



# PRESIDENCY UNIVERSITY

BENGALURU

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

Date: 27-10-2025

Time: 11.00am to 12.30pm

School: SOCSE/SOE	Program: B.Tech(CBC)	
Course Code : CBC3410	Course Name: GENERATIVE AI FOR BLOCKCHAIN APPLICATIONS	
Semester: VII	Max Marks: 50	Weightage: 25

CO - Levels	C01	C02	C03	C04	C05
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	Define blockchain transaction?	2 Marks	L1	C01
2	Define Generative AI and mention one of its key applications.	2 Marks	L1	C01
3	What is the purpose of prompt engineering in blockchain-based AI applications?	2 Marks	L2	C02
4	What is the significance of Creative Commons (CC) licensing on-chain?	2 Marks	L2	C02
5	Explain content addressing in IPFS?	2 Marks	L2	C02

## Part B

Answer the Questions.

Total Marks 40M

6.	a.	Describe the architecture of Generative Adversarial Networks (GANs) and explain how the generator and discriminator compete to produce realistic outputs.	10 Marks	L2	CO 1
Or					
7.	a.	Explain the working of Variational Autoencoders (VAEs).	10 Marks	L2	CO 1

8.	a.	Discuss the process of Diffusion Models in generative AI.	10 Marks	L2	CO 1
Or					
9.	a.	Explain the structure and functionality of smart contracts in blockchain.	10 Marks	L2	CO 1

10.	a.	Explain the architecture and key features of Ethereum.	10 Marks	L2	CO 2
Or					
11.	a.	Explain the architecture and key features of IPFS.	10 Marks	L2	CO 2

12.	a.	Discuss the process of smart contract-driven art or music generation.	10 Marks	L2	CO 2
Or					
13.	a.	Explain the concept of AI-generated NFTs.	10 Marks	L2	CO 2