

Roll No.

3334

B. Tech. 6th Semester (CSE)

Examination – May, 2023

ARTIFICIAL INTELLIGENCE

Paper : PCC-CSE-304-G

Time : Three Hours]

[Maximum Marks : 75

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

Note : Attempt *five* questions in all, selecting at least *one* question from each Section. Question No. 1 is *compulsory*. All questions carry equal marks.

1. Explain the following Questions : $6 \times 2.5 = 15$

- (a) Uninformed Search
- (b) Genetic Algorithm
- (c) Dempster-Shafer Theory
- (d) Explanation Based Learning

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SECTION – A

2. (a) What is Artificial Intelligence ? State examples of AI problems. 8
- (b) Differentiate the DFS and BFS with merits and demerits. 7
3. (a) Explain the Best-First-Search Procedure with example. 8
- (b) Explain AO* algorithm with an example. 7

SECTION – B

4. Explain in detail Knowledge Representation Techniques and schemes. 15
5. State various issues knowledge representation in detail. 15

SECTION – C

6. Explain Probability and Bay's Theorem. 15
7. What is Partial-order Planning. explain in detail ? 15

SECTION – D

8. What are the Current trends in Artificial Intelligence.
Elaborate ? 15

9. Explain the following types of learning : 15

- (a) Learning by Induction,
 - (b) Rote Learning,
 - (c) Symbol Based Learning
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