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CBSA

BTA Certified Blockchain Solution Architect



Exam A

QUESTION 1 SHA-1 is the most commonly used SHA algorithm, and produces a _____-byte hash value(size).

- A. 256
- B. 128
- C. 32
- D. 20

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Explanation:

SHA-1 is the most commonly used SHA algorithm, and produces a 20-byte hash value.

Reference: <https://www.securityinnovationeurope.com/blog/page/whats-the-difference-between-hashing-and-encrypting>

QUESTION 2

What type of attack would be considered a very large flaw in public blockchains such as Bitcoin's Blockchain where the majority of hashpower could possibly be controlled thru an attack?

What is the specific attack Bitcoin could be exposed to?

- A. 51% Attacks
- B. Tether Token Hack
- C. DDoS Attack
- D. BIP attack
- E. Parity Wallet Attack



Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://blockgeeks.com/guides/hypothetical-attacks-on-cryptocurrencies/>

QUESTION 3 How many satoshis are in 1 bitcoin and how many wei in an Ether? (Select two.)

- A. 1,000,000,000,000,000,000
- B. 1,000,000,000,000,000
- C. 1,000,000,000
- D. 10,000
- E. 1,000,000,000,000

Correct Answer: AB

Section: (none)

Explanation

Explanation/Reference:

Reference: <http://www.btcsatoshi.com/>
<http://ethdocs.org/en/latest/ether.html>

QUESTION 4

In the Proof of Stake(POS) algorithm the miners are really known as _____?

- A. Notary
- B. Oracle
- C. Forgers
- D. Minters

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Proof of Stake has the same goal as proof of work—to validate transactions and achieve consensus in the chain—and it uses an algorithm but with a different process. With proof of stake, the creator of a new block “is chosen in a deterministic way, depending on its wealth, also defined as a stake.” Since in a proof of stake system, there is no block reward, but the miners, known as forgers, get the transaction fees. Proponents of this shift, including Ethereum cofounder Buterin, like proof of stake for the energy and cost savings realized to get to a distributed form of consensus.

Reference: <http://www.hl.co.uk/news/2018/2/16/a-brief-history-of-blockchain-technology-everyone-should-read>

QUESTION 5

A Byzantine failure is the loss of a system service due to a Byzantine fault in systems that requires_____.

What is required?

- A. Consensus
- B. Cryptography
- C. Bandwidth
- D. Availability

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

A Byzantine failure is the loss of a system service due to a Byzantine fault in systems that require consensus. Reference:

https://en.wikipedia.org/wiki/Byzantine_fault_tolerance

QUESTION 6 A _____ cipher basically means it is using a fixed key which replaces the message with a pseudorandom string of characters. It is basically the encryption of each letter one at a time.

What is the cipher type?

- A. Stream
- B. Block
- C. Parallel
- D. RSA

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Stream cipher basically means using a fixed key which replaces the message with a pseudorandom string of characters. It is basically the encryption of each letter one at a time.

Reference: <https://blockgeeks.com/guides/cryptocurrencies-cryptography/>

QUESTION 7

You currently using the Metamask Chrome plugin and you see a selection for Etherscan in the plugin.

What is Etherscan used for?

- A. A search engine that allows users to easily lookup, confirm and validate transaction that have taken place on the Ethereum Blockchain
- B. A search engine that allows users to easily lookup, confirm and validate transaction that have taken place on the Bitcoin Blockchain
- C. A search engine that allows users to easily lookup, confirm and validate transaction that have taken place on the Ethereum and Tokens Blockchain
- D. A search engine that allows users to easily lookup, confirm and validate transaction that have taken place on any Blockchain

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

A search engine that allows users to easily lookup, confirm and validate transactions that have taken place on the Ethereum Blockchain

Reference: <https://etherscancom.freshdesk.com/support/solutions/articles/35000022140-what-is-etherscan->

QUESTION 8 What are two challenges with using a Proof of Work algorithm? (Select two.)

- A. Mining pools not allowed
- B. Difficulty rate goes down every year.
- C. Expensive
- D. Power Intensive

Correct Answer: CD

Section: (none)

Explanation



Explanation/Reference:

Reference: <http://www.hl.co.uk/news/2018/2/16/a-brief-history-of-blockchain-technology-everyone-should-read>

QUESTION 9

Your customer is an enterprise that is focused on financial sectors. What type of blockchain would this customer likely want specified for their enterprise?

- A. Permissionless
- B. Decentralized
- C. Hybrid
- D. Permissioned

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Sometimes referred to as “private” blockchains, you are required to have some sort of permission to access any or parts of that blockchain. There are a multitude of variants and hybrid permissioned/permissionless blockchains that exist.

Reference: <https://medium.com/@dustindreifuerst/permissioned-vs-permissionless-blockchains-acb8661ee095>

QUESTION 10

Which is the following is the metaphor that describes a logical dilemma that plagues many computer networks?

- A. Neo Generals' problem
- B. Byzantine Generals' problem
- C. Byzantine Admirals' problem

D. Renaissance Generals' problem

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

BFT is so-named because it represents a solution to the "Byzantine generals' problem," a logical dilemma that researchers Leslie Lamport, Robert Shostak and Marshall Pease described in an academic paper published in 1982

Reference: <https://www.nasdaq.com/article/byzantine-fault-tolerance-the-key-for-blockchains-cm810058>

QUESTION 11 The key difference between encryption and hashing is that encrypted strings can be reversed back into their original decrypted form if you have the right key?

- A. TRUE
- B. FALSE

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://www.securityinnovationeurope.com/blog/page/whats-the-difference-between-hashing-and-encrypting>

QUESTION 12 What is a logic gate in electronics and computer science?

- A. A logic gate usually takes in 2 inputs and gives out 1 output. The inputs and outputs are binary values, meaning they can be both 1 and 0.
- B. A logic gate usually takes in 3 inputs and gives out 2 output. The inputs and outputs are binary values, meaning they can be 1 or 0.
- C. A logic gate usually takes in 2 inputs and gives out 6 output. The inputs and outputs are binary values, meaning they can be both 1 and 0.
- D. A logic gate usually takes in 2 inputs and gives out 1 output. The inputs and outputs are binary values, meaning they can be 1 or 0.

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Explanation:

A logic gate usually takes in 2 inputs and gives out 1 output. The inputs and outputs are binary values, meaning they can be 1 or 0. A XOR logic gate takes in 2 binary inputs and gives out a high output ONLY when the inputs are different.

Meaning, if A and B are inputted to a XOR gate then the out C will be 1 ONLY when A is not equal to B. Reference: <https://blockgeeks.com/guides/cryptocurrencies-cryptography/>

QUESTION 13 Ethereum is considered to be a _____type of blockchain.

- A. Permissionless
- B. Permission Based
- C. Hybrid
- D. Private

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Permissionless - anyone can join Anyone can run a node, run mining software/hardware, access a wallet and write data onto and transact within the blockchain (as long as they follow the rules of the bitcoin blockchain). There is no way to censor anyone, ever, on the permissionless bitcoin blockchain.

Reference: <https://medium.com/@dustindreifuerst/permissioned-vs-permissionless-blockchains-acb8661ee095>

QUESTION 14

Your company working for is now considering the blockchain. They would like to perform a POC with R3 Corda. The CIO was reading about different blockchain consensus algos and would like to understand what type of consensus algos is used with Corda.

What is the best answer?

- A. R3 Corda is a pluggable blockchain and allows the enterprise flexibility
- B. R3 Corda is a byzantine fault tolerant blockchain
- C. R3 Corda is a proof of stake based blockchain
- D. R3 Corda is a proof of work based blockchain

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Corda does not share the same requirements as Bitcoin: we require absolute certainty over transaction finality and we need to know who our counterparts are. So we had the freedom – and took this opportunity – to solve the consensus problem in a different way. In particular, Corda solves the privacy issue in a number of manners, primarily by allowing for separation of consensus into a service which we call the Notary Cluster. Corda was designed for business from the start. It has no cryptocurrency built into the platform and does not require mining-style consensus, which imposes great cost with little business benefit.

QUESTION 15

Secure Hash Algorithm (SHA-256) output is always 256 bits or 32 bytes in length regardless of the length of the input (even if input is millions of bytes). Select best answer.

- A. NSA is spying on us so what's it matters.
- B. Depends on input
- C. False
- D. True



Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Explanation:

SHA stands for Secure Hash Algorithm. This is used to prove data integrity. The same input(s) will always produce the exact same output. This output is always 256 bits or 32 bytes in length regardless of the length of the input (even if input is millions of bytes).

Reference: <https://medium.com/all-things-ledger/bitcoins-implementation-of-blockchain-2be713f662c2>

QUESTION 16 In the Ethereum EVM there are two types of memory areas. (Select two.)

- A. Storage
- B. Database
- C. Memory
- D. Persistent
- E. Ephemeral

Correct Answer: AC

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://solidity.readthedocs.io/en/latest/introduction-to-smart-contracts.html#the-ethereum-virtual-machine>

QUESTION 17

What are some advantages of Proof of Stake(POS) mining over Proof of Work(POW) mining? (Select three.)

- A. Energy efficient in regards to that it could consume for electricity as compared to PoW
- B. Faster Hashing algorithms
- C. No need for expensive compared to POW
- D. Faster validations compared to POW
- E. Better blockchain security compared to POW

Correct Answer: ACD

Section: (none)

Explanation

Explanation/Reference:

Explanation:

This eliminates the below challenges from PoW and believed to have an advantage.

