

Total No. of Questions : 8]

**PD4578**

SEAT No. :

[Total No. of Pages : 2

[6404]-83

**B.E. (Computer Engineering)**  
**BLOCK CHAIN TECHNOLOGY**  
**(2019 Pattern) (Semester-VII) (410243)**

*Time : 2½ Hours]*

*[Max. Marks : 70*

*Instructions to the candidates:*

- 1) Answer Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6 and Q.7 or Q.8.
- 2) Neat diagram must be drawn whenever necessary.
- 3) Figure to the right indicate full marks.
- 4) Assume suitable data, if necessary.

**Q1) a) State and discuss bitcoin mining? Elaborate the functionality of miners.**

**[8]**

**b) Describe the features of Corda Block chain? Justify how makes it so different? Elaborate CorDapps?**

**[9]**

OR

**Q2) a) Give the different types of block chain. State their advantages and disadvantages.**

**[8]**

**b) Illustrate 5 different types of consensus algorithm with example.**

**[9]**

**Q3) a) Enlist and discuss types of cryptocurrency “Is cryptocurrency is safe”. Justify according to your opinion.**

**[9]**

**b) Describe Zero coin and its successor Zero cash in details.**

**[8]**

OR

**Q4) a) Compare Custodial and non-custodial cryptowallets.**

**[8]**

**b) Define the term Hot wallet storage and Cold Wallet storage. Discuss Meta mask and its importance along with its various benefits and drawbacks.**

**[9]**

**P.T.O.**

**Q5)** a) Enlist features of Ethereum. Compare Ethereum Mainnet, Testnet, and Private Networks. [9]

b) Define smart contracts with an example of a real-world scenario which will evaluate its benefits. Discuss the role of gas in the Ethereum network and its significance in smart contract execution. [9]

OR

**Q6)** a) List Decentralized Messaging Platform. Discuss Whisper and its purpose in the Ethereum ecosystem. [9]

b) Discuss in brief two types of smart contracts commonly used on the Ethereum platform. Elaborate the basic steps involved in deploying a smart contract on the Ethereum block chain. [9]

**Q7)** a) List the prominent block chain application. Explain in detail any one with the architecture. [9]

b) Discuss in brief how cyber hack can be reduced for Digital identity using block chain. [9]

OR

**Q8)** a) Elaborate the use of block chain technology in the government sector. Which are the different block chain based applications available/proposed for it? [9]

b) Discuss the impact made by block chain with IOT and Block chain in banking. [9]

