

Total No. of Questions : 5]

SEAT No. :

**PC1586**

[Total No. of Pages : 2

**[6328]-58**

**T.Y. B.Sc.**

**COMPUTER SCIENCE**

**CS-3511 : Blockchain Technology**

**(Revised 2019 Pattern) (CBCS) (Semester - V)**

*Time : 2 Hours*

*[Max. Marks : 35*

*Instructions to the candidates:*

- 1) All questions are compulsory.
- 2) Figures to the right indicate full marks.

**Q1)** Attempt any eight of the following : (out of ten)

**[8×1=8]**

- a) Who is the inventor of Bitcoin?
- b) What is gas?
- c) Which command is used to find the target value?
- d) What is used for a wallet security?
- e) Define nonce.
- f) In which network, each node is itself a client and server?
- g) Name the institute that standardized AES algorithm.
- h) What is IPO?
- i) The blockchain is invented by bitcoin. State and explain true/false.
- j) What is confidentiality?

**P.T.O.**

**Q2)** Attempt any four of the following (out of five) : **[4×2=8]**

- a) What is Ether? List any two denominations in wei?
- b) What is consortium and private blockchain?
- c) List and explain types of variables in solidity.
- d) How nonce useful in hashing?
- e) Define stream cipher and block cipher.

**Q3)** Attempt any two of the following : (out of three) **[2×4=8]**

- a) What is Wallet? Explain its types.
- b) Explain tasks of miners.
- c) List the applications of smart contract. Explain any three.

**Q4)** Attempt any two of the following (out of three) : **[2×4=8]**

- a) Describe the structure of EVM.
- b) Explain digital signature with neat diagram.
- c) Explain the layered architecture of blockchain.

**Q5)** Attempt any one of the following (out of two) : **[1×3=3]**

- a) State and explain Merkle tree.
- b) What are the properties of SHA 256?