No need of expensive hardware (a normal laptop or computer running the respective coin's Validator client will do as long as your laptop or computer is online)

Energy efficient as it won't consume high electricity as PoW does More loyal Validators As higher the stake the Validators have for a long time, more chances for the Validator to be picked up for "forging" and earn the transaction fee Faster validations

Reference: <https://medium.com/@karthik.seshu/cryptocurrency-proof-of-work-vs-proof-of-stake-e1eee1420b10>

QUESTION 18 Application Specific Integrated Circuit (ASIC) are used always in enterprise blockchains.

- A. TRUE
- B. FALSE

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

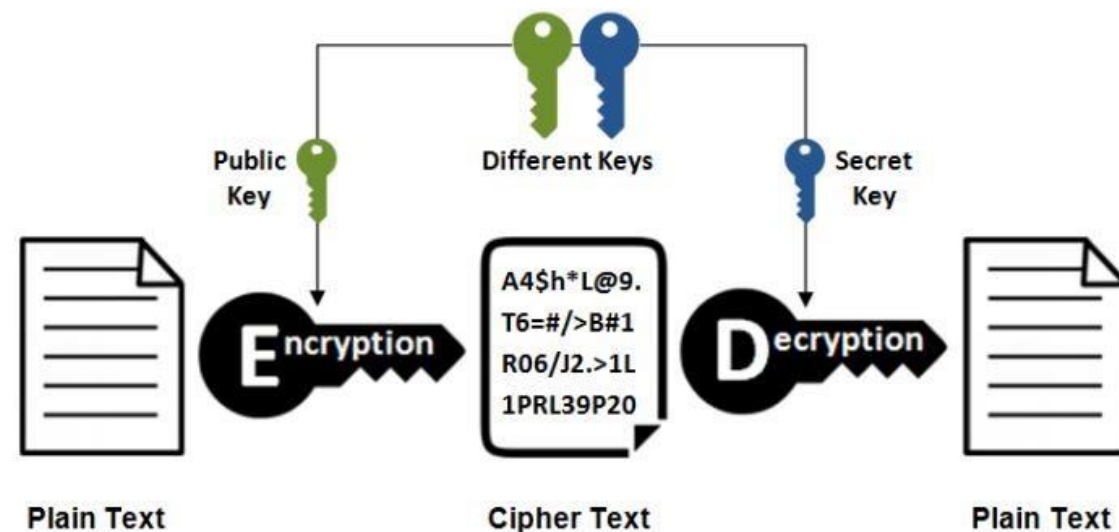
Explanation:

ASICS are generally used in blockchains such as BTC that have a Proof of Work consensus due to competition Reference:

<https://www.trymining.com/pages/asic-vs-gpu>

QUESTION 19

What type of encryption is shown below and is commonly used in blockchain cryptography?



- A. Diffie-Hellman
- B. Asymmetric Encryption
- C. Synchronous
- D. Asynchronous
- E. Symmetric Encryption

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Asymmetric cryptography utilizes two different keys, a public key and a private to encrypt and decrypt a particular data. The use of one key cancels out the use of the other. Reference:

<https://blockgeeks.com/guides/cryptocurrencies-cryptography/>

QUESTION 20 An encryption algorithm transforms plain text into cipher text using a key?

- A. TRUE
- B. FALSE

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Reference: http://www.infosectoday.com/Articles/Intro_to_Cryptography/Introduction_Encryption_Algorithms.htm

QUESTION 21 The gas price is a value set by the creator of the blockchain transaction? Select best answer.

- A. FALSE
- B. Its Negotiable
- C. TRUE

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation:

The gas price is a value set by the creator of the transaction, who has to pay gas_price * gas up front from the sending account. If some gas is left after the execution, it is refunded in the same way. If the gas is used up at any point (i.e. it is negative), an out-of-gas exception is triggered, which reverts all modifications made to the state in the current call frame.

Reference: <https://solidity.readthedocs.io/en/latest/introduction-to-smart-contracts.html#the-ethereum-virtual-machine>

QUESTION 22

R3 Corda does not organize time into blocks. What does Corda actually perform and use?



- A. Ripple is implemented as the blockchain and XRP for cryptocurrency.
- B. Notary services and timesmapping
- C. R3 Corda is a blockchain and does use blocks
- D. Notary services and timestamping

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Review Technical Whitepaper <https://www.corda.net/> Corda network has one or more notary services which provide transaction ordering and timestamping services, thus abstracting the role miners play in other systems into a pluggable component.

QUESTION 23 Contracts live on the blockchain in an Ethereum-specific binary format called _____?

- A. EOS
- B. EVM Code
- C. Ether
- D. Gas
- E. EVM Bytecode

Correct Answer: E

Section: (none)

Explanation

Explanation/Reference:

Explanation:

The Ethereum Virtual Machine (EVM) is the runtime environment for smart contracts in Ethereum. It is not only sandboxed, but actually completely isolated, which means that code running inside the EVM has no access to network, filesystem, or other processes. Smart contracts even have limited access to other smart contracts.

Reference: <http://ethdocs.org/en/latest/contracts-and-transactions/developer-tools.html#the-evm>

QUESTION 24 Bitcoin uses what proof of work consensus system?

- A. Cubehash512
- B. Scrypt-Jane

- C. Whirlpool
- D. Script-n
- E. Hashcash

Correct Answer: E

Section: (none)

Explanation

Explanation/Reference:

Explanation:
Bitcoin uses the Hashcash proof of work system.

Reference: <https://en.bitcoin.it/wiki/Hashcash>

QUESTION 25

An _____ is a well-known service that signs transactions if they state a fact and that fact is considered to be true. They may optionally also provide the facts.

- A. notary
- B. oracle
- C. node
- D. endpoint

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:
An oracle is a well known service that signs transactions if they state a fact and that fact is considered to be true. They may also optionally provide the facts r 3 Corda Technical Whitepaper.

QUESTION 26 Select the two kinds of accounts in Ethereum which share the same address space. (Select two.)

- A. Gas Account
- B. Contract Accounts
- C. External Accounts
- D. Internal Accounts
- E. dApp Accounts

Correct Answer: BC

Section: (none)

Explanation

Explanation/Reference:

QUESTION 27 The most popular Ethereum development framework is currently Truffle.

What are three features of Truffle? (Select three.)

- A. Scriptable deployment & migrations framework.
- B. Automated contract testing with Mocha and Chai.
- C. Takes Dapp transactions via Ws-rpc, json-rpc, ipc-rpc.
- D. Built-in smart contract compilation, linking, deployment and binary management.
- E. Automated contract testing with Mocha only

Correct Answer: ABD

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Truffle is a development environment, testing framework and asset pipeline for Ethereum, aiming to make life as an Ethereum developer easier. Reference:

<https://github.com/trufflesuite/truffle>

QUESTION 28

You are considering writing smart contracts and there are a few different languages you can consider. (Select two.)

- A. Truffle
- B. Serpent
- C. Solidity
- D. Embark

Correct Answer: BC

Section: (none)

Explanation

Explanation/Reference:

Explanation:

To write smart contracts there are a few different languages: Solidity, which is like JavaScript and has .sol as a file extension, Serpent, Python-like with extension .se, and a 3rd, LLL, based on Lisp. Serpent was popular a while back but Solidity is the most popular right now and more robust, so just use Solidity. You prefer Python? Use Solidity.

Reference: <https://medium.com/@ConsenSys/a-101-noob-intro-to-programming-smart-contracts-on-ethereum-695d15c1dab4>

QUESTION 29 Satoshi Nakamoto invented a way to achieve
Decentralized Consensus?

- A. TRUE
- B. FALSE

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://www.interlogica.it/en/insight-en/nakamoto-consensus/>

QUESTION 30 Which of the following would NOT be true about what a smart contract gives
your organization?

- A. Accuracy
- B. Savings
- C. Autonomy
- D. Trust
- E. Legal Assurance

Correct Answer: E

Section: (none)

Explanation

Explanation/Reference:

Explanation:

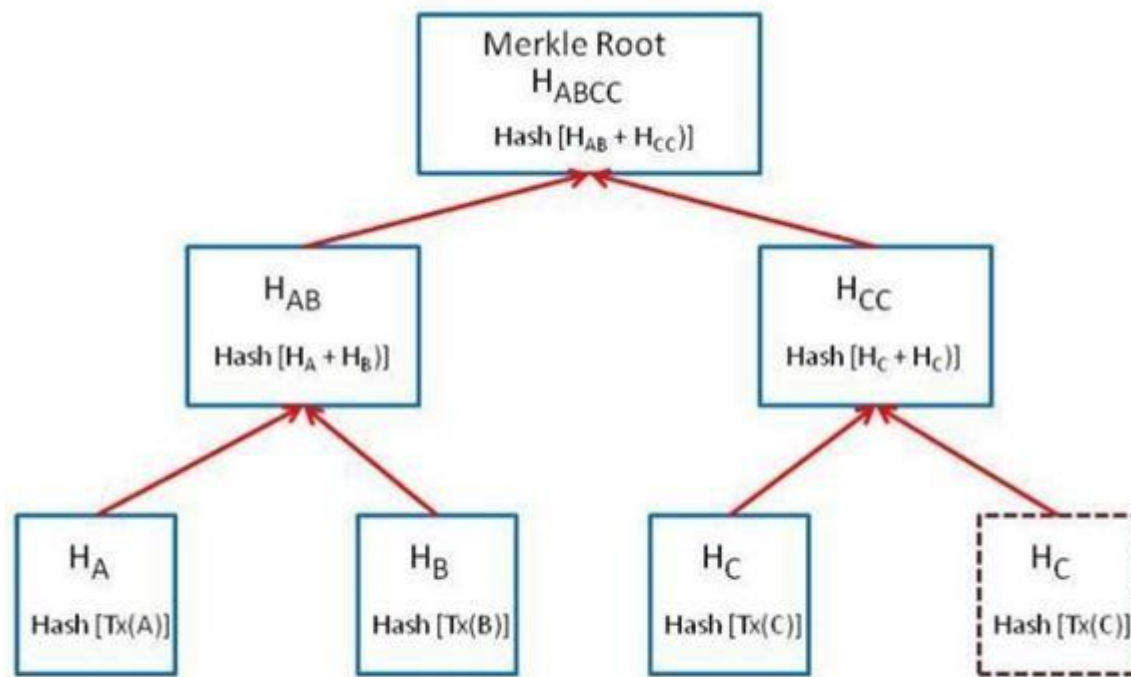
Smart contracts generally are not legal contracts. However, its possible that a smart contract could be accepted as a legal contract but not normally. Read more about Smart contracts here Reference:

<https://blockgeeks.com/guides/smart-contracts/>



QUESTION 31

The _____ of the tree is the topmost node and hence this tree is represented upside down. The bottommost nodes are called as _____ nodes. Each node is simply a cryptographic hash of a transaction.



