



# PRESIDENCY UNIVERSITY

## BENGALURU

Roll No.														
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### Mid - Term Examinations – October 2025

**Date:** 08-10-2025

**Time:** 09.30am to 11.00am

<b>School:</b> SOIS	<b>Program:</b> BCA	
<b>Course Code :</b> CSA1701	<b>Course Name:</b> Artificial Intelligence	
<b>Semester:</b> III	<b>Max Marks:</b> 50	<b>Weightage:</b> 25%

<b>CO - Levels</b>	<b>CO1</b>	<b>CO2</b>	<b>CO3</b>	<b>CO4</b>	<b>CO5</b>
<b>Marks</b>	<b>26</b>	<b>24</b>	<b>0</b>	<b>0</b>	<b>0</b>

#### Instructions:

- (i) Read all questions carefully and answer accordingly.
- (ii) Do not write anything on the question paper other than roll number.

#### Part A

**Answer ALL the Questions. Each question carries 2marks.**

**5Q x 2M=10M**

<b>1</b>	Define the term “Agent” in Artificial Intelligence.	<b>2 Marks</b>	<b>L1</b>	<b>CO1</b>
<b>2</b>	Differentiate between Narrow AI and General AI.	<b>2 Marks</b>	<b>L2</b>	<b>CO1</b>
<b>3</b>	List two key foundations of Artificial Intelligence.	<b>2 Marks</b>	<b>L1</b>	<b>CO1</b>
<b>4</b>	Define Knowledge Representation in AI.	<b>2 Marks</b>	<b>L1</b>	<b>CO2</b>
<b>5</b>	What are the different types of knowledge?	<b>2 Marks</b>	<b>L2</b>	<b>CO2</b>

#### Part B

**Answer the Questions.**

**Total Marks 40M**

<b>6.</b>	<b>a.</b>	Explain the different types of agents in Artificial Intelligence with suitable examples (Simple Reflex, Model-Based, Goal-Based, Utility-Based, Learning Agents).	<b>10 Marks</b>	<b>L2</b>	<b>CO 1</b>
<b>Or</b>					
<b>7.</b>	<b>a.</b>	Discuss the significance of Machine Learning, Deep Learning,	<b>10 Marks</b>	<b>L2</b>	<b>CO</b>

		NLP, and Computer Vision in Artificial Intelligence.			<b>1</b>
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<b>8.</b>	<b>a.</b>	Describe the history of AI from the 1950s to the present. Highlight key milestones such as the Dartmouth Conference, Perceptron, AI Winter, Expert Systems, and modern AI resurgence.	<b>10 Marks</b>	<b>L2</b>	<b>CO 1</b>
<b>Or</b>					
<b>9.</b>	<b>a.</b>	Write a detailed note on applications of AI in Healthcare, Business, and Autonomous Systems.	<b>10 Marks</b>	<b>L2</b>	<b>CO 1</b>

<b>10.</b>	<b>a.</b>	Compare and contrast Propositional Logic and First-Order Logic (FOL). Highlight their syntax, semantics, expressive power, limitations, and applications with suitable examples	<b>10 Marks</b>	<b>L2</b>	<b>CO 2</b>
<b>Or</b>					
<b>11.</b>	<b>a.</b>	Discuss Knowledge-Based Systems (KBS). Explain their structure (knowledge base, inference engine, user interface), advantages, limitations, and real-life applications such as Expert Systems.	<b>10 Marks</b>	<b>L2</b>	<b>CO 2</b>

<b>12.</b>	<b>a.</b>	Discuss different types of knowledge representation techniques (Logical, Semantic Networks, Frames, Production Rules) with examples.	<b>10 Marks</b>	<b>L2</b>	<b>CO 2</b>
<b>Or</b>					
<b>13.</b>	<b>a.</b>	Compare Declarative Knowledge and Procedural Knowledge. How are both used in Knowledge-Based Systems?.	<b>10 Marks</b>	<b>L2</b>	<b>CO 2</b>