Roll No.												

PRESIDENCY UNIVERSITY

BENGALURU

Mid - Term Examinations – October 2025

Date: 07-10-2025 **Time:** 09.30am to 11.00am

School: SOCSE	**Program:** B. tech	
Course Code :CBC2500	**Course Name:** Smart Contract and Solidity	
Semester: V	**Max Marks**:50	**Weightage**:25%

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

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	State any two advantages of deploying applications on blockchain.	2 Marks	L1	CO1
2	List two functions of the Ethereum Virtual Machine (EVM).	2 Marks	L1	CO1
3	Differentiate between public and private blockchain	2 Marks	L2	CO1
4	Define a constructor in Solidity with example.	2 Marks	L1	CO2
5	Outline the syntax for declaring arrays in Solidity	2 Marks	L2	CO2

Part B

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

6.	a.	Discuss the working principle of Ethereum Virtual Machine with an example.	10 Marks	L2	CO 1
		Or			
7.	a.	Illustrate the deployment process of a simple smart contract using Remix IDE	10 Marks	L2	CO 1

8.	a.	Analyze the security challenges of smart contracts on blockchain.	10 Marks	L5	CO 1
		Or			
9.	a.	Explain the architecture of a blockchain with neat diagram.	10 Marks	L4	CO 1

10.	a.	Explain the structure of a Solidity source file with example code..	10 Marks	L2	CO 2
		Or			
11.	a.	Evaluate expressions and control structures in Solidity with examples.	10 Marks	L5	CO 2

12.	a.	Demonstrate how mappings and arrays are used for data storage in Solidity.	10 Marks	L2	CO 2
		Or			
13.	a.	Explain the concept of inheritance and polymorphism in Solidity contracts.	10 Marks	L2	CO 2