Sample Merkle Tree of just 4 transactions

In the above diagram, Transaction A,B, C,C from the leaves of the tree. Select one.

- A. Root, Hash
- B. Root, Leaf Nodes
- C. Has, Root nodes
- D. Leaf nodes, Root
- E. Leaf Nodes, Root



Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

The root of the tree is the topmost node and hence this tree is represented upside down. The bottommost nodes are called as leaf nodes. Each node is simply a cryptographic hash of a transaction. In the above diagram, Transaction A,B,C,C form the leaves of the tree.

Reference: <https://medium.com/all-things-ledger/bitcoins-implementation-of-blockchain-2be713f662c2>

QUESTION 32

Which of the following blockchain is NOT a permissioned blockchain?

- A. Quantum
- B. Ethereum
- C. R3 Corda
- D. Ripple
- E. Hyperledger

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 33 What blockchain is considered Blockchain 1.0, the first blockchain?

- A. Bitcoin Cash
- B. Ethereum
- C. Litecoin
- D. Bitcoin
- E. NEO

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Blockchain 1.0, Grandpa Bitcoin

Reference: <https://hackernoon.com/a-brief-history-in-the-evolution-of-blockchain-technology-platforms-1bb2bad8960a>

QUESTION 34 In the EVM every account has a persistent key-value store mapping 256-bit words to 256-bit words called _____

- A. Gas
- B. Space
- C. Storage
- D. Datastore
- E. Database



Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Every account has a persistent key-value store mapping 256-bit words to 256-bit words called storage.

Reference: <https://solidity.readthedocs.io/en/latest/introduction-to-smart-contracts.html#the-ethereum-virtual-machine>

QUESTION 35

_____ is the official Ethereum IDE that allows developers to build and deploy contracts and decentralized applications on top of the Ethereum blockchain.

- A. Mist
- B. Mix
- C. Truffle
- D. Metamask
- E. Embark

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Mix is the official Ethereum IDE that allows developers to build and deploy contracts and decentralized applications on top of the Ethereum blockchain

QUESTION 36 What is the language that Solidity is using to build on the Ethereum Virtual Machines(EVM)?

- A. .Net
- B. Javascript
- C. C++
- D. Node.js
- E. PHP

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Javascript is the language that Solidity is using to build on the Ethereum Virtual Machine

Reference: <https://www.quora.com/What-is-the-best-programming-language-to-learn-if-you-want-to-work-on-the-blockchain>

QUESTION 37 Regarding Ethereum contracts, the contracts can call (perform) two specific message calls. The message calls are either _____ or _____? (Select two.)

- A. Bitcoin nodes
- B. Send Ether to non-contract
- C. DApps
- D. Other contracts
- E. Ether Nodes



Correct Answer: BD

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Contracts can call other contracts or send Ether to non-contract accounts by the means of message calls. Message calls are similar to transactions, in that they have a source, a target, data payload, Ether, gas and return data. In fact, every transaction consists of a top-level message call which in turn can create further message calls.

QUESTION 38 Which of the following hashing algos is considered to be the strongest?

- A. RSA
- B. SHA-2
- C. AES
- D. MD-5
- E. SHA

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

SHA-2 consists of a set of 6 hashing algorithms, and is considered the strongest. SHA-256 or above is recommended for situations where security is vital. SHA-256 produces 32-byte hash values.

Reference: <https://www.securityinnovationeurope.com/blog/page/whats-the-difference-between-hashing-and-encrypting>

QUESTION 39

When you considering cryptography for a blockchain what would be types of symmetric cryptography you could consider? (Select two.)

- A. Block Ciphers
- B. Rivest-Shamir-Adleman algorithm aka the RSA.
- C. Stream Ciphers
- D. Elliptical Curve Cryptography

Correct Answer: AC

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://blockgeeks.com/guides/cryptocurrencies-cryptography/>

QUESTION 40 The _____ is the runtime environment for smart contracts in Ethereum?

- A. Metamask
- B. Ether
- C. Mist
- D. EVM

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Explanation:

EVM The Ethereum Virtual Machine (EVM) is the runtime environment for smart contracts in Ethereum. It is not only sandboxed, but actually completely isolated, which means that code running inside the EVM has no access to network, filesystem, or other processes. Smart contracts even have limited access to other smart contracts.

Reference: <http://ethdocs.org/en/latest/contracts-and-transactions/developer-tools.html#the-evm>

QUESTION 41

Blockchains are decentralized ledgers which, by definition, are not controlled by a central authority. Due to the value stored in these ledgers, bad actors have huge economic incentives to try and cause faults.

What algo was the original solution to the potential problem as specified by Satoshi?

- A. Proof of Stake
- B. Byzantine Fault Tolerance
- C. Proof of Burn
- D. Proof of Work
- E. Dynamic Proof of Stake

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Explanation:

The big breakthrough when Bitcoin was invented, was the use of Proof-of-Work as a probabilistic solution to the Byzantine Generals Problem as described in depth by Satoshi Nakamoto.

Reference: <https://medium.com/loom-network/understanding-blockchain-fundamentals-part-1-byzantine-fault-tolerance-245f46fe8419>

QUESTION 42 What are some likely repercussions that could occur as a result of a 51% attack to the Bitcoin network?
(Select three.)

- A. Unplanned Fork

- B. Double Spending
- C. Cancelling Transactions
- D. Planned Fork
- E. Selfless Mining

Correct Answer: ABC

Section: (none)

Explanation

Explanation/Reference:

Explanation:

The 4 main attacks that can happen directly as a result of the 51% attack are: Selfish mining. Cancelling transactions. Double Spending. Random forks. Reference:

<https://blockgeeks.com/guides/hypothetical-attacks-on-cryptocurrencies/>

QUESTION 43

_____ is a real-time gross settlement system (RTGS), currency exchange and remittance network by _____

- A. Ripple, Ripple
- B. Ripple, JP Morgan
- C. XRP, RippleD. Ripple, XRP

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Ripple is a real-time gross settlement system (RTGS), currency exchange and remittance network by Ripple. Reference:

<https://ripple.com/>

QUESTION 44

A centralized system is one that that is governed by a hierarchical authority. Which of the following Blockchains would be correctly stated as centralized?

- A. Monero
- B. Ethereum
- C. Bitcoin Cash
- D. Ripple

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://medium.com/@dustindreifuerst/permissioned-vs-permissionless-blockchains-acb8661ee095>

QUESTION 45 Message Calls in the Ethereum EVM is limited to a depth of _____?

- A. 128
- B. 256
- C. 1024
- D. 2048

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Calls are limited to a depth of 1024, which means that for more complex operations, loops should be preferred over recursive calls.

Reference: <https://solidity.readthedocs.io/en/latest/introduction-to-smart-contracts.html#the-ethereum-virtual-machine>

QUESTION 46 In the Bitcoin blockchain the "block creation time" is set to 10 minutes and this can never change.

- A. FALSE
- B. TRUE

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Remember, that the block creation time is set to 10 minutes and this can never change. So after a fixed time of approximately 2 weeks or exactly 2016 blocks the difficulty is re-adjusted. Increase in difficulty means target decreases.

Reference: <https://medium.com/all-things-ledger/decoding-the-enigma-of-bitcoin-mining-f8b2697bc4e2>

QUESTION 47

What is another name for blockchains that run adjacent to the blockchains and also offer more scope for processing contracts?

- A. Adchains
- B. Funnelchains
- C. Multichains
- D. Sidechains



Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Sidechain is another name for blockchains that run adjacent to Bitcoin and offer more scope for processing contracts.

Reference: <https://gandal.me/2014/10/26/a-simple-explanation-of-bitcoin-sidechains/>

QUESTION 48

What are two cryptocurrencies that you would expect to see mining equipment with ASICS? (Select two.)

- A. Bitcoin
- B. Ethereum
- C. Neo
- D. Litecoin
- E. Monero

Correct Answer: AD

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://www.trymining.com/pages/asic-vs-gpu>

QUESTION 49

Vitalik Buterin referred to this concept of trust beyond just currency as 'smart contracts' or even blockchain-based "decentralized autonomous organizations" (DAOs).

