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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: II** |
| **Regulation:PVP20** | **Maximum Marks:10Marks** | **Session: F.N** |
| **A.Y:2024-25** | **Date:27/03/25** | **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.** | Bitcoin is a | **CO1** | **L1** |  |
| a) protocol | b) digital currency | c) platform | d) all |
| **2.** | Before verification and inclusion in block, the transaction are placed in a special memory buffer called | **CO1** | **L1** |  |
| a) Field | b) Gas | c) Counter | d) Transaction Pool |
| **3.** | The transaction data structure contains: | **CO1** | **L1** |  |
| a) Version number | b) Input counter | c) Lock time | d) all |
| **4.** | \_\_\_\_\_\_\_\_is used to generate public and private key pairs in the Bitcoin network. | **CO1** | **L1** |  |
| a) TEDA | b) DES | c) AES | d) ECC |
| **5.** | The standard transaction types are | **CO1** | **L1** |  |
| a) Pay to Public Key Hash (P2PKH) | b) Pay to Script Hash (P2SH) | c) MultiSig (Pay to MultiSig) | d) all |
| **6.** | This is an arbitrary number that miners change repeatedly to produce a hash that is lower than the difficulty target.. | **CO1** | **L1** |  |
| a) Gas | b) Messages | c) Nonce | d) Call |
| **7.** | \_\_\_\_\_\_ are executed locally on a node VM and do not result in any state change because they are never mined. | **CO1** | **L1** |  |
| a) Nonce | b) Gas | c) Call | d) Messages |
| **8.** | This element of transaction is a substate that contains the list of accounts (if any) that are disposed of after the transaction executes. | **CO1** | **L1** |  |
| a) Log series | b) Touched accounts | c) Suicide set | d) None |
| **9.** | \_\_\_\_\_\_\_is a novel consensus algorithm that allows a node to be selected randomly based on the time that the node has waited before proposing a block | **CO1** | **L1** |  |
| a) Fork | b) ChainCode | c) PoET | d) None |
| **10.** | \_\_\_\_\_\_\_\_represent the smallest unit of data that represent a financial agreement. | **CO1** | **L1** |  |
| a) Transactions | b) Flows | c) State objects | d) Consensus |
| **11.** | A bitcoin address is created by taking the corresponding public key of a private key and hashing it twice, first with the \_\_\_\_\_\_\_ algorithm and then with \_\_\_\_\_\_. The resultant 160-bit hash is then prefixed with a version number and finally encoded with a \_\_\_\_\_encoding scheme. | **CO1** | **L1** |  |
| a) AS400, TEDA, Base54 | b) SHA-256, RIPEMD-160, Base58Check | c) DES, TEDA, Base58Check | d) SHA-256, AES, ASCII |
| **12.** | A \_\_\_\_\_\_\_\_ is a secure and unstoppable computer program representing an agreement that is automatically executable and enforceable. | **CO1** | **L1** |  |
| a) Transaction | b) Smart Contract | c) Lease | d) Gas |
| **13.** | A Ricardian contract can be represented as a tuple of three objects, namely | **CO1** | **L1** |  |
| a) Phrase, Points, and Plurals | b) Prose, Parameters, and Code | c) Documents, Opinions, and Objections | d) Debts, Gas, and Conclusions |
| **14.** | \_\_\_\_are the accounts that have code associated with them along with the private key. | **CO1** | **L1** |  |
| a) Externally Owned Accounts (EOAs) | b) Contract Accounts (CAs) | c) Berger Accounts(BAs) | d) None |
| **15.** | A measure of computational effort required to execute a transaction or contract is called \_\_\_\_\_ | **CO1** | **L1** |  |
| a) Nonce | b) Gas | c) Fuel | d) None |
| **16.** | Which Layer in Blockchain IoT Architecture is responsible for data processing and analytics | **CO1** | **L1** |  |
| a) Managaement Layer | b) Application Layer | c) Blockchain Layer | d) Device Layer |
| **17.** | This utility implements the Interledger protocol, which facilitates interoperability across different distributed and non-distributed ledger networks. | **CO1** | **L1** |  |
| a) Quilt | b) Composer | c) Cello | d) Explorer |
| **18.** | \_\_\_\_\_ is a component of Hyperledger Fabric blockchain that allow the flow of confidential transactions between different parties on the network. | **CO1** | **L1** |  |
| a) Channels | b) Transactions | c) MSP | d) Clients |
| **19.** | \_\_\_\_\_\_\_\_is a modular component of Hyperledger Fabric blockchain that is used to manage identities on the blockchain network | **CO1** | **L1** |  |
| a) Membership Service Provider  | b) Transactions | c) World state database | d) Peers |
| **20.** | Transaction fees are calculated by the formula: | **CO1** | **L1** |  |
| a) sum(inputs) - sum(outputs) | b) sum(inputs) + sum(outputs) | c) sum(inputs) \* sum(outputs) | d) sum(inputs) / sum(outputs) |