



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 Experiment :** Hash Your First Block – Blockchain Basics and Setup

### Objective/Aim:

To study and understand the basics of blockchain and how its linked with each other .

### Apparatus/Software Used:

- Laptop/PC
- PowerPoint/Word for documentation
- Internet for research

### Theory/Concept:

1. Blockchain is a shared immutable ledger that facilitates the process of recording transactions and tracking assets across a business network.
2. Blockchain uses the three principles of cryptography, decentralization, and consensus to create a highly secure underlying software system that is nearly impossible to tamper with. There is no single point of failure, and a single user cannot change the transaction records.
3. The key benefit of blockchain lies in its ability to provide security, transparency and trust without relying on traditional intermediaries, such as banks or other third parties.

**Procedure:**

1. Studied theoretical concepts of blockchain technology.
2. Created a PowerPoint presentation on blockchain technology.

**Observation Table:**

The screenshot shows a 'Block' page from a blockchain explorer. It displays the following information:

- Block:** # 1
- Nonce:** 72608
- Data:** 123e4567-e89b-12d3-a456-426614174000 sent 100\$ to 234e4587-d89b-12b3-a456-426614924000
- Hash:** aeb947db3e8edc f65c07b6f9548e0a662a37ade264ba74e4f0078f45a3d57b87
- A **Mine** button is visible at the bottom.

**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		
<b>Total</b>	<b>50</b>		

**Signature of the Student:**

Name :

Regn. No. :

**Signature of the Faculty:**