Ethereum is considered Blockchain version?

- A. 2.0
- B. 4.0
- C. 3.0
- D. 1.0

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

2.0 Ethereum came after Bitcoin. Vitalik Buterin, one of the writers for Bitcoin Magazine that tried to popularize the technology in the early 2012. He witnessed first-hand the problems in the Bitcoin implementation like wasteful mining hardware, centralized mining community, and lack of network scalability. In 2013, the then 19 year old Vitalik described his vision for Ethereum by extending the concept of Bitcoin beyond just currency. He proposed a platform where developer community and entrepreneurs to build distributed application (Dapps) for the Blockchain network. He referred to this concept of trust beyond just currency as 'smart contracts' or even blockchain-based "decentralized autonomous organizations" (DAOs).

Reference: <https://hackernoon.com/a-brief-history-in-the-evolution-of-blockchain-technology-platforms-1bb2bad8960a>

QUESTION 50

Ethereum is a programmable blockchain. What is one of the following reasons is NOT correct regarding Ethereum programmability?

- A. Allows users to create their own operations on any complexity
- B. It serves as a platform for many different types of decentralized blockchain applications
- C. Does not allow users to create their own operations of any complexity
- D. Ethereum also includes a peer-to-peer network protocol



Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Reference: <http://ethdocs.org/en/latest/introduction/what-is-ethereum.html>

QUESTION 51 The block creation time is set to how many minutes in Bitcoin?

- A. 1
- B. 10
- C. 120
- D. 100E. 15
- F. 150

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Remember, that the block creation time is set to 10 minutes and this can never change. So after a fixed time of approximately 2 weeks or exactly 2016 blocks the difficulty is re-adjusted. Increase in difficulty means target decreases.

Reference: <https://medium.com/all-things-ledger/decoding-the-enigma-of-bitcoin-mining-f8b2697bc4e2>

QUESTION 52

In Hyperledger Fabric chaincode runs in a secured Docker container isolated from the endorsing peer process?

- A. TRUE
- B. FALSE

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Reference: <http://hyperledger-fabric.readthedocs.io/en/release-1.1/chaincode.html>

QUESTION 53 You would like to run Ethereum DApps in a browser without a node. (No need to download blockchain.) What could you use locally in your Chrome browser?

- A. Jaxx
- B. Solidity
- C. Metamask
- D. Mist

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Metamask is essentially a bridge.

Reference: <https://blog.aion.network/introguideandwallet-57882a4066e3>

QUESTION 54 You would like to start your Gethin Fast Sync Mode.

What is the command for this?

- A. geth-mode—fast—cache 4096
- B. geth—fast—cache 4096
- C. geth—cache—fast 4096
- D. geth—fast-mode—cache 4096

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://datawookie.netlify.com/blog/2018/01/ethereum-running-a-node/>

QUESTION 55 Which of the following is not considered an Ethereum testnet?

- A. Ropstein
- B. Rinkeby
- C. Mainnet
- D. Kovan

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://testnet.etherscan.io/>

QUESTION 56

Looking the graph below, what type of an attack is this likely?

Base game:		You vote 0	You vote 1
	Others vote 0	P	0
	Others vote 1	0	P

- A. 51% Attack
- B. P+ Epsilon Attack
- C. Blacklisting
- D. Selfish Mining Attack

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

A proof of work system is vulnerable to a particular type of attack called the “P+ epsilon attack”. In order to understand how this attack works we must define some terms before hand. Un-Coordinated Choice Model: An uncoordinated choice model is a model where all the participants don’t have the incentive to work with one another. The participants may form groups but at no time is the group big enough to become a majority.

Reference: <https://blockgeeks.com/guides/hypothetical-attacks-on-cryptocurrencies/>

QUESTION 57 What does the 20 in ERC20

mean or relate to?

- A. BIP number
- B. Release number
- C. Update number
- D. Proposal ID number

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Explanation:

ERC stands for Ethereum Request for Comments. This is an official protocol for proposing improvements to the Ethereum network. '20' is the unique proposal ID number.

Reference: <https://support.exodus.io/article/108-what-is-an-erc20-token-and-does-exodus-support-it>

QUESTION 58

You are considering writing a smart contract for Ethereum and would like to use a robust programming language.

Which programming language is considered the most flexible and robust for Ethereum?

- A. Solidity
- B. Python
- C. Serpent

D. JS

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

To write smart contracts there are a few different languages: Solidity, which is like JavaScript and has .sol as a file extension, Serpent, Python-like with extension .se, and a 3rd, LLL, based on Lisp. Serpent was popular a while back but Solidity is the most popular right now and more robust, so just use Solidity. You prefer Python? Use Solidity.

Reference: <https://medium.com/@ConsenSys/a-101-noob-intro-to-programming-smart-contracts-on-ethereum-695d15c1dab4>

QUESTION 59 How many peers in the network need to endorse a transaction in a Hyperledger Fabric blockchain?

- A. The number of peers required to endorse a transaction is driven by the IAM policy that is specified by the ledger.
- B. The number of peers required to endorse a transaction is driven by the endorsement policy that is specified by the DApps.
- C. The number of peers required to endorse a transaction is driven by the endorsement policy that is specified by the ledger.
- D. The number of peers required to endorse a transaction is driven by the endorsement policy that is specified at chaincode deployment time.

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Explanation:

The number of peers required to endorse a transaction is driven by the endorsement policy that is specified at chaincode deployment time.

Reference: <http://hyperledger-fabric.readthedocs.io/en/release-1.1/Fabric-FAQ.html#endorsement>

QUESTION 60 Every node needs to keep track of time AND it needs to be in synch with its other peer nodes on the blockchain. In Bitcoin for example the current median for time is around?

- A. 7 minutes
- B. 7 seconds
- C. 17 seconds
- D. 70 Minutes
- E. 70 Seconds

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Explanation:

The median time differs by more than 70 mins from its system time

Reference: <https://blockgeeks.com/guides/hypothetical-attacks-on-cryptocurrencies/>

QUESTION 61 You are using Geth and you would like to list the accounts controlled by the node.

What is the command?

- A. geth list accounts
- B. geth account node list
- C. geth account node
- D. geth account list

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://datawookie.netlify.com/blog/2018/01/ethereum-running-a-node/>

QUESTION 62 _____ ensures that the shared ledgers are exact copies, and lowers the risk of fraudulent transactions, because tampering would have to occur across many places at exactly the same time.

- A. Encryption
- B. Consensus
- C. Validation
- D. Replication

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Consensus ensures that the shared ledgers are exact copies, and lowers the risk of fraudulent transactions, because tampering would have to occur across many places at exactly the same time

Reference: <https://www.ibm.com/developerworks/cloud/library/cl-blockchain-basics-intro-bluemix-trs/index.html>

QUESTION 63 Ethereum tries to keep the mining time difference between ____ and ____ seconds.

- A. 10, 18
- B. 10, 20
- C. 10, 29
- D. 10, 19



Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://dltlabs.com/how-difficulty-adjustment-algorithm-works-in-ethereum/>

QUESTION 64

Which of the following cryptocurrencies use an alternate consensus method called "Scrypt" to BTC's Proof of Work (POW) SHA-256 algorithm?

- A. Ripple
- B. Peercoin
- C. Litecoin
- D. Steemit

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation:

The Scrypt hash function was initially implemented by the Litecoin development team to avoid what are known, ASICs, from being able mine its cryptocurrency. When mining for cryptocurrencies, users typically have an option between: a CPU, GPU or ASIC miner.

Reference: <https://www.mycryptopedia.com/litecoin-scrypt-algorithm-explained/>

QUESTION 65

What is chaincode?

- A. Smart contract
- B. DApps
- C. Node programs
- D. Virtual machines

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Reference: <http://hyperledger-fabric.readthedocs.io/en/release-1.1/chaincode.html>

QUESTION 66 Addresses on a blockchain are derived by a process of hashing _____.

- A. Wallet Addresses
- B. Private Keys
- C. IP Addresses
- D. Mac addresses
- E. Public Keys

Correct Answer: E

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://medium.com/@ConsenSys/blockchain-underpinnings-hashing-7f4746cbd66b>



QUESTION 67 When considering a new ERC20 token its best to consider using _____.

- A. Use a template from AWS
- B. Audited Implementation
- C. Start a new one
- D. Copy from existing token

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://medium.com/@merunasgrincalaitis/gain-ethereum-ico-trust-credibility-e9e53145c331>

QUESTION 68 Smart Contracts are generally written in specific programming languages. Which one is NOT a language for smart contracts?

- A. .Net
- B. Viper
- C. LLL
- D. Solidity

Correct Answer: A

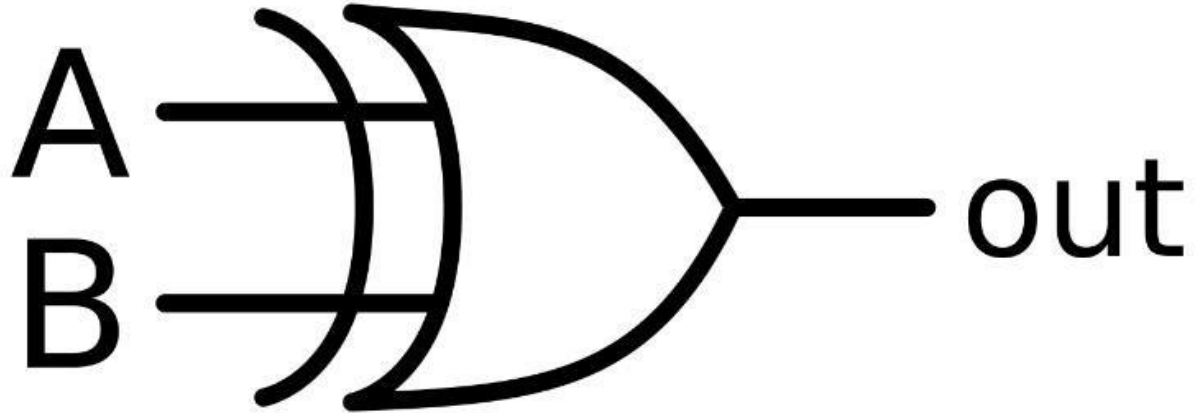
Section: (none)

Explanation

Explanation/Reference:

QUESTION 69

What is diagram referencing below?



