

Total No. of Questions : 5]

SEAT No. :

P-1307

[Total No. of Pages : 2

[6055]-308

T.Y. B.Sc.

COMPUTER SCIENCE

CS-3511 : Blockchain Technology

(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.*
- 3) *Neat diagrams must be drawn wherever required.*

**Q1)** Attempt any EIGHT of the following (out of TEN) :

**[8 × 1 = 8]**

- a) What is Non-repudiation?
- b) What is difficulty in a block?
- c) In which network, each & every node itself is a client and server?
- d) What is Ether?
- e) What is consensus?
- f) What is full node?
- g) What is Remix?
- h) What is immutable ledger?
- i) Define genesis block.
- j) What is EVM?

**Q2)** Attempt any FOUR of the following (out of FIVE) :

**[4 × 2 = 8]**

- a) Define Symmetric and asymmetric key cryptography.
- b) What is stream cipher & block cipher?
- c) List the applications of hash function.
- d) What is Gas and Gas Limit?
- e) What is the purpose of test network? List Ethereum testnets.

**P.T.O.**

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

- a) Compare client server & peer to peer architecture.
- b) Explain the contents of block of a blockchain.
- c) Explain Ethereum architecture with neat diagram.

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

- a) Enumerate and explain types of blockchain.
- b) Write a short note on ICO.
- c) Explain forking with types.

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

- a) Explain the uses of SHA-256 algorithm.
- b) What are the tasks of miners?

