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PRESIDENCY UNIVERSITY

BENGALURU

Mid - Term Examinations – October 2025

Date: 07-10-2025

Time: 02.00pm to 03.30pm

School: SOCSE	Program:	
Course Code: CBC3406	Course Name: Introduction to artificial intelligence in block chain	
Semester: V	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	State two benefits of using federated learning.	2 Marks	L1	C02
2	Identify use of Edge AI?	2 Marks	L1	C02
3	Define Narrow AI with one real-world example.	2 Marks	L1	C02
4	Tell any two applications of Artificial Intelligence in healthcare.	2 Marks	L1	C01
5	Describe the difference between Supervised Learning and Unsupervised Learning in AI?	2 Marks	L1	C01

Part B

Answer the Questions.

Total Marks 40M

6.	a.	Classify the structure of Blockchain with respect to header, transaction data and Hash value	10 Marks	L2	CO1
Or					
7.	a.	Describe AI Audit Trails and Data Provenance. How does blockchain enhance them?	10 Marks	L2	CO1

8.	a.	Explain Smart Contracts with types (Smart Legal Contract, DAO, Application Logic Contract) and real-life use cases.	10 Marks	L2	CO2
Or					
9.	a.	Evaluate the impact of AI-driven DApps in finance (DeFi), gaming, and healthcare sectors.	10 Marks	L3	CO2

10.	a.	Illustrate the architecture of a DApp and highlight how it differs from traditional applications.	10 Marks	L3	CO2
Or					
11.	a.	Compare and contrast the different types of blockchain oracles. Discuss their advantages, limitations, and applications.	10 Marks	L2	CO2

12.	a.	Explain different consensus algorithms (PoW, PoS, DPoS, PoA) along with their advantages and disadvantages.	10 Marks	L2	CO1
Or					
13.	a.	“Blockchain enhances transparency, security, and incentivization in federated learning.” – Critically review this statement with examples.	10 Marks	L2	CO1