- A. AND Gate
- B. XOR Gate
- C. OXR Gate
- D. NAND Gate

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:
XOR or "Exclusive OR" is a logic gate.

Reference: <https://blockgeeks.com/guides/cryptocurrencies-cryptography/>



QUESTION 70 Which of the following is considered the most popular public key encryption algorithm?

- A. RSA
- B. AES
- C. MD5
- D. PGP

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://medium.com/@ConsenSys/blockchain-underpinnings-hashing-7f4746cbd66b>

QUESTION 71 Geth uses what port to expose the Ethereum RPC Service?

- A. 2096
- B. 8545
- C. 4096
- D. 2545

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://datawookie.netlify.com/blog/2018/01/ethereum-running-a-node/>

QUESTION 72 In Ethereum the difficulty adjustment algorithm is coded in the _____ file.

- A. calcDifficultyFrontier
- B. block_validator.go
- C. calcDifficultyHomestead
- D. calcDifficultyvalidator.go

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://dltlabs.com/how-difficulty-adjustment-algorithm-works-in-ethereum/>

QUESTION 73 What are two advantages of using a DPOS algo in a blockchain? (Select two.)

- A. Scalable
- B. Governance Model
- C. Efficiency
- D. Fast transactions
- E. Centralized

Correct Answer: AD

Section: (none)

Explanation

Explanation/Reference:

Explanation:

The advantages of DPoS are that it is scalable and provides fast transaction verification, but the disadvantage is that it is partially centralized and the governance model has not been proven effective in a large project. DPoS is employed by Steemit, EOS, and BitShares.

Reference: <https://hackernoon.com/an-overview-of-cryptocurrency-consensus-algorithms-9d744289378f>

QUESTION 74

When writing and considering push and pull in a smart contract that involves "user" funds would it be better to _____?

- A. Withdraw funds rather than pull funds to them automatically
- B. Withdraw funds rather than push funds to them automatically
- C. Pull funds rather than push funds to them automatically
- D. Push funds rather than pull funds to them automatically

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Withdraw funds rather than push funds to them automatically Favor pull over push for external calls as we've seen, external calls can fail for a number of reasons, including external errors. To minimize the damage caused by such failures, it is often better to isolate each external call into its own transaction that can be initiated by the recipient of the call. This is especially relevant for payments, where it is better to let users withdraw funds rather than push funds to them automatically. (This also reduces the chance of problems with the gas limit.)



Reference: <https://github.com/ethereum/wiki/wiki/Safety#favor-pull-over-push-for-external-calls>

QUESTION 75

When considering tokens on the Ethereum Blockchain what is the main difference between ERC20 and ERC721 tokens?

- A. No difference on Ethereum all tokens are fungible
- B. ERC20 is not fungible while ERC721 tokens are fungible
- C. ERC721 is not fungible while ERC20 tokens are fungible
- D. No difference on Ethernet all tokens are not fungible

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Non-fungible means unique. ERC is acronym of Ethereum Request for Comments. A standard allows for the implementation of a standard API for creating non-fungible tokens. To whom not familiar, ethereum, when launched during ICO, is using ERC-20 which ethereum coin can be broken down into smaller portion such as 0.000001. As you know, in coin, we don't differentiate it by serial number. Government only uses "serial number" to track the note and not on coin. Hence, there is no way to distinguish or trace your coin and my coin. This behavior is same in Ethereum coin. Startup has found a way to use ERC-721 to create a unique and traceable coin in ethereum blockchain technology. This is a break through in blockchain technology.

Reference: <https://medium.com/@PatrickGohBS/ethereum-erc-721-vs-erc-20-4bff8c147fdf>

QUESTION 76 You are trying to generate a random number in Ethereum blockchain. What is the best way?

- A. Wikipedia
- B. Coindesk
- C. Coinbase
- D. Randao
- E. ERC20



Correct Answer: E

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Randao is based on Blockchain technology and provides the service of random number generation that is open source, decentralized, socialized and verifiably fair. Reference:

<http://randao.org/>

QUESTION 77

Your company is looking to develop a new token and raise funds for this new platform.

What is the process your company would like go thru to raise funds?

- A. Crowdfunding
- B. ICO
- C. Audit
- D. IPO

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://www.nasdaq.com/article/what-is-an-ico-cm830484>

QUESTION 78

Your company is looking to develop a new token and raise funds for this new platform. What is the process your company would like go thru to raise funds?

- A. Crowdfunding
- B. ICO
- C. Audit
- D. IPO

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://www.nasdaq.com/article/what-is-an-ico-cm830484>

QUESTION 79 The difference between Ethereum tokens and a standalone currency like Litecoin is that _____ tokens piggyback on the Ethereum network, hosted by Ethereum addresses and sent using Ethereum transactions.

- A. ERC
- B. ERC20
- C. Ether
- D. BIP

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

The difference between these tokens and a standalone currency like Litecoin is that ERC20 tokens piggyback on the Ethereum network, hosted by Ethereum addresses and sent using Ethereum transactions.

Reference: <https://support.exodus.io/article/108-what-is-an-erc20-token-and-does-exodus-support-it>

QUESTION 80 Which of the following is NOT a requirement of an enterprise blockchain typically?

- A. Append-only distributed system of record shared across business network
- B. Cost efficient blockchain
- C. Transactions are endorsed by relevant participants
- D. Ensuring appropriate visibility; transactions are secure, authenticated & verifiable

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://developer.ibm.com/courses/all/blockchain-essentials/>

QUESTION 81 Which of the following blockchain key components state how the transactions will be confirmed?

- A. Distributed Ledger database
- B. Validity Rules
- C. Consensus Algorithm
- D. Encryption

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Validity rules (validation) state how the user and the transactions will be validated. This is predetermined by the consensus algorithm.

QUESTION 82

A chaincode package that was signed at creation can be handed over to other owners for inspection and signing in Hyperledger.

Is it true that the workflow supports out-of-band signing of chaincode package?

- A. TRUE
- B. FALSE

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

A chaincode package that was signed at creation can be handed over to other owners for inspection and signing. The workflow supports out-of-band signing of chaincode package.

Reference: <http://hyperledger-fabric.readthedocs.io/en/release-1.1/chaincode4noah.html>

QUESTION 83

_____ is advantageous because it presents scalability and low cost transactions, but like DPoS introduces a component of centralization.

What algorithm is being referenced here?

- A. Byzantine Fault Tolerance
- B. Hashgraph
- C. Proof of Stake
- D. Proof of Work
- E. DAG



Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

BFT is notably implemented by Ripple (where validators are pre-selected by the Ripple foundation) and Stellar (where anyone can be a validator and trust is established by the community). BFT is advantageous because it presents scalability and low cost transactions, but like DPoS introduces a component of centralization.

Reference: <https://hackernoon.com/an-overview-of-cryptocurrency-consensus-algorithms-9d744289378f>

QUESTION 84

In Hashcash, miners all compete to look for a so called. " _____ "which, if provided as input (together with other parts of a block header) to a hash function, yields an output that's numerically small enough to claim the next block reward.

- A. Difficulty bits
- B. Nonce
- C. Merkle Root
- D. Timestamp

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://medium.com/all-things-ledger/bitcoins-implementation-of-blockchain-2be713f662c2>

QUESTION 85

You currently on a conference call with an executive from a too big to fail bank. They are validating that they want to use Quorum or another enterprise blockchain. They specifically want to know what type of consensus algo it uses and what industry for the Quorum blockchain targets.

- A. BFT, cross industry
- B. POS, Financial only
- C. Majority voting, Financial only
- D. Majority voting, cross industry
- E. POW, cross industry

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Reference: https://www.horsesforsources.com/top-5-blockchain-platforms_031618

QUESTION 86

_____ is supposed to be the constant cost of network resources/utilization in the Ethereum blockchain?

What is the constant?

- A. Wei
- B. Tether
- C. Gas
- D. Ether

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Gas is supposed to be the constant cost of network resources/utilization. You want the real cost of sending a transaction to always be the same, so you can't really expect Gas to be issued, currencies in general are volatile. So instead, we issue ether whose value is supposed to vary, but also implement a Gas Price in terms of Ether. If the price of ether goes up, the Gas Price in terms of ether should go down to keep the real cost of Gas the same. Reference: <http://ethdocs.org/en/latest/ether.html>

QUESTION 87 You are currently consulting with an organization that ships widgets overseas. They would like to implement a Hyperledger Fabric and would like to know about how to use cryptocurrencies with Hyperledger Fabric.

What is the best answer?

