in detail the expert system life cycle with necessary diagram. (CO4) [Application]
