

Cosmic Ledger: Cryptocurrencies and Space Exploration

Cryptocurrency · Answer Key · 10 Questions

1. Which space-based initiative, aimed at utilizing the ISS for node operation, was the first to facilitate a successful cryptocurrency transaction in orbit?

A) SpaceChain

- B) Bitcoin in Orbit
- C) Celestial Ledger
- D) Orbital Hash

2. The 2021 'Doge-1' mission to the Moon, funded entirely by Dogecoin, was commissioned through which private aerospace manufacturer?

A) Blue Origin

B) SpaceX

- C) Rocket Lab
- D) Virgin Galactic

3. In 2023, what specific space-faring entity utilized a private blockchain to secure satellite-to-ground telemetry data?

A) NASA's Deep Space Network

B) European Space Agency

- C) ISRO
- D) JAXA

4. The concept of 'Proof of Space' (PoSpace) consensus mechanisms, often used by the Chia Network, relies on allocating what specific physical resource?

A) Disk storage space

- B) Satellite bandwidth
- C) Orbital decay constants
- D) Solar radiation levels

5. Which cryptocurrency exchange launched a 'Bitcoin' payload to the Moon's surface using the Astrobotic Peregrine lander in 2024?

A) Coinbase

B) Binance

C) BitMEX

D) Kraken

6. The term 'Space-Time Tradeoff' in cryptographic mining refers to the optimization between what two computational factors?

A) Memory and processing time

- B) Satellite signal latency and node uptime
- C) Orbital velocity and hashing rate
- D) Cold storage and transmission speed

7. Which layer-2 scaling solution for Ethereum has been proposed for use in 'Interplanetary File Systems' (IPFS) to manage decentralized cosmic data?

A) Polygon

- B) Optimism
- C) Arbitrum
- D) Loopring

8. What is the primary technical limitation for running a Bitcoin full node on the International Space Station compared to Earth-based nodes?

A) Radiation-induced bit flips

- B) Orbital gravity variations
- C) Thermal vacuum degradation
- D) Signal propagation delay

9. In 2022, a project known as 'CryptoSat' deployed a nanosatellite to provide what specific cryptographic service from low earth orbit?

A) Trustless random number generation

- B) High-speed ledger synchronization
- C) Satellite-based cold wallet storage
- D) Quantum key distribution

10. Which blockchain protocol was utilized in the 'SpaceMesh' project, which incentivizes storage-based consensus via a protocol called 'Proof of Space-Time'?

A) Spacemesh Protocol

- B) Filecoin
- C) Solana
- D) Cardano