

BLOCKCHAIN PROFESSIONAL CERTIFICATE – BCPC

Sample Exam (V092021)

1. Who coined the term fourth industrial revolution?
 - a. Klaus Schwab
 - b. Jeff Sutherland
 - c. Satoshi Nakamoto
 - d. Bill Gates

2. In the centralized ledger model:
 - a. The parties do not maintain local records of the transaction
 - b. The record and the transactions are only one truth among all the parties
 - c. There is a traditional central body that controls all the transactions and records
 - d. The intermediaries make the parties to have different transaction records

3. Which definition is correct?
 - a. Blockchain is a shared, non-programable, verifiable, and cryptographically safe ledger, that generates trust and cannot be controlled by any user
 - b. Blockchain is a ledger of shared transactions among the parties in a network, which is controlled in all the instances by a unique central authority
 - c. Blockchain is a distributed ledger of transactions with immutable, security, transparency, and pseudo-anonymity characteristics
 - d. In essence, Blockchain is an information digital database that resides in a unique location of internet

4. Which are the three following attributes of Blockchain?
 - a. Immutable, faster settlement, auditable
 - b. Faster settlement, centralized, immutable
 - c. Consensus, analytic, accurate
 - d. None of the above

5. According to the Byzantine Generals Problem, first proposed by Marshall, Robert Shostak and Leslie Lamport in 1982. Blockchain does not solve the double transactional spending?
 - a. True
 - b. False

6. According to Blockchain evolution, the deployment of Dapps is part of:
 - a. Blockchain 2.0
 - b. Blockchain 1.0
 - c. Blockchain 3.0
 - d. Blockchain 4.0

7. In the Blockchain 2.0 the focus was on the implementation of technology in sectors such as government, health, science, culture, amongst others.
 - a. True
 - b. False

8. The statement: “The Blockchain 3.0 includes Bitcoin 2.0 with its corresponding protocols, as well as the entry to the Smart Contracts, Smart Property, Dapps, DAOs and DACs” is
 - a. True
 - b. False

9. What was Ethereum when it emerged?
 - a. An infrastructure known as strong and solid because of its scripts system and a “turing complete” platform
 - b. An infrastructure known as strong and solid because of its scripts system and a Merkle complete platform
 - c. A Blockchain infrastructure known to be strong and solid of its scripts systems and a Merkle complete platform
 - d. None of the options

10. Smart networks comprehend the Blockchain 3.0
- True
 - False
11. A Smart Contract is not:
- An executable code to allow the execution of predefined processes
 - A way to make agreements between parties in the network
 - A contract that is always legal and mandatory to be able to use Blockchain
 - An element that is executed on a Blockchain layer that must have terms and conditions, a subject and digital signature
12. Which of the followings are a category of the DApps?
- DApps manage money; 2. DApps that manage semi-financial tasks; 3. DApps that manage distributed information; 4. Dapps that manage tasks focused solely on governance
- 1 and 2 are correct
 - 1 and 3 are correct
 - 2 and 4 are correct
 - 1 and 4 are correct
13. The DAOs are Smart Contracts supported by algorithm to execute decisions that require to be supplied information without a hierarchical management:
- True
 - False
14. From its inception Ethereum arrived being Blockchain 4.0
- True
 - False
15. Why the outputs in the Blockchain transactions add slightly more than what the inputs add up?
- This is due to the error percentage of transactions performed in Blockchain
 - There is no difference between the outputs and inputs
 - This is because there is a transaction fee involved in the operation
 - None of the options

16. Which of the following block types is NOT one that actually exists in a Blockchain network?
- a. Umer Block
 - b. Stale Block
 - c. Genesis Block
 - d. Merkle Block
17. In mining, when somebody is successfully mining a block while other miners work with their own versions of similar blocks, it is understood that the first miner has blocks that are _____:
- a. Genesis
 - b. Merkle
 - c. Stale
 - d. Orphans
18. Within the information compilation part of the block header, which one has the header hash of the previous block?
- a. Difficulty Objective
 - b. ID from the previous block
 - c. Time Stamp
 - d. Software version
19. In which of the following elements data alteration reflects on Blockchain?
- a. The genesis block
 - b. The hash
 - c. The Merkle tree
 - d. None of the options

