## **Bitcoin Trivia - Answer Sheet**

## **Difficulty: Bitcoiner**

1. What is a UTXO (Unspent Transaction Output)?

Answer: An output that has not yet been spent

2. How does Proof of Work contribute to the security of the Bitcoin blockchain?

Answer: It makes attacks like double-spending expensive

3. What is a private key?

Answer: A unique secret key that signs transactions

4. Which exchange was hacked in 2014 and lost many Bitcoins?

Answer: Mt. Gox

5. What is the purpose of the Lightning Network?

Answer: Faster and cheaper transactions

6. How many blocks are found on average per day in the Bitcoin network?

Answer: 144

7. What happens every 210,000 blocks in the Bitcoin network?

Answer: The block reward is halved (Halving)

8. Who was Hal Finney?

Answer: A developer and one of the first Bitcoin recipients

9. When was the first Bitcoin block (Genesis Block) mined?

Answer: 2009

10. What is a seed phrase (recovery phrase)?

Answer: A backup for a wallet

11. What role do miners play in the Bitcoin network?

Answer: They validate and secure transactions through computational power

12. Which hardware is particularly efficient for Bitcoin mining?

Answer: ASIC

13. How many blocks does a transaction usually need for high security?

Answer: 6

14. What is a transaction that has not yet been included in a block called?

Answer: Unconfirmed

15. What is a 'cold wallet'?

Answer: A wallet kept offline

16. What is the current (as of 2024) reward for miners per block?

Answer: 3.125 BTC

17. What is a Merkle Tree in the Bitcoin blockchain?

Answer: A structure for efficiently storing transactions

18. What is a 'mempool' in the Bitcoin network?

Answer: A storage for unconfirmed transactions

19. What is the purpose of a 'time lock' in Bitcoin transactions?

Answer: Releasing transactions at a later time

20. What is a 'Replace-by-Fee' (RBF)?

Answer: Replacing a transaction with a higher fee

21. What is the purpose of a mining pool?

Answer: Combining computational power to find blocks faster

22. What is a 'fork' in the Bitcoin blockchain?

Answer: A split in the blockchain

23. What is a 'hot wallet'?

Answer: A wallet that is connected online

24. What is the purpose of a 'watch-only wallet'?

Answer: Only displaying transactions without signing them

25. What is the 'block time' in Bitcoin?

Answer: The average time to find a new block

26. What is a 'dust limit' in Bitcoin?

Answer: The smallest spendable amount of a UTXO

27. What is the purpose of the 'difficulty adjustment'?

Answer: Keeping the block time around 10 minutes

28. What is a 'paper wallet'?

Answer: A wallet on paper with keys

29. What is the purpose of a 'block header'?

Answer: Verifying the integrity of a block

30. Which country adopted Bitcoin as legal tender in 2022?

Answer: Central African Republic

31. What is the purpose of a 'hardware wallet'?

Answer: Secure offline storage of private keys

32. What is a 'nonce' in a Bitcoin block?

Answer: A value adjusted during mining to find the hash

33. What is an 'orphan block'?

Answer: A block not included in the main chain

34. What is the goal of Fedimint in the Bitcoin ecosystem?

Answer: Enabling decentralized custody and transactions

## **Difficulty: Curious**

1. What is the maximum supply of Bitcoin?

Answer: 21 Million

2. Who invented Bitcoin?

Answer: Satoshi Nakamoto

3. What is the primary purpose of Proof of Work in Bitcoin?

Answer: Validating transactions through computational power

4. What is a Bitcoin address?

Answer: A unique string for transaction assignment

5. What does 'HODL' mean in the Bitcoin community?

Answer: Hold On for Dear Life

6. What is a blockchain?

Answer: A linked list of blocks containing transactions

7. Which consensus protocol does Bitcoin use for mining?

Answer: Proof of Work

8. Which country adopted Bitcoin as legal tender in 2021?

Answer: El Salvador

9. Which symbol is used for Bitcoin?

Answer: ■

10. What is a wallet in the Bitcoin context?

Answer: Software or hardware for managing Bitcoin keys

11. Which year marked the start of the Bitcoin network?

Answer: 2009

12. Why is Bitcoin decentralized?

Answer: It is operated by many nodes worldwide

13. Which African country has high Bitcoin adoption through peer-to-peer trading?

Answer: Nigeria

14. What does a 'Halving' describe in Bitcoin?

Answer: The number of new Bitcoins per block is halved

15. What is a Satoshi?

Answer: The smallest unit of Bitcoin

16. Which characteristic is NOT typical for Bitcoin?

Answer: Inflationary

17. How often is a new Bitcoin block found on average?

Answer: Every 10 minutes

18. What is the purpose of the Bitcoin whitepaper?

Answer: A technical description of Bitcoin

19. Which company officially accepted Bitcoin as a payment method in 2014?

