School: .... Campus: ....

Academic Year: .... Subject Name: .... Subject Code: ....

Semester: .... Program: .... Branch: .... Specialization: ....

Date: ....

Centurion
UNIVERSITY
Shaping Lives...
Empowering Communities...

Applied and Action Learning
(Learning by Doing and Discovery)

Name of the Experiement :

* Coding Phase: Pseudo Code / Flow Chart / Algorithm

- Intro: AI adds intelligence and automation to decentralized Web3 systems.

- Data Control: Web3 gives users ownership and transparency over AI data.

- Integration: On-chain smart contracts connect with off-chain AI using oracles (e.g., Chainlink).

- Marketplaces: Platforms like SingularityNET allow buying/selling AI services.

- Storage: AI data stored on IPFS for security and immutability.

- Use Cases: Fraud detection, IoT agents, decentralized apps, and smart governance.

- Execution: Deploy contracts, connect DApp, and verify AI–Web3 interaction.

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* Softwares used

No coding or implementation – purely research and presentation based (AI models, Web3 concepts, decentralized data frameworks).

* Implementation Phase: Final Output (no error)

During the practical session, students formed groups and prepared a 5–7 slide presentation demonstrating the connection between AI and blockchain in real-world applications. Each group selected a specific AI + Web3 use case and presented a visual flow with architecture diagrams.

1. Use Case Demonstration:
    - Example chosen: Autonomous Fraud Detection in DeFi using AI Agents
    - AI model trained off-chain reads real-time blockchain transaction data via oracles
2. The AI sends fraud alert score back to smart contract for blocking suspicious transfers
    - Architecture Diagram Shared (Sample Flow):
    - User → Blockchain Network → Oracle → AI Engine → Smart Contract → Action on-chain
    - Diagram illustrated how off-chain AI interacts with on-chain logic
3. Live Demo (Optional):
    - Simulated decentralized sentiment analysis model (mock predictions) interacting with a governance smart contract
    - When sentiment score < threshold → Contract triggers automated proposal vote
4. Tools Used:
    - Blockchain: Ethereum Testnet (Goerli/Sepolia)
    - AI Model Hosting: Local Python-based ML script (mock deployment)
5. Wallets: MetaMask for user interaction
    - Diagramming Tool: Draw.io / Figma for architecture visualization
6. Presentation Summary:
    - Highlighted the hybrid nature of AI + Web3 systems
    - Discussed challenges: Gas cost, model verification, privacy of training data
7. Emphasized future opportunities like on-chain AI agents, DAO-powered AI funding, decentralized compute networks

Applied and Action Learning

* Implementation Phase: Final Output (no error)

- Contract deployed successfully.

- Model hash (AI data) stored securely on blockchain.

- Demonstrates integration between AI model storage and Web3 infrastructure.

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* Observations

It was observed that combining AI with Web3 creates a decentralized, intelligent network where AI

decisions become more transparent and trusted. Blockchain ensures data integrity and ownership, while

 AI provides automation and analytics. Together, they enable the next evolution of the internet —

Intelligent Web3.

ASSESSMENT

Rubrics	Full Mark	Marks Obtained	Remarks
Concept	10		
Planning and Execution/ Practical Simulation/ Programming	10		
Result and Interpretation	10		
Record of Applied and Action Learning	10		
Viva	10		
Total	**50**		

Signature of the Student:

Name :

Signature of the Faculty:

Regn. No. :

Page No............