1. In a soft fork, structures that were invalid under the old rules will be ___ under the new rules. In a hard fork, structures that were invalid under the old rules will be ___ under the new rules.
A. invalid invalid
B. valid valid
C. invalid valid
D. valid invalid
Answer: C

2. [True/False] An SPV node validates transactions.
Answer: False

3. [True/False] An SPV node needs to download all block headers, selected transactions and Merkle proofs.
Answer: True

4. [True/False] An full node needs to download all block headers, all transactions and Merkle proofs.
Answer: False (no need to download Merkle proof).

5. Bitcoin mining difficulty will be changed every ___ blocks.
A. 25
B. 10
C. 1024
D. 2016
Answer: D

6. What is the difference between Anonymity and Pseudonymity? use one word to describe.

Answer: Linkability

7. What defends against linking attack:
A. Stronger hash algorithm
B. Using Mixing service
C. Increase hardness
D. Add Bloom filter
Answer: B

8. [True/False] Proof-of-work is important to prevent sybil attacks on the Bitcoin blockchain
Answer: True

9. Which of the following(s) does NOT break anonymity:
A. In a service with a single mixer, the mixer discloses the linkage
B. Mix a group of transactions with different values

C. In a service with multiple mixers, one mixer discloses the linkage
D. Mix a group of transactions with the same values

Answer: C, D

10. [True/False] CoinJoin is a single Bitcoin transaction encoding multiple inputs/outputs.
True

11. [True/False] 51% attacks are difficult because an adversary would need to control more than half of the nodes on the Bitcoin network.
Answer: true

12. Which part of block header is the solution to the mining “puzzle”?
A. Merkle root
B. Block hash
C. Nonce
D. previous block’s hash

Answer: C