

SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)

B.Tech II Year II Semester Regular & Supplementary Examinations June-2024
FUNDAMENTALS OF ARTIFICIAL INTELLIGENCE
(Common to CAD & CSM)

Time: 3 Hours**Max. Marks: 60**

(Answer all Five Units 5 x 12 = 60 Marks)

UNIT-I

- 1 a Define AI. How it is organized? Explain the categories of it in detail. CO1 L1 6M
b Explain the role of AI in Education and Finance. CO1 L2 6M

OR

- 2 Discuss in detail about Intelligent System with examples. CO1 L2 12M

UNIT-II

- 3 a Prepare a Graph tree for Min Max Search Procedure and explain it in detail. CO2 L6 6M
b How water jug problem is effective in problem solving. Deduce with an example. CO2 L2 6M

OR

- 4 a Explain BFS Technique with an example. List the Pros and Cons in it. CO2 L2 6M
b What are the characteristics of a problem? How effectively it can be solved? CO2 L1 6M

UNIT-III

- 5 a Discuss about "Resolution in Propositional Logic" and explain with an example. CO3 L2 6M
b Express Tautologies and Contradictions with Truth tables. CO3 L2 6M

OR

- 6 Explain the concept of Predicate Logic with examples. CO4 L2 12M

UNIT-IV

- 7 a How representations and Mappings in KR is done? Explain. CO5 L2 6M
b Describe the approaches to Knowledge Representation? CO5 L2 6M

OR

- 8 a Why Case Grammars are used in Knowledge Representation? Explain. CO5 L4 6M
b How Script Structure in Conceptual Dependency Theory is used? Explain the rules in using it. CO5 L2 6M

UNIT-V

- 9 Explain Components of Expert Systems in detail. CO6 L2 12M
- OR**
- 10 a How Probability Theory is used in Theoretical and Experimental Probabilities. CO6 L2 6M
b What is Certainty Factor Theory? Why it is considered as part of Expert System in AI. Explain. CO6 L4 6M

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