

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.

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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?

