



PRESIDENCY UNIVERSITY

BENGALURU

Roll No.																			
----------	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

End - Term Examinations - December 2025

Date: 10- 12- 2025

Time: 1.00pm to 04.00pm

School: SOCSE	Program: B.Tech. Computer Science and Engineering (CSE)		
Course Code : CBC3406	Course Name: Introduction To Artificial Intelligence in Block Chain		
Semester: V	Max Marks: 100	Weightage: 50%	

CO - Levels	C01	C02	C03	C04	C05
Marks					

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 a Rug Pull Attack in DeFi and state one AI prevention technique.	2 Marks	L1	C03
2.	Define Explainable AI (XAI)?	2 Marks	L1	C04
3.	Define "Embedding decision-making into contracts" and provide one example from the insurance sector.	2 Marks	L1	C02
4.	Name two core components required for intelligent smart contracts.	2 Marks	L1	C02
5.	Define a Model Training Marketplace and name one participant role.	2 Marks	L1	C03
6.	Define Tokenization in the context of AI and provide one example type.	2 Marks	L1	C03
7.	Label two key regulatory objectives for AI-Blockchain systems	2 Marks	L1	C04
8.	Define a Blockchain Oracle and give one example of its use in flight insurance.	2 Marks	L1	C01
9.	Define an Intelligent NFT (iNFT) and its key feature	2 Marks	L1	C03
10.	Define Scalability as a challenge in AI-Blockchain integration	2 Marks	L1	C04

Part B

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

11.	Determine the role of GDPR in AI-Blockchain systems, outlining key individual rights, compliance requirements, and penalties, and discuss how it conflicts with blockchain's immutability in data privacy scenarios	10 Marks	L3	C04
Or				
12.	Demonstrate the role of Resource Constraints in AI-Blockchain systems, focusing on Computational Power, Storage, and Energy, and propose at least three solutions with examples.	10 Marks	L3	C04
Or				
13.	Explain the concept of Intelligent Smart Contracts, including how they integrate AI for adaptability, and discuss the lifecycle of embedded decision-making with examples from supply chain and energy trading.	10 Marks	L2	C01
Or				
14.	Describe how Blockchain enhances Federated Learning, focusing on decentralized coordination, immutable audit trails, incentive mechanisms, and security against attacks, with a healthcare use case.	10 Marks	L2	C01
Or				
15.	Classify the good and bad sides of mixing Explainable AI (XAI) with Blockchain. Explain how it helps with ethical issues in areas like health and money.	10 Marks	L3	C04
Or				
16.	Examine the major Challenges in AI-Blockchain Integration specifically for Data Privacy, including examples for each challenge.	10 Marks	L3	C04
Or				
17.	Describe Blockchain Oracles, including how they work step-by-step (from request to execution), types (Software, Hardware, Inbound, Outbound, etc.), and two real-world use cases in insurance and DeFi.	10 Marks	L2	C02
Or				
18.	Describe the role of AI and Blockchain in embedding decision-making into contracts, highlighting core components like AI/ML algorithms, oracles, and data provenance tools, along with their benefits.	10 Marks	L2	C02
Or				
19.	Classify the three types of AI (Narrow, General, and Super AI) with definitions and at least two examples each from real-world applications.	10 Marks	L2	C01
Or				
20.	Compare Smart Contracts, their working mechanism with IF-THEN logic, and describe the three types (Legal, DAO, ALC) with one example each.	10 Marks	L2	C01
Or				
21.	Classify the architecture of a DApp and highlight how it differs from traditional applications	10 Marks	L2	C02
Or				

22.	Estimate a detailed note on the benefits, challenges, and future scope of combining AI with blockchain technology in various industries.	10 Marks	L2	C02
------------	--	---------------------	-----------	------------

23.	Classify various DeFi attacks (Rug Pull, Flash Loan, Price Oracle Manipulation, etc.) with definitions, examples, and AI-based prevention techniques using ML, NLP, and GNNs.	10 Marks	L3	C03
------------	---	---------------------	-----------	------------

Or

24.	Explain Tokenization in AI, covering types (Word, Subword), steps, applications (e.g., text generation), and how Blockchain ensures ownership and incentives in AI models like in SingularityNET.	10 Marks	L2	C03
------------	---	---------------------	-----------	------------

25.	Explain how SingularityNET tokenizes AI services using blockchain, with step-by-step workflow.	10 Marks	L2	C03
------------	--	---------------------	-----------	------------

Or

26.	Explain detailed notes on DApps with examples (Uniswap, Aave, Axie Infinity, Filecoin).	10 Marks	L2	C03
------------	---	---------------------	-----------	------------