Roll No.												

PRESIDENCY UNIVERSITY

BENGALURU

Mid - Term Examinations – October2025

Date: 28-10-2025 **Time:** 11.00am to 12.30pm

School: SOCSE/SOE	**Program:** B.Tech. CSE - Block Chain	
Course Code :CBC3405	**Course Name**: Block Chain Security & Ethical Hacking	
Semester:VII	**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	Point out how decentralization strengthens the dependability of a blockchain system.	2 Marks	L1	CO1
2	Indicate what happens to blockchain consensus when a Sybil attack takes place.	2 Marks	L2	CO1
3	Specify the main goal of performing reconnaissance during blockchain penetration testing.	2 Marks	L1	CO2
4	List any two observable signs that suggest a blockchain node is suffering a DDoS attack.	2 Marks	L1	CO2
5	Mention one major reason for establishing legal boundaries before starting ethical hacking.	2 Marks	L1	CO2

Part B

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

6.	**a.**	Explain the core security principles followed in decentralized blockchain environments and show how they promote transparency and trust.	10 Marks	L2	CO1
		Or			
7.	**a.**	Examine different vulnerable layers (network, consensus, and user layers) within blockchain systems and outline the preventive steps for each.	10 Marks	L3	CO1
8.	**a.**	Compare the impact of Sybil and DDoS attacks on blockchain networks, and explain how each affects network stability and performance.	10 Marks	L2	CO1
		Or			
9.	**a.**	Assess how flaws in smart contracts or wallet management can be exploited and suggest ways to reduce such risks.	10 Marks	L3	CO1
10.	**a.**	Outline the major phases involved in ethical hacking and penetration testing, highlighting how reconnaissance and scanning differ in purpose.	10 Marks	L2	CO2
		Or			
11.	**a.**	Show how blockchain enumeration tools such as Etherscan or Tenderly can be used to uncover contract-level weaknesses.	10 Marks	L3	CO2
12.	**a.**	Discuss how analyzing network traffic can help detect blockchain communication vulnerabilities, with a note on ethical considerations.	10 Marks	L2	CO2
		Or			
13.	**a.**	Describe a safe approach for building and testing smart contract exploits in a sandbox or testnet environment.	10 Marks	L3	CO2