



R20 Regulation

Subject code:307DB

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

(Autonomous, Accredited by NAAC with 'A+' Grade)

B.Tech VII Semester Supplementary Examinations, April 2024

ARTIFICIAL INTELLIGENCE

(ECE)

Maximum Marks: 70

Date:30.04.2024 Duration: 3 hours

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

Part-A

All the following questions carry equal marks

(10X2M=20 Marks)

- 1 Write the four components of state space search?
- 2 What is an AI technique.
- 3 Can you represent the resolution in predicate logic?
- 4 What is forward reasoning
- 5 Explain about logic for Non-Monotonic Reasoning?
- 6 Write about forward chaining in resolution method
- 7 Write about Frames?
- 8 What are types of learning algorithms?
- 9 What is planning?
- 10 Define Iterative Deepening.

Part-B

Answer All the following questions.

(5X10M=50Marks)

- 11 Develop algorithm for depth first and breadth first search. [10]
OR
- 12 Explain the state space representation of water – jug problem. [10]
- 13 Explain the various features of declarative and procedural frames [10]
OR
- 14 Describe how the search control knowledge proves the efficiency or search in a knowledge-based systems. [10]
- 15 What is non-monotonic? How it is used in problem solving. [10]
OR
- 16 Explain the Bayesian belief network with example [10]
- 17 Explain about CYC 216 in detail? [10]
OR
- 18 Explain about Strong slot and filler structures. [10]
- 19 Discuss about nonlinear planning using Constraint Posting. [10]
OR
- 20 Describe the Min-Max Algorithm and Alpha –beta Pruning. [10]