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| **P.V.P Siddhartha Institute of Technology** | | | | | | | | | | | | | | | | | | | | | | | | | **Signature of Invigilator with date:** | | **Marks Obtained:** | |
| **Department of Computer Science and Engineering** | | | | | | | | | | | | | | | | | | | | | | | | |
| **Course: B.Tech** | | | | **Year: III** | | | | | | **Semester: II** | | | | | | | **Objective: I** | | | | | | | |
| **Regulation:PVP20** | | | | **Maximum Marks:10Marks** | | | | | | | | | | | | | | | **Session: F.N** | | | | | |
| **A.Y:2024-25** | | | | **Date:23/01/25** | | | | | | | | **Duration: 20 min** | | | | | | | | | | | | |
| **Subject Code: 20CS4601C** | | | | | | | | | **Subject Name: Block Chain Technology** | | | | | | | | | | | | | | | | | | | |
| **Registered Number:** | | | | | | | | | | | | | | | | | | **Name:** | | | | | | | | | | |
| **Answer all the Questions. Each Question carries ½ Mark 20×½ M =10M** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **S.No** | **Question** | | | | | | | | | | | | | | | | | | | | | | | | | **CO** | **Level** | **Answer** |
| **1.** | In a Blockchain \_\_\_\_\_\_ tree stores all the transactions in a block by producing a digital finger print of the entire set of transactions. | | | | | | | | | | | | | | | | | | | | | | | | | **CO1** | **L1** |  |
| a) Merkle | | | | b) Binary | | | | | | | | | | c) AVL | | | | | d) Red Black | | | | | |
| **2.** | Blockchain is a type of: | | | | | | | | | | | | | | | | | | | | | | | | | **CO1** | **L2** |  |
| a) Client server | | b) Distributed ledger technology | | | | | | | | | | | c) Centralized ledger technology | | | | | | | | d) Physical ledger | | | |
| **3.** | Identify one of the types of blockchain network | | | | | | | | | | | | | | | | | | | | | | | | | **CO1** | **L2** |  |
| a) Open Blockchain network | | | | b) Constraint Blockchain Network | | | | | | | | | c) Private Blockchain Network | | | | | | d) Restricted Blockchain Network | | | | | |
| **4.** | What does the block in the blockchain contain | | | | | | | | | | | | | | | | | | | | | | | | | **CO1** | **L1** |  |
| a) Transaction data | | | | b) Timestamp | | | | | | | | | c) Hash Point | | | | | | d) All | | | | | |
| **5.** | Smart Contracts of Ethereum opened up the possibility of a \_\_\_\_\_\_\_\_\_\_\_\_ consensus mechanism | | | | | | | | | | | | | | | | | | | | | | | | | **CO1** | **L1** |  |
| a) Proof-of-Stake (PoS) | | | | b) Proof-of-Work (PoW) | | | | | | | | | c) Proof-of-Authority (PoA) | | | | | | | d) RAFT | | | | |
| **6.** | In blockchain concept, a \_\_\_\_\_\_\_\_\_\_\_\_ is an electronic device (computers, mobile devices, servers, etc.) that is connected to the internet. | | | | | | | | | | | | | | | | | | | | | | | | | **CO1** | **L2** |  |
| a) Blockchain | | | | b) Node | | | | | | | | | c) Ledger | | | | | | | d) E-wallet | | | | |
| **7.** | What is the name of the first block in a blockchain | | | | | | | | | | | | | | | | | | | | | | | | | **CO1** | **L1** |  |
| a) Block one | | | | b) Origin Block | | | | | | | | | c) Genesis Block | | | | | | | | | d) None | | |
| **8.** | What are the pillars of blockchain technology | | | | | | | | | | | | | | | | | | | | | | | | | **CO1** | **L1** |  |
| a) Transparency | | | | | | b) Immutability | | | | | | | | | c) Decentralization | | | | | | | | d) All | |
| **9.** | Can blockchain technology offer access to financial transactions like banks without any intermediaries | | | | | | | | | | | | | | | | | | | | | | | | | **CO1** | **L2** |  |
| a) True | | | | | | | | | | | | | b) False | | | | | | | | | | | |
| **10.** | What is a dApp? | | | | | | | | | | | | | | | | | | | | | | | | | **CO1** | **L1** |  |
| a) a type of crypto currency | | | | b) Decentralized Application | | | | | | | | | | c) Distributed Application | | | | | | | | d) None | | |
| **11.** | What is the incentive for miners to validate transactions | | | | | | | | | | | | | | | | | | | | | | | | | **CO1** | **L2** |  |
| a) Appreciation of the community | | | | | | | b) Nonce | | | | | | c) Block rewards | | | | | | d) Additional memory | | | | | |
| **12.** | What is the security incident when attackers gain control over the blockchain network resources | | | | | | | | | | | | | | | | | | | | | | | | | **CO1** | **L1** |  |
| a) Reentrancy attack | | | | b) Invasion attack | | | | | | | | | c) Brute force attack | | | | | | d) 51% attack | | | | | |
| **13.** | What is Proof of Stake? | | | | | | | | | | | | | | | | | | | | | | | | | **CO1** | **L2** |  |
| a) Consensus mechanism | | | | b) Certificate required for blockchain usage | | | | | | | | | c) Method for creation of private keys | | | | | | d) Password for accessing the blockchain platform | | | | | |
| **14.** | What does P2P stand for? | | | | | | | | | | | | | | | | | | | | | | | | | **CO1** | **L1** |  |
| a) Password to Password | | | | b) Peer to Peer | | | | | | | | | c) Product to Product | | | | | | d) Private Key to Public Key | | | | | |
| **15.** | The currency used by Lisk is called | | | | | | | | | | | | | | | | | | | | | | | | | **CO1** | **L1** |  |
| a) Safecoin | | | | b) Ether | | | | | | | | c) LSK coin | | | | | | | d) Rise | | | | | |
| **16.** | What is a miner? | | | | | | | | | | | | | | | | | | | | | | | | | **CO1** | **L2** |  |
| a) A type of blockchain | b) An algorithm that predicts the next part of the chain | | | | | | | | | c) A person doing calculations to verify a transaction | | | | | | | | | d) Computers that validate and process blockchain transactions | | | | | |
| **17.** | \_\_\_\_\_\_\_refers to a type of cryptography where the key that is used to encrypt the data is the same one that is used for decrypting the data. | | | | | | | | | | | | | | | | | | | | | | | | | **CO1** | **L2** |  |
| a) Symmetric cryptography | | | | | | | | | | | | | b) Asymmetric cryptography | | | | | | | | | | | |
| **18.** | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the assurance that information is only available to authorized entities. | | | | | | | | | | | | | | | | | | | | | | | | | **CO1** | **L1** |  |
| a) Confidentiality | | | | | b) Integrity | | | | | | | | c) Authentication | | | | | | d) Non Repudiation | | | | | |
| **19.** | What is the purpose of a nonce? | | | | | | | | | | | | | | | | | | | | | | | | | **CO1** | **L2** |  |
| a) Follows nouns | | | | b) A hash function | | | | | | | | | c) Prevents double spending | | | | | | d) Sends information to the blockchain network | | | | | |
| **20.** | An example of Symmetric Cryptography | | | | | | | | | | | | | | | | | | | | | | | | | **CO1** | **L2** |  |
| a) DES | | | | b) AES | | | | | | | | | c) IDEA | | | | | | | | | d) All | | |