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

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

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

Date: .....

Applied and Action Learning

(Learning by Doing and Discovery)

Name of the Experiement : Explore the chain - Using a Blockchain Explorer

Objective/Aim:

To study and understand how a blockchain explorer works by viewing transactions, blocks, and wallet addresses on a blockchain network.

Apparatus/Software Used:

- A computer/laptop with internet connection
- A web browser
- Blockchain Explorer website (e.g., https://www.blockchain.com/explorer (https://www.blockchain.com/explorer) for Bitcoin, or https://etherscan.io (https://etherscan.io) for Ethereum)

Theory/Concept:

- A blockchain explorer is a web-based tool that allows users to search and view details about a blockchain network. It provides information such as:
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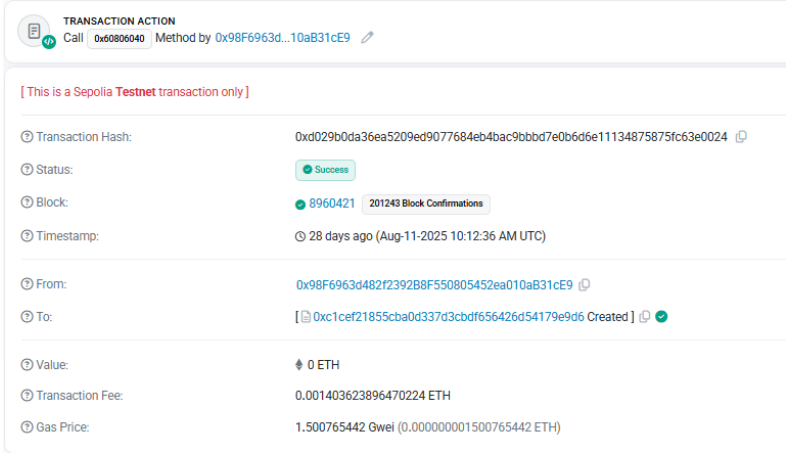
- Blocks: Contain a collection of transactions.
- Transactions: Movement of cryptocurrency from one address to another.
- Addresses: Wallets or accounts used to send/receive crypto.
- Hash: A unique identifier for blocks and transactions.
- Explorers make blockchain data transparent and accessible to everyone..



Procedure:

1. Open a blockchain explorer in your browser (example: Etherscan for Ethereum).
2. Search for a block number or transaction hash using the search bar.
3. Observe details such as timestamp, sender address, receiver address, transaction amount, and block confirmations.
4. Explore a wallet address to view its transaction history and current balance.
5. Compare data between multiple blocks to understand how new transactions are added.
6. Note down your observations.

Observation:

* Each transaction has a unique hash.
* Wallet addresses show all past transactions with timestamps.
* Blocks are linked sequentially, showing immutability.
* Transparency allows anyone to verify transactions without needing special access.

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**		