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SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)**B.Tech II Year II Semester Regular Examinations October-2022****FUNDAMENTALS OF ARTIFICIAL INTELLIGENCE**

CSE(Artificial Intelligence and Machine Learning)

Time: 3 hours

Max. Marks: 60

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

UNIT-I

- 1 Discuss in detail about the Foundations of Artificial Intelligence. L2 12M
- OR
- 2 a What are the languages that support AI over a period of time? Explain. L2 6M
b How AI is transformed over the years? What are the languages supported by it. L1 6M

UNIT-II

- 3 a What are the general steps in Problem Solving? Explain in detail why it is used in Artificial Intelligence. L4 6M
b Explain in detail about the Process in Control Strategies. L2 6M
- OR
- 4 a Write a short note on Constraint Satisfaction Problem with an example. L1 6M
b How Game playing strategies helps to improve effectiveness in search? L2 6M

UNIT-III

- 5 How representation facts in Propositional Logic are done? Explain. L2 12M
- OR
- 6 a Write the algorithm of "Conversion to Clause Form" and explain. L1 6M
b What is unit-preference-strategy and why it complements predicate logic. L4 6M

UNIT-IV

- 7 Explain in detail about Extended Semantic Networks for KR with example. L2 12M
- OR
- 8 a List the set of primitives and conceptual tenses used in Conceptual Dependency. L1 6M
b List the ways in which classes are related to each other in frames, with suitable example. L1 6M

UNIT-V

- 9 a List out the Benefits of Expert Systems. L1 6M
b Discuss about hybrid expert system in detail. L2 6M
- OR
- 10 a How Probability Theory is used in Theoretical and Experimental Probabilities. L2 6M
b What is Certainty Factor Theory? Why it is considered as part of Expert System in AI. Explain. L4 6M

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