

# THE CORE-BITCOIN DIPLOMA 2024

## CHAPTER 9 QUIZZES (COHORT 7)

\* Indicates required question

---

1. **What do nodes in the Bitcoin network do? \***

*Mark only one oval.*

- ☐ Print new bitcoins
- ☐ Set Bitcoin's price
- ☐ Validate transactions and keep a copy of the ledger
- ☐ Connect banks to the blockchain

2. **Why is Bitcoin called decentralized? \***

*Mark only one oval.*

- ☐ Because it is regulated by the United Nations
- ☐ Because it runs on a single global server
- ☐ Because it is stored in physical vaults
- ☐ Because no single entity controls the network

3. **Who plays a key role in helping Bitcoin gain adoption? \***

*Mark only one oval.*

- ☐ Central banks
- ☐ International Monetary Fund
- ☐ Retail stores
- ☐ Bitcoin education and community projects

4. **What is a major advantage of using Bitcoin? \***

*Mark only one oval.*

- ☐ It increases reliance on banks
- ☐ It offers free bank accounts
- ☐ It gives users control over their own money
- ☐ It eliminates the need for security

5. **What happens if you lose your Bitcoin private key? \***

*Mark only one oval.*

- ☐ You lose access to your bitcoins permanently
- ☐ You can reset it using your email
- ☐ A support team restores access
- ☐ The Bitcoin system will recover it after 24 hours

6. **What is the primary purpose of a hash in Bitcoin? \***

*Mark only one oval.*

- ☐ To store private keys
- ☐ To verify data integrity
- ☐ To create public addresses
- ☐ To mine Bitcoin blocks

7. **Which two hash functions does Bitcoin commonly use? \***

*Mark only one oval.*

- ☐ MD5 and SHA1
- ☐ HMAC and SHA3
- ☐ SHA-256 and RIPEMD-160
- ☐ AES and Blowfish

8. **What is a UTXO in Bitcoin? \***

*Mark only one oval.*

- ☐ A user identification number
- ☐ An unspent transaction output
- ☐ A digital signature
- ☐ A type of Bitcoin wallet

9. **Why is the output length of a hash function important in Bitcoin? \***

*Mark only one oval.*

- ☐ It helps determine block size
- ☐ It simplifies mining
- ☐ It allows fixed-length outputs regardless of input size
- ☐ It identifies double-spends

10. **What happens to the remaining balance when a UTXO is used in a transaction?** \*

*Mark only one oval.*

- ☐ It is returned as a new "change" UTXO
- ☐ It is burned
- ☐ It is added to miner fees
- ☐ It is split equally among all nodes

11. **How do Bitcoin nodes contribute to the network's decentralization?** \*

*Mark only one oval.*

- ☐ By competing to find new blocks
- ☐ By setting transaction fees
- ☐ By generating new bitcoins through mining
- ☐ By maintaining copies of the blockchain and enforcing rules

12. **What is the mempool in Bitcoin?** \*

*Mark only one oval.*

- ☐ A storage location for lost bitcoins
- ☐ A waiting area for unconfirmed transactions
- ☐ A special mining pool
- ☐ A backup for the blockchain

13. **How often does Bitcoin undergo a halving event? \***

*Mark only one oval.*

- ☐ Every year
- ☐ Every 50,000 blocks
- ☐ Every 100,000 blocks
- ☐ Every 210,000 blocks

14. **What does a Bitcoin node do when it receives a new transaction? \***

*Mark only one oval.*

- ☐ It verifies the transaction and shares it with other nodes
- ☐ It adds it directly to the blockchain
- ☐ It stores it permanently
- ☐ It sends it to miners for approval

15. **What happens when Bitcoin mining difficulty increases? \***

*Mark only one oval.*

- ☐ The Bitcoin supply increases
- ☐ Fewer transactions are processed
- ☐ It becomes harder to find a valid block hash

---

This content is neither created nor endorsed by Google.

Google Forms