- A. If they need a native currency for their chain network, they can develop their own native currency with chaincode.
- B. Hyperledger Fabric can be integrated with any crypto currency by using the proper APIs.
- C. If they need a native currency for their chain network, they must use Ripple currency with chaincode.
- D. If they need a native currency for their chain network, they must use Ethereum currency with chaincode.
- E. Hyperledger Fabric does not support cryptocurrencies.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

If you really need a native currency for your chain network, you can develop your own native currency with chaincode. One common attribute of native currency is that some amount will get transacted (the chaincode defining that currency will get called) every time a transaction is processed on its chain.

Reference: <http://hyperledger-fabric.readthedocs.io/en/release-1.1/Fabric-FAQ.html#endorsement>

QUESTION 88 Is it possible to access the blockchain via an Ethereum Node?

- A. Yes
- B. No

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

True You can interact with the blockchain using RPC via HTTP POST requests. You can find out more about the JSON-RPC API here. Although you can use RPC to communicate with a local node you can also use it to hook up with a remote node. To send requests to the local node we address them to <http://127.0.0.1:8545> (Geth exposes the RPC service on port 8545).

Reference: <https://datawookie.netlify.com/blog/2018/01/ethereum-running-a-node/>

QUESTION 89 Which of the following enterprise blockchain platforms does not have smart contract functionality?

- A. Ethereum
- B. Quorum
- C. R3 Corda
- D. Hyperledger Fabric
- E. Ripple

Correct Answer: E

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Ripple is a real-time gross settlement system (RTGS), currency exchange and remittance network by Ripple. Reference:

<https://ripple.com/>

QUESTION 90 You have flown to NYC to have a discussion with a technical executive of a too big to fail bank. You are having a discussion about blockchain algos and the customer is asking what are some disadvantages of using a POW algo?

- A. Centralization of blockchain control
- B. Only use case for computational power is blockchain
- C. Large expenditures for computational power
- D. Not profitable for miners
- E. 51% attack mitigation

Correct Answer: CE

Section: (none)

Explanation

Explanation/Reference:

Explanation:

The main disadvantages are huge expenditures, “uselessness” of computations and 51 percent attack.

Reference: <https://cointelegraph.com/explained/proof-of-work-explained>

QUESTION 91



What are two reasons that you would consider implementing a POW algo in your blockchain? (Select two.)

- A. PoW imposes no limits on actions in the network and therefore can thwart attacks better than other algos due to high cost B.
- What matters is to have large computational power to solve the puzzles and form new blocks over having a financial stake.
- C. PoW imposes some limits on actions in the network and therefore can thwart attacks better than other algos due to high cost D.
- The algo is energy efficient compared to POS and BFT
- E. The algo is energy efficient compared to POS and DPOS

Correct Answer: BC

Section: (none)

Explanation

Explanation/Reference:

Explanation:

The main benefits are the anti-DoS attacks defense and low impact of stake on mining possibilities. Defense from DoS attacks. PoW imposes some limits on actions in the network. They need a lot of efforts to be executed. Efficient attack requires a lot of computational power and a lot of time to do the calculations. Therefore, the attack is possible but kind of useless since the costs are too high. Mining possibilities. It doesn't matter how much money you have in your wallet. What matters is to have large computational power to solve the puzzles and form new blocks. Thus, the holders of huge amounts of money are not in charge of making decisions for the entire network. Reference:

<https://cointelegraph.com/explained/proof-of-work-explained>

QUESTION 92

In Hyperledger Fabric, the smart contract logic is also called by two other names _____ and _____? (Select two.)

- A. CordApps
- B. DApps
- C. Programmatic Logic
- D. Ripple
- E. Chaincode
- F. Ledger

Correct Answer: CE

Section: (none)

Explanation

Explanation/Reference:

Reference: <http://hyperledger-fabric.readthedocs.io/en/release-1.1/Fabric-FAQ.html#endorsement>

QUESTION 93

Ethereum has a metric system of denominations used as units of ether. What is the smallest denomination of Ether?

- A. Kwei
- B. Shannon
- C. Wei
- D. Finney

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Reference: <http://ethdocs.org/en/latest/ether.html>

QUESTION 94 When a consensus algo is considered to be "pluggable modularity», what does that mean?

- A. Add permission as needed
- B. Add user as needed
- C. Select an optimal algorithm for your networks

D. Select a specific API that manages the blockchain

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://www.ibm.com/developerworks/cloud/library/cl-blockchain-basics-intro-bluemix-trs/index.html>

QUESTION 95 The merkle tree contains a full list of the transactions on the blockchain?

A. FALSE

B. TRUE

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

The merkle tree does not contain a list of all the transactions, rather a hash (digital fingerprint) of all transactions as a tree structure. Reference:

<https://medium.com/all-things-ledger/bitcoins-implementation-of-blockchain-2be713f662c2>

QUESTION 96 Which of the following enterprise blockchains have a pluggable framework consensus algo? (Select two.)

A. Quorum

B. R3 Corda

C. Ethereum

D. Hyperledger Fabric

E. Ripple



Correct Answer: BC

Section: (none)

Explanation

Explanation/Reference:

Reference: https://www.horsesforsources.com/top-5-blockchain-platforms_031618

QUESTION 97

You are using Truffle for an Ethereum contract and would like to use a default set of contracts and tests from within an empty project directory.

What is the syntax?

A. truffle defaults

B. truffle init

C. truffle test

D. truffle compile

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://github.com/trufflesuite/truffle>

QUESTION 98

Gas has multiple associated terms with it: Gas Prices, Gas Cost, Gas Limit, and Gas Fees. The principle behind Gas is to have a stable value for how much a transaction or computation costs on the Ethereum network.

Which is considered to be the static value for how much a computation costs in terms of Gas?

- A. Price
- B. Fee
- C. Cost
- D. Limit

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Gas Cost is a static value for how much a computation costs in terms of Gas, and the intent is that the real value of the Gas never changes, so this cost should always stay stable over time Reference:

<http://ethdocs.org/en/latest/ether.html>

QUESTION 99 Which of the following is NOT considered a token?

- A. ICON
- B. LTC
- C. Golem
- D. EOS

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

LTC is Litecoin and is a crypto. Check Ethereum tokens here: <https://etherscan.io/tokens>

QUESTION 100 How are "assets" in Hyperledger Fabric represented? (Select two.)

- A. JSON
- B. Node
- C. YAML
- D. Binary
- E. Deployment Manager

Correct Answer: AD

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Assets in Hyperledger Fabric are represented in JSON or Binary. Assets are represented in Hyperledger Fabric as a collection of key-value pairs, with state changes recorded as transactions on a Channel ledger. Assets can be represented in binary and/or JSON form.

Reference: https://hyperledger-fabric.readthedocs.io/en/release-1.3/fabric_model.html

QUESTION 101

The Hyperledger Fabric business network is divided into three categories. What are the three categories? (Select three.)



- A. Membership
- B. Chaincode
- C. Networking
- D. EVM
- E. Blockchain

Correct Answer: ABE

Section: (none)

Explanation

Explanation/Reference:

QUESTION 102

The Secure Registry Services enables Secured _____Registry of base Hyperledger images and custom images containing chaincodes.

What type of registry is implemented?

- A. Docker
- B. EVM
- C. Kubernetes
- D. VMWare

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Secure Registry Services enables Secured Docker Registry of base Hyperledger images and custom images containing chaincodes.

QUESTION 103 Hyperledger Composer has two main components. What are the two components? (Select two.)

- A. Fabric
- B. Sawtooth
- C. Playground
- D. Explorer
- E. Business Network Archive
- F. SDK

Correct Answer: CE

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Hyperledger Composer has following main components: 1) Business Network Archive: Capturing the core data in a business network, including the business model, transaction logic, and access controls, the Business Network Archive packages these elements up and deploys them to a runtime. Business Network Archive files are stored as “.bna” files. 2) Composer Playground: This web-based tool allows developers to learn Hyperledger Composer, model out their business network (domain), test that network, and deploy that network to a live instance of a blockchain network. The playground keeps the development model in browser storage, allowing them to be easily uploaded or downloaded. The playground also allows for CRUD (create, read, update, delete) operations to be performed on asset transactions which are created and logged. Composer playground offers a repository of sample business networks that can provide a base for building your own business network

QUESTION 104 What are two specific advantages of using Hyperledger Fabric? (Select two.)

- A. No order service needed
- B. Use any programming language available

- C. Open Source Modular architecture
- D. Allows components to be plug-and-play
- E. Makes mining cryptos more efficient

Correct Answer: CD

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Hyperledger is an open source collaborative effort created for open industrial blockchain development. It started in December 2015 by the Linux Foundation. Linux Foundation's objectives were to create an environment in which communities of software developers and companies meet and coordinate to build blockchain frameworks.

QUESTION 105 In Hyperledger, nodes need a _____ to be able to communicate to the network.

- A. Valid Certificate
- B. Valid License
- C. Valid YAML file
- D. Valid JSON file

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

In Hyperledger, nodes need a valid certificate to be able to communicate to the network and the participants use applications that connect to the network by way of the nodes.

QUESTION 106 What component on the blockchain maintains the "world state"?

- A. .acl
- B. Reputation Manager
- C. Distributed Ledger
- D. .bna

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Distributed Ledger manages the world state and the transaction log in the blockchain. The world state is defined as the state of all transactions on the Blockchain, where all nodes agree that all blocks on the Blockchain are at the same state. It implements three key attributes. It efficiently calculates the cryptographic hash of the entire dataset of each block. It efficiently transmits a minimal "delta" changes to the dataset, when a peer is out of sync and needs to "catch up". It minimizes the amount of stored data required for each peer to operate.

