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

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