MCQ 1

Question: What is the core characteristic of a blockchain that makes it resistant to data manipulation?

A) Decentralization

B) Immutability

C) Transparency

D) Availability

Correct Answer: B

MCQ 2

Question: Which consensus mechanism involves solving complex computational puzzles to validate transactions?

A) Proof of Stake (PoS)

B) Proof of Work (PoW)

C) Proof of Authority (PoA)

D) Practical Byzantine Fault Tolerance (PBFT)

Correct Answer: B

MCQ 3

Question: According to the CAP theorem, which combination of properties is impossible for a distributed system to achieve simultaneously?

A) Consistency, Availability, Partition Tolerance

B) Consistency, Availability, Security

C) Consistency, Security, Partition Tolerance

D) Availability, Security, Partition Tolerance

Correct Answer: A

MCQ 4

Question: Which type of blockchain is best suited for applications requiring high transaction throughput and privacy within a specific organization?

A) Public Blockchain

B) Private Blockchain

C) Consortium Blockchain

D) Hybrid Blockchain

Correct Answer: B

MCQ 5

Question: What does the term "Byzantine node" refer to in a distributed system?

A) A node that consistently follows the protocol.

B) A node that has failed and is no longer participating.

C) A node that exhibits arbitrary or malicious behavior.

D) A node with limited computational power.

Correct Answer: C

MCQ 6

Question: Which component of a blockchain stores a record of an event, such as a transfer of value?

A) Block

B) Address

C) Transaction

D) Ledger

Correct Answer: C

MCQ 7

Question: What is the primary challenge addressed by the Byzantine Generals Problem?

A) Achieving consensus in a distributed system with faulty nodes.

B) Optimizing transaction throughput in a blockchain network.

C) Securing the network against external attacks.

D) Managing the storage capacity of the blockchain.

Correct Answer: A