20. The consensus algorithms are NOT:
- The medium through which transparency or an error-free system is achieved
 - Binary algorithms and their breakdown allow us to find the underlying data
 - The mechanism through which Blockchain is a universal, permanent, continuous, auditable, repository, among other characteristics
 - Every process performed within a distributed system by a node to reach a unique agreement of unique value for acceptable data
21. Which of the following is not a consensus type?
- Proof of Stake
 - Proof of Work
 - Proof of Activity
 - Proof of Incinerate
22. Which is a correct statement about the PoS?
- 50% of ownership of all the network crypto assets is needed to add malicious blocks
 - There is competition so that the block creator is selected by an algorithm
 - In this consensus economic involvement is the only criterion
 - None is correct
23. Soft forks are:
- Permanent
 - They have both new and old rules
 - Both chains maintain a similar history before the fork
 - None of the options
24. Permissioned Blockchain is needed when:
- Highly efficient transactions are required, also access to reading and writing
 - No need to control access for Reading, writing and efficient transactions
 - It does not need to use permissioned Blockchains
 - It needs to control data analytics

25. Which is not an adequate protocol to deploy a Blockchain project?
- a. Cloud provider
 - b. Complexity
 - c. Road map
 - d. Consensus algorithm
26. When choosing a protocol to deploy a Blockchain Project it must be considered velocity, access, privacy, and cloud region
- a. True
 - b. False
27. Ethereum is a private permissioned Blockchain
- a. True
 - b. False
28. Which of the following enterprise Blockchain protocols is supported by IBM, Intel, SAP, CISCO, Daimler and AmEX?
- a. Hyperledger
 - b. IOTA
 - c. Bitcoin
 - d. Ethereum
29. It is optional for the enterprise Blockchains that once transactions are confirmed these cannot be reversed
- a. True
 - b. False
30. Data redundancy and data version duplicates for each organization is a problem that could arise from going from a _____ data model to a _____ model
- a. Centralized, traditional distributed
 - b. Centralized, decentralized
 - c. Centralized, distributed consortium
 - d. Decentralized, centralized

31. Blockchain as consensus systems of multiple parties as utilization represents:
- A clear approach to gradually distribute control through time
 - A clear and gradual approach for control centralization through time
 - A clear and gradual approach for control decentralization through time
 - A clear and immediate approach for control distribution
32. Within the Hyperledger frameworks some of the ones that can be found are the following:
- Fabric, Burrow, Indy and Iroha
 - Fabric, Butcher, Indy and Iroha
 - Fabric, Burrow, Indiana and Iroha
 - Fabric, Burrow, Carter and Iroha
33. A difference between Blockchain and DLT is that the DLT is fully distributed in terms of data visibility to all the parties
- True
 - False
34. The application, network and protocol layers are attributed to:
- DLT
 - Consensus
 - Smart Contract
 - Bitcoin
35. Application providers represent the entities that:
- Create value for end-users through applications
 - Create value for initial users through applications
 - Create value for end-users through Smart Contracts
 - Create value for initial users through Smart Contracts

36. The Smart Contracts are

- a. Executable code in Blockchain or similar infrastructures that allow a transparent execution of predefined processes based on agreements among different parties without involving a trusted third-party
- b. Executable code in Blockchain or similar infrastructures that allow a transparent execution of predefined processes based on agreements among different parties involving a trusted third-party
- c. Executable code solely in Blockchain that allows a transparent execution of predefined processes based on agreements among different parties without involving a trusted third-party
- d. None of the options

37. Ethereum, Corda and Quorum use Smart Contracts

- a. True
- b. False

38. The ledger is that database where safely and immutably it will be stored that which will update the Smart Contract execution

- a. True
- b. False

39. The result of the consensus in Blockchain is a forecast performed by the IA.

- a. True
- b. False

40. The levels of value interconnection, market agreements and resources' services are those considered in an organization that is looking for implementing:

- a. Smart Contracts
- b. Blockchain
- c. Artificial Intelligence
- d. Big Data

ANSWERS

- | | |
|-------|-------|
| 1. A | 21. D |
| 2. C | 22. D |
| 3. C | 23. D |
| 4. A | 24. A |
| 5. B | 25. A |
| 6. A | 26. A |
| 7. B | 27. B |
| 8. B | 28. A |
| 9. A | 29. B |
| 10. B | 30. A |
| 11. C | 31. A |
| 12. A | 32. A |
| 13. A | 33. B |
| 14. B | 34. A |
| 15. D | 35. A |
| 16. D | 36. A |
| 17. C | 37. A |
| 18. B | 38. A |
| 19. B | 39. B |
| 20. B | 40. B |