

ROLL No:

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Total number of pages: (1)

Regular

B.Tech. || CSE || 6<sup>th</sup> Sem

Artificial Intelligence

Subject Code: BTCS-614A (RG)

Paper ID:

Time allowed: 3 Hrs

Max.Marks:60

Important Instructions:

- All questions are compulsory
- Assume any missing data

## PART A (10×2marks)

Q. 1. Short-Answer Questions:

- List basic steps in problem solving techniques.
- What is functionality of metadata?
- What is Depth limited search.
- Define Greedy Best First Search.
- What are components of Production System?
- Explain Artificial Intelligence.?
- Explain concept of clustering?
- Which type of data can be mined?
- What are issues in designing a Search Program?.
- What is Conflict Resolution Strategy? -

## PART B (5×8marks)

Q. 2. Explain any four problem types in AI?

OR

What is Expert System? Illustrate with an example.

CO1

Q. 3. Differentiate between hill climbing and best first search techniques.

OR

What is meant by Turing test?.

CO1

Q. 4. In which scenarios of solving programming problems can BFS be applied?

OR

Explain Time/Space complexity of Depth First Search.

CO2

Q. 5. Differentiate between forward chaining and backward chaining?

OR

Differentiate between Supervised and Unsupervised learning?

CO3

Q. 6. How field of Natural Language Processing uses AI. What are issues in this field.

OR

What are Genetic Algorithm. Explain any one problem, which can use GA for its solution.

CO4