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開始日時 2023年 06月 8日(木曜日) 10:55

状態 終了

完了日時 2023年 06月 8日(木曜日) 11:04

所要時間 9 分 18 秒

評点 36.00 / 100.00

問題 1

正解

6.00 / 6.00

Which instruction enables the implementation of escrow transactions

- ☒ a. OP_CheckMultiSig: Checks multi-signatures ✓
- ☐ b. OP_Hash216: Compute the hashes of three parties
- ☐ c. OP_IdenticalVerify: Returns true if the inputs are identical
- ☐ d. OP_Trip: Triples the top item on the stack

Your answer is correct.

正解:

OP_CheckMultiSig: Checks multi-signatures

問題 2

不正解

0.00 / 6.00

Which is not a consideration in choosing the location to setup a mining center for a cryptocurrency?

- ☐ a. Electricity cost
- ☐ b. Popularity of that cryptocurrency in that country
- ☐ c. Network speed
- ☒ d. Climate ✗

Your answer is incorrect.

正解:

Popularity of that cryptocurrency in that country

問題 3

不正解

0.00 / 6.00

Which is NOT true about Bitcoin's language Script

- ☒ a. It is Turing incomplete ❌
- ☐ b. It has a set of basic arithmetic, basic logic and cryptographic instructions
- ☐ c. It is stack-based
- ☐ d. It can contain loops

Your answer is incorrect.

正解:

It can contain loops

問題 4

正解

6.00 / 6.00

Which is a form of consensus in Bitcoin

- ☐ a. Consensus about core developers
- ☒ b. Consensus about rules ✔️
- ☐ c. Consensus about future blocks
- ☐ d. Consensus about the exchange rate

Your answer is correct.

正解:

Consensus about rules

問題 5

正解

6.00 / 6.00

Which is not a part of a Bitcoin transaction?

- ☐ a. Input(s)
- ☐ b. Metadata
- ☐ c. Output(s)
- ☒ d. Smart contract ✓

Your answer is correct.

正解:

Smart contract

問題 6

不正解

0.00 / 6.00

Which is not a major risk to handle for Bitcoin exchanges

- ☐ a. Exchange range might fluctuate
- ☐ b. It can be hacked
- ☒ c. Too many people may show up ✗
- ☐ d. It might lead to a Ponzi scheme

Your answer is incorrect.

正解: Exchange range might fluctuate

問題 7

不正解

0.00 / 8.00

What is true about virtual mining

- ☒ a. We need to spend real resources for security ✖
- ☐ b. It leads to centralization faster than other cryptocurrencies
- ☐ c. It is researched a lot scientifically
- ☐ d. It is better for the environment than traditional mining

Your answer is incorrect.

正解: It is better for the environment than traditional mining

問題 8

正解

6.00 / 6.00

Which is an advantage of GPU over CPU in mining Bitcoin

- ☐ a. Several of them can be cooled more systematically
- ☒ b. It can parallel-compute multiple hashes ✔
- ☐ c. GPU can compute floating points in SHA256
- ☐ d. It can be used by amateurs

Your answer is correct.

正解:

It can parallel-compute multiple hashes

問題 9

正解

6.00 / 6.00

Which is not a required property for general hash functions?

- ☒ a. It should be difficult to compute ✓
- ☐ b. Output should be a string of a fixed size
- ☐ c. It should be easy to verify
- ☐ d. It should be efficiently computable

Your answer is correct.

正解:

It should be difficult to compute

問題 10

正解

6.00 / 6.00

Which is true about the anonymity of Bitcoin

- ☐ a. It's anonymity is always good for the society
- ☐ b. It is anonymous
- ☒ c. It is pseudonymous ✓
- ☐ d. Its transactions are unlinkable

Your answer is correct.

正解:

It is pseudonymous

問題 11

不正解

0.00 / 6.00

Which is true about mining pools

- ☒ a. Pools contribute to decentralization because amateur individuals cannot compete ASICs but they can combine their power in pools
- ☐ b. In reality, a pool member can easily leave the pool anytime
- ☐ c. Pool mechanism increases the variance in finding solutions increasing the chance to find more blocks
- ☐ d. System upgrade is made easier

Your answer is incorrect.

正解:

System upgrade is made easier

問題 12

不正解

0.00 / 6.00

Which is true?

- ☐ a. Bitcoin's puzzle is not memory hard
- ☐ b. We don't know any puzzle to be memory hard in solving but memory easy in verifying
- ☒ c. A cryptocurrency with a memory-hard and memory-bound puzzle is ASIC resistant
- ☐ d. If we have a memory hard puzzle, we don't need powerful processors

Your answer is incorrect.

正解:

Bitcoin's puzzle is not memory hard

問題 13

不正解

0.00 / 6.00

Which is true?

- ☐ a. SHA-256 accepts fixed size input but applying Merkle-Damgard transformation, it can be used for cryptocurrency
- ☐ b. SHA-256 accepts fixed size input, so it can never be used for cryptocurrency
- ☐ c. SHA-256 is not collision-resistant but applying Merkle-Damgard transformation, it can be used for cryptocurrency
- ☒ d. SHA-256 accepts any arbitrary size input ✖

Your answer is incorrect.

正解:

SHA-256 accepts fixed size input but applying Merkle-Damgard transformation, it can be used for cryptocurrency

問題 14

不正解

0.00 / 6.00

Which is true about the anonymity of Bitcoin

- ☒ a. Minimizing the taint score implies a better anonymity ✖
- ☐ b. Side channels are good for deanonymization
- ☐ c. Unlinkability should be defined with respect to any general adversary
- ☐ d. Pseudonymity implies unlinkability

Your answer is incorrect.

正解:

Side channels are good for deanonymization

問題 15

不正解

0.00 / 6.00

Which is true about Bitcoin

- ☐ a. Due to imperfections in the network, latency, etc., less than 51% of the hash rate can be sufficient to hack
- ☒ b. Coins are fungible ✖
- ☐ c. Miners check all fields of a transaction to verify it
- ☐ d. History of coins does not matter

Your answer is incorrect.

正解:

Due to imperfections in the network, latency, etc., less than 51% of the hash rate can be sufficient to hack

問題 16

不正解

0.00 / 8.00

What is the core reason that ASIC resistance honey-moon took longer for Litecoin than that of Bitcoin?

- ☐ a. Bitcoin was launched earlier
- ☒ b. In Litecoin, every new block is found in 2.5 mins, while in 10 mins. in Bitcoin ✖
- ☐ c. Bitcoin has always been more popular
- ☐ d. Memory technology advances slower than processor technology

Your answer is incorrect.

正解:

Memory technology advances slower than processor technology

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