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IV/IV B.Tech (Regular/Supplementary) DEGREE EXAMINATION

November, 2019
Seventh Semester

Time: Three Hours

Information Technology
Artificial Intelligence

Maximum : 60 Marks*Answer Question No.1 compulsorily.*

(1X12 = 12 Marks)

Answer ONE question from each unit.

(4X12=48 Marks)

1 Answer all questions

(1X12=12 Marks)

- Define State Space
- List out Uniformed Search Strategies.
- What are the Problem Characteristics of Artificial Intelligence?
- Distinguish between Fact and Predicate.
- What is Declarative Knowledge
- What is Forward Reasoning?
- Define Reactive System.
- What is Conceptual Dependency?
- What are the Various Planning Systems?
- What is Explanation Based Learning?
- Name the Programming Methods Supported by Expert System Tools?
- What is Rote Learning?

UNIT I

- Describe Problem characteristics with examples? 6M
 - Briefly explain the travelling salesman problem and find a solution to it? 6M

(OR)

- Write an algorithm for Mean End Analysis? 6M
 - Trace the constraint satisfaction procedure solving the 6M

CROSS

+ROADS

DANGER

UNIT II

- Discuss the role of reasoning in AI. How predicate logic is used in AI to represent knowledge? 6M
 - Define Resolution. Explain with suitable example. 6M

(OR)

- How knowledge can be represented using Procedural knowledge with suitable example? 6M
 - Briefly explain Control Knowledge? 6M

UNIT III

- List Semantic Networks. Explain features of Semantic net. 6M
 - Describe major components of a Restaurant Script. 6M

(OR)

- Discuss about the Nonlinear Planning using Constraint Posting. 6M
 - Describe hierarchical planning methods with relevant examples? 6M

UNIT IV

- Explain in detail about explanation based learning Mechanism. 6M
 - Explain various types of learnings in problem solving. 6M

(OR)

- Explain with neat diagram the architecture of expert system and mention its features. 6M
 - Explain about Knowledge acquisition? 6M

