

GYANMANJARI INNOVATIVE UNIVERSITY
GYANMANJARI INSTITUTE OF TECHNOLOGY
B.Tech.-Mid Semester Examination (MSE)- S2025

Enrollment No.: _____

Subject Code: BETCE15314

Subject Name: Artificial Intelligence

Time: 02:30 to 04:30 PM

Date: 10/09/2025

Semester: 5th

Total Marks: 60

Instructions:

1. Question No. 1 is compulsory.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

		Marks
Q.1	(a) Name 3 sub-areas of AI with real-world examples.	05
	(b) Explain what is problem solving and why is it necessary	05
	(c) Differentiate BFS and DFS	10
Q.2	(a) What is knowledge representation?	05
	(b) Define inference engine.	05
	OR	
	(b) Define expert systems.	05
	(c) Apply constraint satisfaction Problem to Puzzle as follows: TO+GO=OUT	10
	OR	
	(c) Using backward chaining, describe how fever can be diagnosed.	10
Q.3	(a) Compare traditional systems vs. expert systems.	05
	(b) What is Uninformed Search? Types of uninformed search.	05
	(c) Explain MYCIN Expert System along with its purpose and working of it with its advantages and disadvantage.	10
	OR	
Q.3	(a) Explain Depth First Search with necessary tree structure and traversal steps.	05
	(b) List all components of Expert Systems.	05
	(c) Explain Expert Systems with Interference Mechanism.	10