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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	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	State two benefits of using federated learning.	2 Marks	L1	CO2
2	Identify use of Edge AI?	2 Marks	L1	CO2
3	Define Narrow AI with one real-world example.	2 Marks	L1	CO2
4	Tell any two applications of Artificial Intelligence in healthcare.	2 Marks	L1	CO1
5	Describe the difference between Supervised Learning and Unsupervised Learning in AI?	2 Marks	L1	CO1

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
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Or

7.	a.	Describe AI Audit Trails and Data Provenance. How does blockchain enhance them?	10 Marks	L2	CO1
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8.	a.	Explain Smart Contracts with types (Smart Legal Contract, DAO, Application Logic Contract) and real-life use cases.	10 Marks	L2	CO2
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Or

9.	a.	Evaluate the impact of AI-driven DApps in finance (DeFi), gaming, and healthcare sectors.	10 Marks	L3	CO2
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10.	a.	Illustrate the architecture of a DApp and highlight how it differs from traditional applications.	10 Marks	L3	CO2
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Or

11.	a.	Compare and contrast the different types of blockchain oracles. Discuss their advantages, limitations, and applications.	10 Marks	L2	CO2
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12.	a.	Explain different consensus algorithms (PoW, PoS, DPoS, PoA) along with their advantages and disadvantages.	10 Marks	L2	CO1
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Or

13.	a.	“Blockchain enhances transparency, security, and incentivization in federated learning.” – Critically review this statement with examples.	10 Marks	L2	CO1
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