Roll No.												

PRESIDENCY UNIVERSITY

BENGALURU

Mid - Term Examinations – MARCH 2026

Date: 10 – 03- 2026 **Time:** 02:00pm – 03:30pm

School: SOE	**Program:** Civil/Mechanical/Petroleum	
Course Code : CSE2282	**Course Name:** Computational Thinking and AI Programming	
Semester: IV	**Max Marks**:50	**Weightage**:25%

CO - Levels	**CO1**	**CO2**	**CO3**	**CO4**	**CO5**
Marks	**24**	**26**	**----**	**----**	**----**

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**

1	**Rephrase** the definition of a Computational Problem in your own words.	**2 Marks**	**L2**	**CO1**
2	**Explain** Abstraction using the sandwich-making example.	**2 Marks**	**L2**	**CO1**
3	**Make use** of the **pass statement** in a Python code snippet.	**2 Marks**	**L3**	**CO2**
4	**Model** string immutability through a simple code experiment**.**	**2 Marks**	**L3**	**CO2**
5	**Create** a script that utilizes both local and global variables.	**2 Marks**	**L3**	**CO2**

Part B

Answer the Questions. **Total Marks 40M**

6.	**a.**	**Compare** and contrast Iteration (loops) and Recursion, providing a code example for each.	**10 Marks**	**L2**	**CO1**
	b.	**Outline** the differences between Pseudocode, Flowcharts, and Python code using a single algorithm as an example.	**10 Marks**	**L2**	**CO1**
		Or			
7.	**a.**	**Explain** Python conditionals by contrasting independent if statements with an if-elif-else chain.	**10 Marks**	**L2**	**CO1**
	b.	**Extend** simple decision-making into a "Tiered Decision" or a "Nested Hierarchy" using a Customer Loyalty or Access Control example.	**10 Marks**	**L2**	**CO1**

8.	**a.**	**Illustrate** the best loop (for vs. while) to build solutions for two different scenarios.	**10 Marks**	**L3**	**CO2**
	b.	**Produce** a recursive program to solve for a factorial or range sum.	**10 Marks**	**L3**	**CO2**
		Or			
9.	**a.**	**Build** a comparison of Python's four data structures and choose the right one for a specific task.	**10 Marks**	**L3**	**CO2**
	b.	**Develop** a file-handling program that utilizes different access modes to save and read data.	**10 Marks**	**L3**	**CO2**