Roll No. | | | | | | | | | | | |

PRESIDENCY UNIVERSITY

BENGALURU

End - Term Examinations – December 2025

Date: 11 – 12- 2025　　　　　　　　　　　　**Time:** 01:00pm – 04:00pm

School: SOCSE	**Program:** B.Tech(CBC)
Course Code: CBC3410	**Course Name:** GENERATIVE AI FOR BLOCKCHAIN APPLICATIONS
Semester: VII	**Max Marks**: 100　　　**Weightage**: 50%

CO - Levels	CO1	CO2	CO3	CO4	CO5
Marks	26	26	24	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.　　　　　**10Q x 2M=20M**

1.	Define Generative AI with two examples.	2 Marks	L1	CO1
2.	Explain the role of blockchain oracles.	2 Marks	L2	CO1
3.	Differentiate between GANs and VAEs.	2 Marks	L4	CO1
4.	Explain Creative Commons licensing on-chain.	2 Marks	L2	CO2
5.	Explain metadata in NFTs?	2 Marks	L2	CO2
6.	Explain IPFS for content storage.	2 Marks	L2	CO2
7.	Define DAO governance.	2 Marks	L1	CO3
8.	Explain the concept of agent verification and staking?	2 Marks	L2	CO3
9.	Explain verifiable credentials?	2 Marks	L2	CO4
10.	List two ethical concerns in Web3 AI marketplaces.	2 Marks	L2	CO4

Part B

Answer the Questions.   **Total Marks 80M**

11.	a.	Summarize the differences between GANs and Diffusion Models in terms of how they generate data.	10 Marks	L4	CO1
	b.	Assess how decentralization in blockchain improves transparency when deploying Generative AI applications.	10 Marks	L5	CO1
		Or			
12.	a.	Explain how smart contracts can support trust in AI model deployment.	10 Marks	L2	CO1
	b.	Judge the reliability of blockchain oracles in providing external data for AI systems.	10 Marks	L5	CO1

13.	a.	Describe how NFT metadata is stored using IPFS or Arweave.	10 Marks	L2	CO2
	b.	Critique the impact of Creative Commons licensing on the commercial use of AI-generated NFTs.	10 Marks	L5	CO2
		Or			
14.	a.	Explain how prompt engineering influences the uniqueness of blockchain-based NFTs.	10 Marks	L2	CO2
	b.	Compare Ethereum with other blockchains for supporting NFT-driven AI art.	10 Marks	L4	CO2

15.	a.	Explain the role of autonomous AI agents in DAO governance.	10 Marks	L2	CO3
	b.	Assess whether staking mechanisms are effective in discouraging malicious agents in DeFi.	10 Marks	L5	CO3
		Or			
16.	a.	Explain how LLMs can be used to draft DAO proposals.	10 Marks	L2	CO3
	b.	Analyse the strengths and weaknesses of combining Chainlink oracles with LLMs for governance.	10 Marks	L4	CO3

17.	a.	Explain how blockchain can be applied to combat misinformation.	10 Marks	L2	CO4
	b.	Evaluate the usefulness of verifiable credentials in protecting AI models.	10 Marks	L5	CO4
		Or			
18.	a.	Describe the features of Bittensor as a decentralized AI marketplace.	10 Marks	L2	CO4
	b.	Analyse the regulatory challenges of integrating AI with blockchain.	10 Marks	L4	CO4