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|  | **DEPARTMENT OF COMPUTER ENGINEERING**  **ACADEMIC YEAR 2024-25** |

**Course Name: Blockchain Lab**

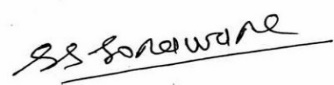
**Class: BE CMPN (Division A and B)**

**Semester: VII**

**Faculty In charge: Swapnil Sonawane**

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| **CO#** | **Course Outcome** |
| CO1 | Explain blockchain concepts. |
| CO2 | Apply cryptographic hash required for blockchain. |
| CO3 | Apply the concepts of smart contracts for an application. |
| CO4 | Design a public blockchain using Ethereum |
| CO5 | Design a private blockchain using Hyperledger. |
| CO6 | Use different types of tools for blockchain applications |

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| **Sr. No.** | **Name of Experiment** | **CO Mapping** |
| 1 | Introduction to Ethereum and Setting Up MetaMask | CO3 |
| 2 | Writing and Deploying a SimpleSmart Contract using Remix IDE | CO3 |
| 3 | Interacting with Deployed Smart Contracts | CO3 |
| 4 | Developing a Simple Token Contract | CO3 |
| 5 | Building a Decentralized Application (DApp) Interface | CO4 |
| 6 | Case Study - Real-World Application of Ethereum (e.g., DeFi application, supply chain management) | CO4 |
| 7 | Implementing Smart Contract Security | CO4 |
| 8 | Integrating MetaMask with DAPP | CO4 |
| 9 | Advanced Smart Contract Development | CO4 |
| PBLE1 | Implementing a Simple Vot ing System | CO6 |
| PBLE2 | Tracking Supply Chain Transactions | CO6 |



**Swapnil S. Sonawane**