

Code No.: CS502PC

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CMR ENGINEERING COLLEGE: : HYDERABAD
UGC AUTONOMOUS
III-B.TECH-I-Semester End Examinations (Supply) - May- 2023
ARTIFICIAL INTELLIGENCE
(Common for CSE, IT)

[Time: 3 Hours]

[Max. Marks: 70]

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.

PART-A

(20 Marks)

1. a) Explain about the tasks of Artificial Intelligence? [2M]
- b) What is Local Maxima? [2M]
- c) Define the techniques of knowledge representation. [2M]
- d) Write a short notes on Frame based System. [2M]
- e) What is propositional logic? [2M]
- f) List out the types of Inference mechanisms. [2M]
- g) Explain radial basis function network? [2M]
- h) Define support vector machine. [2M]
- i) What are the most important aspects of expert systems? [2M]
- j) Define the knowledge acquisition process. [2M]

PART-B

(50 Marks)

2. Explain the various problem solving and problem reduction methods in Artificial Intelligence. [10M]
- OR**
3. Discuss A* algorithm in detail? [10M]
4. Write unification algorithm and explain resolution in predicate logic. [10M]
- OR**
5. Describe types of Resolution Methods? Explain with example. [10M]
6. What is conditional probability? Explain Baye's theorem with exam example. [10M]
- OR**
7. Define knowledge representation under uncertainty with example. [10M]
8. Explain about Winston's learning program. [10M]
- OR**
9. What is learning? Explain about Rote learning? [10M]
10. Define Expert system. Explain the architecture of an expert system in detail with a neat diagram. [10M]
- OR**
11. Explain in detail about expert system shell. [10M]
