

## Quiz Assignment-VIII Solutions: Distributed Systems (Week-8)

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Q. 1 Kerberos primarily addresses \_\_\_\_\_ using a \_\_\_\_\_ cryptosystem. Kerberos is an authentication system designed for MIT's Project Athena.

- A. Client–server authentication, asymmetric
- B. Client–server authentication, symmetric
- C. Trusted authentication, asymmetric
- D. Privacy issue, symmetric

**Ans: B) Client–server authentication, symmetric**

Q. 2 The \_\_\_\_\_ allows the server and client to authenticate each other and to negotiate an encryption algorithm and cryptographic keys before the application protocol transmits or receives its first byte of data.

- A. SSL record protocol
- B. SSL TCP segment
- C. SSL handshake protocol
- D. None of these

**Ans: C) SSL handshake protocol**

Q. 3 The computers that process transactions for the bitcoin network are commonly called:

- A. Truckers
- B. Linesman
- C. GPU
- D. Miners

**Ans: D) Miners**

Q. 4 In bitcoin proof-of-work is essentially \_\_\_\_\_

- A. One-IP-address-one-vote
- B. One-CPU-one-vote
- C. One-Disk-one-vote
- D. One-Memory-one-vote

**Ans: B) One-CPU-one-vote**

**Explanation:** Proof-of-work is essentially one-CPU-one-vote. The majority decision is represented by the longest chain, which has the greatest proof-of-work effort invested in it. If a majority of CPU power is controlled by honest nodes, the honest chain will grow the fastest and outpace any competing chains.

Q. 5 What is the name of the general ledger that tracks all bitcoin transactions?

- A. The Gox-Chain
- B. The Block-link
- C. The Block-chain
- D. Ledger-Link

**Ans: C) The Block-chain**

Q. 6 In blockchain technology, \_\_\_\_\_ are basically computer programs that can automatically execute the terms of a contract.

- A. Smart contracts
- B. Smart Property
- C. Public ledger
- D. Smart Consensus

**Ans: A) Smart contracts**

**Explanation:** Smart contracts are basically computer programs that can automatically execute the terms of a contract. When a pre-configured condition in a smart contract among participating entities is met then the parties involved in a contractual agreement can be automatically made payments as per the contract in a transparent manner.

Q. 7 The \_\_\_\_\_ and \_\_\_\_\_ are two important characteristics of blockchain technology.

- A. Checkpoints, Non-anonymity
- B. Consensus, Agreement
- C. Distributed consensus, Anonymity
- D. None of these

**Ans: C) distributed consensus, anonymity**

Q. 8 Consider the following statements:

Statement 1: In one-way authentication, only one principal verifies the identity of the other principal.

Statement 2: In mutual authentication, both communicating principals verify each other's identity.

- A. Both statements are false
- B. Both statements are true
- C. Statement 1 is true and statement 2 is false
- D. Statement 1 is false and statement 2 is true

**Ans: B) Both statements are true**