

Unit-I

- Q.1 What are the basic ideas of blockchain
- Q.2 What is a hash puzzle and how does it work?
- Q.3 Define the concept of cryptography and provide an introduction to Bitcoin blockchain.
- Q.4 What is difference between private key and public key.
- Q.5 Describe the concept of hashing and provide a diagram to show its function.

Unit-II

- Q.1 Explain mining in blockchain with diagram.
- Q.2 Define an escrow account and illustrate the Bitcoin network.
- Q.3 What are the use cases of bitcoin blockchain scripting language in micropayment?
- Q.4 What is the bitcoin network in detail.
- Q.5 What are the key area of bitcoin development

Unit-III

- 1. Describe the RSA Algorithm using an appropriate example.
- 2. What are the principles of public key cryptosystem?
- 3. how does the diffi-Hellman key exchange work?
- 4. Explain AES structure and analysis of AES.

Unit-IV

- 1. differentiate proof of work and proof of stake.
- 2. Explain Ethereum with Ethereum mining process.
- 3. What is Byzantine general problem?
- 4. What is ethereum? Differentiate symmetric and asymmetric cryptography with example.
- 5. Write a short note on Byzantine Agreement Algorithm Method.
- 6. Explain Smart contract with suitable example
- 7. What do you understand by Consensus Mechanism explain with its Objectives?

Unit-V

- 1. What is hyper ledger and how does it work?
- 2. How is blockchain utilized in E-governance through Corda?
- 3. Explain permissioned blockchain and use cases in detail.
- 4. Write a short note on

1. The application of Corda in Land Registration Processes.
2. The role of Corda in Medical information Systems.
3. Corda uses of blockchain in E-Governance.