

Exam : HFCP

**Title : Hyperledger Fabric Certified
Practitioner (HFCP) Exam**

Version : DEMO

1. An enterprise blockchain is a permission blockchain node distributed to whom?

- A. Administration data center
- B. Nodes distributed with a validator
- C. Member organizations
- D. Nodes distributed on a public Blockchain

Answer: C

Explanation:

In Hyperledger Fabric, the enterprise blockchain is a permissioned network where nodes are distributed among the member organizations that participate in the blockchain network. This is in contrast to a public blockchain where anyone can participate anonymously. In a permissioned blockchain like Hyperledger Fabric, the participants are known entities within a business network, such as enterprises or organizations, that have specific permissions and roles within the network. This setup enhances security and trust as each participant is vetted and authorized to take part in the network operations. The architecture of Hyperledger Fabric is designed to support such a governance model, where multiple organizations can interact in a secure and regulated environment, maintaining their own ledgers but sharing data that require consensus across known entities.

2. An endorsement policy lists what?

- A. The number of organizations involved in a transaction.
- B. The number of peers needed to endorse a transaction.
- C. The order in which transactions are executed.
- D. The identities required for endorsing a transaction.

Answer: D

Explanation:

In Hyperledger Fabric, an endorsement policy specifies which network participants, identified by their digital identities, must endorse a transaction before it can be considered valid. This is crucial for the network's security and integrity, as it controls how transactions are approved and added to the ledger. Endorsement policies are part of the channel configuration and can be customized to fit the specific needs of a business network. They dictate the necessary endorsements from specific organizations or even particular roles within those organizations, ensuring that only authorized entities can validate transactions. This mechanism supports the collaborative yet secure nature of the enterprise blockchain, where trust is decentralized across different organizations that are part of the network.

3. A smart contract can call other smart contracts both within the same channel and across different channels.

Which of the following transactions is inter-contract communication whose functionality is limited?

- A. Chaincode X calls Getstate in Chaincode Y on the same channel.
- B. Chaincode X calls Putstate in Chaincode Y on the same channel.
- C. Chaincode X calls Getstate in Chaincode Y on a different channel.
- D. Chaincode X calls Putstate in Chaincode Y on a different channel.

Answer: D

Explanation:

In Hyperledger Fabric, inter-contract communication is possible both within the same channel and across different channels. However, the functionality to alter the state (using PutState) of a chaincode on a

different channel is restricted. This limitation is due to the security and isolation principles of channels in Hyperledger Fabric, where each channel represents a separate ledger and state. Transactions within a channel can read and write data freely, subject to endorsement policies, but writing data to another channel's chaincode directly is not permitted. This prevents unauthorized influence on a separate and potentially isolated business process, ensuring that operations within a channel are controlled and secure.

4. When building a test network, how many nodes are adequate for an Ordering Service?

- A. There is no set number of nodes required for an Ordering Service.
- B. Three ordering nodes are needed for a test Ordering Service.
- C. One ordering node is sufficient for an Ordering Service.
- D. Ordering Service nodes are optional in a test network.

Answer: C

Explanation:

For a test network in Hyperledger Fabric, one ordering node is sufficient to form an Ordering Service⁷. The test network typically uses a single-node Raft ordering service for simplicity and educational purposes. However, for production networks, a multi-node ordering service is recommended for fault tolerance and high availability⁸.

5. Regarding peer lifecycle chaincode, which of the following is the incorrect (unsupported) subcommand for query?

- A. peer lifecycle chaincode querypackaged
- B. peer lifecycle chaincode querycommitted
- C. peer lifecycle chaincode queryapproved
- D. peer lifecycle chaincode queryinstalled

Answer: A

Explanation:

The correct subcommands for querying in the peer lifecycle chaincode are queryinstalled, queryapproved, checkcommitreadiness, commit, and querycommitted¹. The subcommand querypackaged is not a supported subcommand for querying in the peer lifecycle chaincode.