QUESTION 107 When you are developing with Fabric Composer which of the following is true?

- A. Decreases the time of development
- B. Simplifies the development of applications
- C. Simplifies the integration of client applications
- D. Increases the time of development

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Hyperledger Composer is an open-source application development framework which simplifies the creation of Hyperledger Fabric blockchain applications, thus reducing the time and complexity of development. The tool aims at helping users to create blockchain applications based on Hyperledger Fabric without needing to know the low-level (Go Programming) details involved in blockchain networks.

QUESTION 108

Composer Modeling Language is an object-oriented modeling language that defines the domain model for a business network definition. The modeling language is saved as a _____ file.

- A. .json
- B. .go
- C. .txt
- D. .ico
- E. .cto

Correct Answer: E

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Composer Modeling Language is an object-oriented modeling language that defines the domain model for a business network definition. The modeling language is saved as a .cto file.

QUESTION 109 Fabric Ledger has two specific parts. Select answer with the proper two parts.

- A. State Data, Transactional Data
- B. State Data, Transaction logs
- C. LevelIDb, CouchDB
- D. Transaction Logs, CouchDB



Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Fabric Ledger has two parts: • State data: Representation of current state of the assets. Asset state data can be changed upon changes to the state of the data. • Transaction Logs: Record of all the transactions (in the order they are received) which modified the state data, and once the data is written it is immutable and cannot be changed.

QUESTION 110

In Hyperledger there are three distinct types of nodes.

What are the three types of nodes? (Select three.)

1. Client Node: That initiates the transaction
2. Peer Nodes: Commits Transaction & keeps the data in sync across the ledger
3. Ordered: They are the communication backbones and responsible for the distribution of the transactions.

- A. Client Node
- B. Ordered Node
- C. Certificate Node
- D. Anchor
- E. Peer Node

Correct Answer: ABE

Section: (none)

Explanation

Explanation/Reference:

Explanation:

In Hyperledger, all Nodes are NOT equal. There are three distinct types of nodes: 1. Client Node: That initiates the transaction 2. Peer Nodes: Commits Transaction & keeps the data in sync across the ledger 3. Ordered: They are the communication backbones and responsible for the distribution of the transactions

QUESTION 111

The fabric framework is implemented on _____programming language.

What programming language?

- A. Go
- B. Python
- C. Node.js
- D. Java
- E. JS

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

The fabric framework is implemented on Go. Since assets in Hyperledger Fabric are represented in JSON or Binary, hyperledger includes the REST and JSON RPC APIs, events, and an SDK for applications to communicate with the network.

QUESTION 112 What is provided by the Hyperledger Fabric to facilitate network communications?

- A. API
- B. SDK
- C. Ruby
- D. Middleware

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 113

The CA (Fabric CA by default) issues a _____ to each member (organization or individual) that is authorized to join the network.

- A. rootCert
- B. tCert
- C. eCert
- D. NodeCert

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

The CA (Fabric CA by default) issues a root certificate (rootCert) to each member (organization or individual) that is authorized to join the network

QUESTION 114

Chaincode Services uses Docker to host (deploy) the chaincode without relying on any virtual machine or computer language.

What would be the main reason or best reason that Hyperledger chose containers over virtual machines?

- A. Docker provides a secured, lightweight method to sandbox chaincode execution that is not "locked down".
- B. Docker provides a secured, lightweight method to sandbox chaincode execution that is not "locked down" but additional programming languages cannot be enabled.
- C. Docker provides a secured, lightweight method to sandbox chaincode execution that is "locked down".
- D. Docker is fully compatible with Hyperledger and Linux with an upgrade subscription.

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Docker provides a secured, lightweight method to sandbox chaincode execution that is "locked down" Chaincode Services uses Docker to host (deploy) the chaincode without relying on any virtual machine or computer language. Docker provides a secured, lightweight method to sandbox chaincode execution. The environment is a "locked down" and secured container, along with a set of signed base images containing secure OS and chaincode language, runtime and SDK images for Golang Additional programming languages can be enabled

QUESTION 115 Chaincode is a decentralized transactional program, running on the validating nodes. As with every chaincode, it implements the _____ in particular, Init and Invoke functions.

What does is actually implemented?

- A. SDK
- B. REST Interface
- C. EVM
- D. Chaincode interface

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Chaincode is a decentralized transactional program, running on the validating nodes. As with every chaincode, it implements the Chaincode interface in particular, Init and Invoke functions. Init is called during Instantiate transaction after the chaincode container has been established for the first time, allowing the chaincode to initialize its internal data. Invoke is called to update or query the ledger in a proposal transaction. Updated state variables are not committed to the ledger until the transaction is committed.

QUESTION 116

Hyperledger can best be described as a _____?

- A. Blockchain that exclusively supports PoS Consensus
- B. Permissionless blockchain
- C. Token
- D. Blockchain that exclusively supports PoW Consensus
- E. Umbrella collaboration of open source blockchains

Correct Answer: E

Section: (none)

Explanation

Explanation/Reference:

Explanation: hyperledger is an open source collaborative effort created to advance cross-industry blockchain technologies. It is a global collaboration, hosted by The Linux Foundation, including leaders in finance, banking, Internet of Things, supply chains, manufacturing and Technology.

QUESTION 117 With Hyperledger Fabric ledger, it supports both levelDB / CouchDB for state data?

- A. FALSE
- B. TRUE

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

The ledger system in Hyperledger fabric uses levelDB. By definition, LevelDB allows concurrent writers to safely insert data into the database by providing internal synchronization. LevelDB uses very coarse-grained synchronization which forces all writes to proceed in an ordered, first-come-first-served basis, effectively reduces throughput to a single thread. State database options include LevelDB and CouchDB. LevelDB is the default key-value state database embedded in the peer process. CouchDB is an optional alternative external state database. Like the LevelDB key-value store, CouchDB can store any binary data that is modeled in chaincode (CouchDB attachment functionality is used internally for nonJSON binary data). But as a JSON document store, CouchDB additionally enables rich query against the chaincode data, when chaincode values (e.g. assets) are modeled as JSON data.

QUESTION 118

Hyperledger Composer has following two main components?

- A. Composer Playground
- B. Business Network Archive

Correct Answer: AB

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Hyperledger Composer has following main components:

- 1) Business Network Archive: Capturing the core data in a business network, including the business model, transaction logic, and access controls, the Business Network Archive packages these elements up and deploys them to a runtime. Business Network Archive files are stored as “.bna” files.
- 2) Composer Playground: This web-based tool allows developers to learn Hyperledger Composer, model out their business network (domain), test that network, and deploy that network to a live instance of a blockchain network. The playground keeps the development model in browser storage, allowing them to be easily uploaded or downloaded. The playground also allows for CRUD (create, read, update, delete) operations to be performed on asset transactions which are created and logged. Composer playground offers a repository of sample business networks that can provide a base for building your own business network

QUESTION 119 What type of peer node executes transactions?

- A. Monitoring
- B. API Peer
- C. Endorsing Peer
- D. Ordering Peer

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Endorsing Peers (Endorsers) An endorser executes and endorses transactions. The endorsing peers take the role of endorsing transactions before they are ordered and committed as per the policy defined in Chaincode.

QUESTION 120 In Ethereum a block contains two very important parameters. (Select two.)

- A. Difficulty
- B. Release date
- C. Block number

D. Timestamp

Correct Answer: AD

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Difficulty and Timestamp block also contains two very important parameters: a difficulty and a timestamp. The difficulty regulates how hard it is to find a block by the miner. The mining time is set to be between 10 and 20 seconds. If it's beyond 20 seconds, the difficulty is too high and will be automatically lowered going forward. If the mining happens below 10 seconds, then the difficulty increases. The timestamp is the time when a miner found the block. It is not automatically derived, rather it is set by the miner itself and can thus be influenced to a certain degree. The timestamp does not depend on the time zone, as it's the standard Unix timestamp.

QUESTION 121 Select the best statement for determining how consensus is reached.

- A. By the miner nodes which make sure that a transaction is valid.
- B. By a cryptographic secure signature algorithm called ECDSA which makes sure that cheating is impossible.
- C. By every single node in the blockchain network different transactions.
- D. By every single node in the blockchain network executing the same transaction.

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Explanation:

If you send a transaction to the network, then one miner-node will at some point pick it up. The Miner will run the transaction and add the result to the next block. Now, this doesn't imply consensus yet. By design all nodes don't trust each other. Each node must verify that the transaction the miner added to the block is really valid. This means, consensus is reached by having every node running the same transactions again and verifying that the result is correct. Plus, the results are verified in a cryptographic manner.

QUESTION 122

When developing in Ethereum which is considered to be an In-Memory Blockchain simulations for rapid development?

- A. Cpp-ethereum
- B. Geth
- C. TestRPC
- D. Parity

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation:

There are several redundant implementations of the Ethereum protocol to ensure the correctness of the implementation. Additionally, not all blockchain nodes operate the same way. Some are purely for developing and hold a blockchain inmemory and just simulate the mining. Real Blockchain Nodes: 1. Cpp-ethereum 2. Go-Etheruem (GETH) 3. Parity In-Memory Blockchain simulations for rapid development: 1. TestRPC 2. Ganache 3. Truffle Developer Console Clients to access the blockchain in a convenient way: 1. MetaMask browser Plugin through Infura 2. Status.IM Android/iOS app through Infura 3. MIST DApp Browser with integrated GETH

QUESTION 123 Ethereum smart contracts can be written in what programming languages?

