



School of Computer science and Engineering

Department of Computer Engineering and Technology

SY BTech (AIDS) (Academic Year 2024-25)

Mid Term Exam - Semester ...

Course Name:- Artificial Intelligence and Expert System Course Code:-CET2007B

Maximum Marks: 30

Time: 1 Hr ... Minutes

Date: 05/03/2025

Instructions:-

1. Attempt any 3 questions from Q. 1 to Q. 4 AND
Attempt any 3 questions from Q. 5 to Q. 8
2. Figure to the right indicates full marks.
3. Use of cell phone is prohibited in the examination hall.
4. Neat diagrams must be drawn wherever necessary.
5. Assume suitable data, if necessary and clearly state.
6. Use of scientific calculator is allowed

Attempt any 3 questions from Q. 1 to Q. 4

Q.1	CO 1	Elucidate the various categories of task environments, providing examples.	[5 Marks]
Q.2	CO 1	What is the difference between Breadth-First Search and Depth-First Search Algorithm with time and space complexity?	[5 Marks]
Q.3	CO 2	Discuss the heuristic function used in the A* algorithm, with significance with example?	[5 Marks]
Q.4	CO 2	Define and explain Constraint Satisfaction Problem.	[5 Marks]
Attempt any 3 questions from Q. 5 to Q. 8			
Q.5	CO 3	What is knowledge representation in AI?	[5 Marks]
Q.6	CO 3	Describe semantic networks. Explain with proper example.	[5 Marks]
Q.7	CO 3	What is the difference between forward and backward chaining?	[5 Marks]
Q.8	CO 3	Convert the following sentences to predicate logic- I. Marcus was a man. II. Alive means not dead.	[5 Marks]

Roll No.

III. If x divides y and y divides z then x divides z .
