SMART CONTRACTS LAB SYLLABUS

1. Setting up Ethereum network by using Geth command line interface.

2. Identifying and setting up a testnet, like Ropsten or Kovan, so that free ethers can be used as transaction.

3. Transfer ethers from one account to another on an Ethereum testnet.

4. Constructing Solidity code for a decentralized application where the owner can create a contracts (with a tenant) which can be replicated to all nodes.

5. In a rented house setup with the owner and the tenants, the tenant can submit a deposit and the contracts's state changes on all the decentralized nodes.

6. The owner should be able to check the balance of the contracts from any one of the nodes.

7. Using Remix on the Solidity code to develop, compile and deploy the contracts.

8. Using setter and getter functions to interact with the contracts

9. Withdrawing funds from a contracts to a restricted account, preferably the owner's, with different levels of security restrictions.

10. Deploying a contracts on an external blockchain by using Ganache and/or MyEtherwalllet, Metamask.