Answer: Microsoft

20. What is a Bitcoin exchange?

Answer: A platform for buying and selling Bitcoin

21. What is a peer-to-peer network in Bitcoin?

Answer: A network without central authority

22. What type of currency is Bitcoin?

Answer: Cryptocurrency

23. What is a transaction fee in Bitcoin?

Answer: An amount miners receive for processing

24. What is the main difference between Bitcoin and traditional money?

Answer: Bitcoin is digital and decentralized

25. What does 'To the Moon' mean in the Bitcoin community?

Answer: An expression for rising prices

26. What is a block in the context of Bitcoin?

Answer: A record of transactions

27. Who published the Bitcoin whitepaper?

Answer: Satoshi Nakamoto

28. What is the purpose of a public key?

Answer: Receiving Bitcoin

29. What does 'permissionless' mean in Bitcoin?

Answer: Anyone can participate without permission

30. What is the goal of mining in the Bitcoin network?

Answer: Validating transactions and finding new blocks

31. How many Satoshis correspond to 1 Bitcoin?

Answer: 100 Million

32. Which function does Bitcoin NOT directly fulfill?

Answer: Smart contracts

33. How many decimal places does 1 Bitcoin have?

Answer: 8

34. What is the goal of the Bitcoin community's 'Laser Eyes'?

Answer: A meme for rising prices

## Difficulty: Satoshi

1. What does SHA-256 stand for?

Answer: Secure Hash Algorithm

2. What is a 51% attack?

Answer: When a miner controls over 51% of the hash rate

3. Why is Proof of Work energy-intensive?

Answer: It requires complex hash calculations

4. What is the Taproot upgrade?

Answer: An update to improve privacy and scalability

5. What message does the Genesis Block contain?

Answer: The Times 03/Jan/2009 Chancellor on brink of second bailout for banks

6. What is the function of difficulty in the Bitcoin network?

Answer: It adjusts the mining difficulty

7. What is a soft fork?

Answer: A backward-compatible protocol change

8. Which programming language was primarily used for Bitcoin Core?

Answer: C++

9. What is a hard fork?

Answer: A network upgrade that breaks consensus

10. Which of these platforms is NOT a Layer-2 network?

Answer: Taproot

11. What happens if a miner publishes an invalid block?

Answer: The block is rejected by the network

12. What block size was specified in the Bitcoin whitepaper?

Answer: 1 MB

13. What is a multisig wallet?

Answer: A wallet requiring multiple signatures for transactions

14. How is the difficulty adjusted in Bitcoin mining?

Answer: Automatically every 2016 blocks

15. Which algorithm is used for Bitcoin mining?

Answer: SHA-256

16. What is a 'ScriptSig' in a Bitcoin transaction?

Answer: A script to unlock a UTXO

17. What is the purpose of a 'locktime' in Bitcoin?

Answer: Releasing transactions at a specific time

18. What is an 'SPV Wallet' (Simplified Payment Verification)?

Answer: A wallet that only verifies block headers

19. What is the purpose of a 'CheckSequenceVerify' (CSV)?

Answer: Setting relative time delays for transactions

20. What is a 'sidechain' in the Bitcoin context?

Answer: An alternative blockchain linked to Bitcoin

21. What is the purpose of a 'Bloom Filter' in Bitcoin?

Answer: Improving privacy for SPV wallets

22. What is a 'CoinJoin'?

Answer: A method to increase privacy by mixing transactions

23. What is a 'Tapscript' in the Taproot upgrade?

Answer: A scripting language for more complex transactions

24. What is the purpose of a 'Hash Time Locked Contract' (HTLC)?

Answer: Enabling time-bound payments in the Lightning Network

25. What is a 'Schnorr Signature' scheme?

Answer: A more efficient signature method in the Taproot upgrade

26. What is the purpose of a 'Difficulty Target' in Bitcoin?

Answer: Setting the difficulty level for mining a block

27. What is a 'Chain Reorganization' in Bitcoin?

Answer: When a longer blockchain replaces a shorter one

28. What is the purpose of an 'OP\_RETURN' in Bitcoin?

Answer: Inserting small amounts of data into the blockchain

29. What is a 'Statechain' in the Bitcoin context?

Answer: A method for off-chain UTXO transfers

30. What is the purpose of a 'Child Pays for Parent' (CPFP)?

Answer: Speeding up an unconfirmed transaction with a higher fee

31. What is a 'Confidential Transaction' in the Bitcoin context?

Answer: A transaction with hidden amounts

32. What is the purpose of a 'Block Subsidy'?

Answer: The reward for miners for finding a block

33. What is a 'Pruned Node' in the Bitcoin network?

Answer: A node with reduced historical data

34. What is the purpose of a 'CheckLockTimeVerify' (CLTV)?

Answer: Setting absolute time delays for transactions

35. What is Ark in the Bitcoin ecosystem?

Answer: A scaling solution for trust-minimized transactions