Select all that apply.

- A. Serpant
- B. Cobol
- C. LLL
- D. LLC
- E. Vyper
- F. Node.js
- G. IOS

- H. Mutan
- I. Solidity

Correct Answer: ACHI

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Ethereum Smart Contracts run on compiled bytecode, which means that there can be several high-level languages which code can be written in. In particular, Ethereum has a number of languages available: 1. Solidity – the most popular language now (2018). 2. Vyper – A Language by Vitalik Buterin with an emphasis on security 3. LLL – “Low Level Lisp-like Language” 4. Mutan – Golang-like, deprecated in 2015 5. Serpent, Python-like, but seems to be no longer maintained 6. Bamboo

QUESTION 124 Which is the right order for Ethereum Denominations?

- A. Finney, Szabo, Mether, Wei
- B. Gwei, Szabo, Finney, Ether
- C. Finney, Szabo, Mether, Gwei
- D. Wei, Finney, Szabo, Ether, Tether

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Most widely used are Wei, Gwei, Finney and Ether. With the tool <https://etherconverter.online/> you can easily convert different units.

QUESTION 125 What is the nonce-field in a transaction?

- A. To sum up all ethers sent from that address
- B. Protects against replay attacks
- C. To distribute the workloads in the EVM
- D. Adds a checksum for transactions

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Explanation:

If you send off a transaction, then several fields have to be set. These include: • nonce: It is a sequence number for the sending account which counteracts replay attacks • gasprice: price offered to pay per gas • startgas: upper limit for the gas consumption • to: destination address (EoA or contract address) • value: Ether to transfer • data: Data to transfer • v, r, s: ECDA signature.

QUESTION 126

Ethereum currently uses the _____ Consensus Algo and in the future it is planned to go to the _____ Consensus Algo?

- A. PoW, DPoS
- B. PoW, PoS
- C. PoS, PoW
- D. DPoS, PoW

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://coingape.com/ethereum-founder-vitalik-buterin-consensus-algorithm-fight-attacks/>

QUESTION 127 In Ethereum how is the block difficulty determined in Ethereum?

- A. The Block Difficulty increases when the time between mined blocks is below 10 seconds, while it decreases when the time is above 20 seconds.
- B. The Block Difficulty is determined by the Ethereum Committee every fortnight to reflect the average amount of transaction and it cannot be influenced by the network itself.
- C. The Block Difficulty increases when the time between mined blocks is below 20 seconds, while it decreases when the tie is above 60 seconds.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

At the time of writing these lines, the Ethereum Blockchain still runs on Proof of Work. When a block is mined, the miner node selects some transactions from a pool of pending transactions. Usually they are sorted by how much gas they would bring in. These transactions are executed and incorporated in the new block. But a block also contains two very important parameters: a difficulty and a timestamp. The difficulty regulates how hard it is to find a block by the miner. The mining time is set to be between 10 and 20 seconds. If it's beyond 20 seconds, the difficulty is too high and will be automatically lowered going forward. If the mining happens below 10 seconds, then the difficulty increases. The timestamp is the time when a miner found the block. It is not automatically derived, rather it is set by the miner itself and can thus be influenced to a certain degree. The timestamp does not depend on the time zone, as it's the standard Unix timestamp.

QUESTION 128 In regards to understanding the Ethereum Virtual Machine what statement is true?

- A. The EVM is extremely powerful, non-turing complete and perfect for doing computational intensive things, because of the direct access to the graphics card.
- B. The EVM is extremely powerful, turing complete and perfect for doing computational intensive things, because of the direct access to the graphics card.C. While the EVM is Sandboxed, it isn't as powerful as the Bitcoin network, because it's not Turing Complete
- D. The EVM can't access hardware layers or anything outside a blockchain node because it's sandboxed.

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

Explanation:

The EVM is basically a sandboxed virtual machine running on every single node. It is Turing complete and a transaction-based state machine. The nodes reach consensus by executing all transactions. Only the miner node gets the block reward, all other nodes are just checking if the miner was "honest".

QUESTION 129

Blockchain provenance is defined as _____?

- A. Information sent to the blockchain and written to the blockchain.
- B. Recording the history of data, from its last block to various stages of the data lifecycle
- C. Recording the history of data, from its inception to various stages of the data lifecycle.
- D. Once a transaction has been written and committed to the ledger it cannot be changed.

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Provenance means recording the history of data, from its inception to various stages of the data lifecycle. Provenance provides a detailed record of how the data was collected, where it was stored and how it is used. Blockchain holds complete provenance details of each component of data transfer. It is accessible to all the participants in a business network. It improves the system utilization and increases trust.

QUESTION 130 Smart Contracts provide all the following benefits EXCEPT?

- A. Legally Enforcable

- B. Autonomy
- C. Cast Savings
- D. Efficiency
- E. Backup

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Smart contracts generally are not legal contracts. However, its possible that a smart contract could be accepted as a legal contract but not normally. Reference:

<https://blockgeeks.com/guides/smart-contracts/>

QUESTION 131 There are two types of tokens in blockchain solutions. (Select two.)

- A. Legal
- B. Utility
- C. Equity
- D. Financial

Correct Answer: BC

Section: (none)

Explanation

Explanation/Reference:



QUESTION 132

You are currently considering blockchain solutions for your organization. You read an article about "blockless" blockchains.

What are the two benefits that could be gained over a traditional blockchain solution? (Select two.)

- A. Faster Block writes
- B. Greater Transaction Security
- C. Faster Performance
- D. Greater transaction Capacity

Correct Answer: AB

Section: (none)

Explanation

Explanation/Reference:

Reference: <https://solarmagazine.com/blockchain-trading-peer-to-peer-solar-energy-trading/>

QUESTION 133 In blockchains there is the concept of "Group Consensus" and how many members must agree.

- A. 52%
- B. 74%
- C. 75%
- D. 51%
- E. 100%

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 134 What consensus algo uses a method of sending coins to an address where they cannot be retrieved?

- A. Proof of Stake
- B. Proof of Activity
- C. Proof of Burn
- D. Proof of Sending

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 135

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- \$90.00

Total

USD \$210.00

A. NO, that's ok Use Code JH30UDEMY

B. YES, Use Code JH30UDEMY

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 136

Hyperledger is an enterprise focused blockchain project. This project was released by a consortium under the umbrella of the Linux Foundation's Hyperledger Project.

What year did Hyperledger go live?

- A. 2013
- B. 2012
- C. 2015
- D. 2009

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 137

What is the difference in using Go-Ethereum over Ganache?

- A. Can automate builds with Go Ethereum but you can't with Ganache
- B. Go Ethereum is written in Java whereas Ganache is written in Golang
- C. Go Ethereum is real blockchain whereas Ganache is a blockchain simulation
- D. Ganache is a real blockchain whereas Go Ethereum is a blockchain simulation



Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

Reference: http://truffleframework.com/docs/getting_started/client

QUESTION 138

In what year did a whitepaper that was published by "Satoshi Nakamoto" outlined a solution to the Byzantine Generals problem?

- A. 2006
- B. 2009
- C. 2008
- D. 2010

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

Explanation:

In 2008 a whitepaper is published by "Satoshi Nakamoto" which outlines a solution to the Byzantine Generals problem

QUESTION 139

What is a development language which lets developers solve any class of problem in existence given infinite time and resources?

- A. Turing Complete

- B. Turing Incomplete
- C. Solidity
- D. Mist
- E. JVM
- F. EVM

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Turing Complete – A language which lets developers solve any class of problem in existence given infinite time and resources Vs Turing Incomplete – Can't solve all types of problems, such as problems with loops and iterations (Bitcoin)

QUESTION 140 When you considering developing and running dAPPS in Ethereum its important to understand that Gas and Ether are decoupled for price stability. Is this True or False?

- A. True
- B. False

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

True. Gas and Ether are decoupled for price stability reasons especially because Ether can vary in price significantly even in a day.

QUESTION 141 What type of "bug" generally occurs when something isn't right according to business requirements?



- A. Business logic
- B. Business Requirements
- C. Integration
- D. Accessibility
- E. Security

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Business logic – something isn't right according to business requirements Security – the code is vulnerable to some security exploits Regression – some code updates caused existing features to break Performance – the code is slow or some actions execute extra functions

QUESTION 142 Ideal bug reports link the bug being reported to a

- A. Business Value
- B. Business Process
- C. Regression Issue
- D. Business Target
- E. Progression Issue

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 143 Which cryptocurrency is also known as "Smart Money" in the blockchain world?

- A. Ether
- B. BTC
- C. Monero
- D. Litecoin

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

Explanation:

Ether Foundation of all ERC tokens “Smart Money”, money which can be programmed to make decisions for itself

QUESTION 144

You are considering a cryptocurrency and for your privacy and anonymity are number one priority. Which cryptocurrency should you likely use?

- A. Monero
- B. Bitcoin
- C. Dash
- D. Shadowcoin
- E. Litecoin

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 145 When specifying blockchain technologies, it is important to understand its benefits and its challenges. What would be two challenges of blockchain technology adoption to an enterprise? (Select two.)

- A. Scalability, transaction speed / cost
- B. Tokenization of platforms
- C. Distributed
- D. Very New Technology

Correct Answer: AD

Section: (none)

Explanation

Explanation/Reference:

Explanation:

What are the drawbacks of Blockchain? Very new technology Constantly changing, evolving Not very many trained resources High cost for trained resources Best practices, recommended patterns still being formed Scalability, transaction speed / cost.

