

										Subject Code: KCS714					
Roll No:															

B. TECH (SEM VII) THEORY EXAMINATION 2021-22 BLOCKCHAIN ARCHITECTURE DESIGN

Time: 3 Hours Total Marks: 70

Note: 1. Attempt all Sections. If require any missing data; then choose suitably.

SECTION A

1. Attempt all questions in brief.

 $2 \times 7 = 14$

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- What is the principle on which Blockchain technology is based on?
- Why is Blockchain a trusted approach? b.
- Name the two types of records that are present in the Blockchain database? c.
- Differentiate between the term Hyper ledger and Blockchain. d.
- What are Encryption in Blockchaining and its role in Blockchain? e.
- f. What are the different types of tokens used in Blockchains?
- g. What are the application Block identifiers in Blockchaining?

SECTION B

2. Attempt any three of the following:

 $7 \times 3 = 21$

- What type of records can be kept in a Blockchain? Is there any restriction on same? a.
- Explain the major elements of the Blockchain ecosystem in detail? b.
- 13.230.06.22 Mention the difference State difference between proof-of-work & proof-of-stake in c. Blockchaining.
- What are the key principles in Blockchain that are helpful in eliminating the d. security threats that needs to be followed?
- e. What is the application of Merkle trees? Write use of Merkle trees in Blockchains?

SECTION C

3. Attempt any one part of the following:

- What are function modifiers in Solidity? How is Blockchain distributed ledger different from a traditional ledger?
- What is the concept of Double Spending? What is a DAPPS in Blockchain? (b)

4. Attempt any one part of the following:

 $7 \times 1 = 7$

- Write and explain the Blockchain Architecture in depth. What are the (a) primary benefits of immutability in Blockchaining?
- Explain the steps that are in the Blockchain project implementation. (b) Mention the significance of blind signature and how it is useful?

5. Attempt any one part of the following:

7 x 1=7

- What are the key principles in Blockchain that are helpful in (a) eliminating the security threats that needs to be followed
- Mention and list the parts of EVM memory in Blockchaining. (b)

6. Attempt any one part of the following:

- Name organizations that can use Blockchain technology. What is the difference (a) between Blockchain and database?
- What is the concept of executive accounting? Does Blockchain support the (b) same?

7. Attempt any *one* part of the following:

- Which cryptographic algorithm is used in Blockchain? Explain in detail. (a)
- Mention various limitations of Blockchaining in detail with proper (b) representation.