What is Blockchain?

- Blockchain is a decentralized digital ledger of transactions that ensures transparency and security.

Name one core feature of Blockchain.

- Immutability, meaning once data is added, it cannot be changed.

What does 'decentralized' mean in the context of Blockchain?

- It means no single entity controls the network; it's distributed across multiple nodes.

What is MetaMask?

- MetaMask is a browser extension that allows users to store and manage Ethereum and ERC-20 tokens.

Explain Peer-to-Peer networking in Blockchain.

- It enables direct transactions between parties without a central authority.

What is Ether in Blockchain terms?

- Ether is the native cryptocurrency of the Ethereum blockchain, used for transactions and fees.

What is a Cryptocurrency?

- A digital or virtual currency that uses cryptography for secure transactions.

What is Bitcoin?

- Bitcoin is the first and most well-known cryptocurrency, launched in 2009.

How is Ethereum different from Bitcoin?

- Ethereum enables smart contracts and decentralized applications, whereas Bitcoin is primarily a digital currency.

What are 'hot' and 'cold' wallets?

- Hot wallets are online and easily accessible, while cold wallets are offline, providing greater security.

What does 'immutable' mean in Blockchain?

- Data once recorded in a blockchain cannot be altered, ensuring reliability.

Explain what double spending is.

- Double spending is the risk of a digital currency being spent more than once.

What is a Merkle Tree?

- A data structure used to organize and verify large sets of data in a blockchain.

How does MetaMask interact with the blockchain?

- MetaMask connects the user's browser to the Ethereum blockchain, allowing interactions with dApps.

What is a smart contract?

- Self-executing code on the blockchain that runs when specific conditions are met.

How does MetaMask enhance security in transactions?

- By storing private keys locally and encrypting them, it limits access to the user only.

What are gas fees in Ethereum?

- Fees users pay to process transactions on the Ethereum network, measured in Gwei.

Why is Blockchain considered tamper-proof?

- The decentralized structure and cryptographic security make it highly resistant to alterations.

Explain the concept of mining in cryptocurrency.

- Mining involves solving complex mathematical problems to validate and add transactions to the blockchain.

What is an ERC-20 token?

- A standard protocol for creating tokens on the Ethereum blockchain.

How does MetaMask manage private keys?

- MetaMask encrypts and stores private keys locally on the user's device.

What is cryptojacking?

- Unauthorized use of someone's device to mine cryptocurrency.

Describe a use case of Blockchain technology.

- In supply chain management, Blockchain can provide transparency and traceability.

How do you add MetaMask as a browser extension?

- Download it from your browser's web store and follow installation steps.

What are altcoins?

- Cryptocurrencies other than Bitcoin, often created to improve upon Bitcoin's limitations.