

Code No.: DS602PC

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CMR ENGINEERING COLLEGE: : HYDERABAD
UGC AUTONOMOUS
III-B.TECH-II-Semester End Examinations (Regular) - May- 2023
ARTIFICIAL INTELLIGENCE

(CSD)

[Max. Marks: 70]

[Time: 3 Hours]

Note: This question paper contains two parts A and B.
Part A is compulsory which carries 20 marks. Answer all questions in Part A.
Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

PART-A

(20 Marks)

1. a) List applications of AI? [2M]
- b) Define state space search. [2M]
- c) What is a predicate logic statement? [2M]
- d) What is semantic network? [2M]
- e) List applications of expert systems? [2M]
- f) What is the Dempster theory of Shafer? [2M]
- g) What is Supervised Learning? [2M]
- h) What is Neural Network? [2M]
- i) Define NLP (Natural language Processing). [2M]
- j) What is case grammar? [2M]

PART-B

(50 Marks)

2. Explain different Categories of Heuristic Search Techniques in AI? [10M]
- OR
3. What are the main sub areas of artificial intelligence? Explain. [10M]
4. Discuss syntax and semantics of Propositional logic with examples. [10M]
- OR
5. Discuss about Knowledge Representation using Frames. [10M]
6. Explain the Expert System Architecture with the help of a neat diagram. [10M]
- OR
7. Discuss the Bayesian Belief networks with an example. [10M]
8. What is machine learning? Explain about inductive and deductive learning. [10M]
- OR
9. Write a short note on the following:
a) Support Vector Machines. [5M]
b) Radial-Basis Function Networks. [5M]
10. List and explain the applications of Natural Language Processing. [10M]
- OR
11. Give a brief note on Semantic Analysis. [10M]
