Department of Computer Science and Engineering-SVNIT, Surat

Class Test

B Tech IV(CSE) - VII Semester

Course: Blockchain Technology (CS467)

Date : 7-Oct-2022 Admission Number U19CS012 Marks: 30

1	Merkle Tree is also known as? A. Hash Tree B. Trees structure C. leaf node D. non-leaf node
2	Final hash which is included in block header is called the? A. Merkle Root B. Root Hash C. Both A and B D. None of the above
3	The Merkle Trees are constructed in a? A. bottom-up approach B. top-down approach C. Both A and B D. None of the above
4	Which of the following uses Merkle Trees structure? A. Bitcoin B. Ethereum C. Both A and B D. None of the above
5	A Merkle tree stores all the transactions in a block by producing a digital fingerprint of the entire set of transactions. A. TRUE B. FALSE C. Can not say C. Can be true or false D. Can not say
6	Merkle trees are in a binary tree? A. TRUE B. FALSE C. Can be TRUE or FALSE
7	Merkle tree is generalization of _____ A. Heap B. Hash list C. BST D. B – tree
8	What will be the height of the Merkle tree with branching factor 2 and with 8 records? A. 3 (Root-0) B. 5 C. 4 D. 6
9	If end to end connection is done using symmetric key at a network or IP level, and if there are N hosts, then what is the number of keys required? A. N(N-1)/2 B. N C. N(N+1)/2 D. N/2
10	Communication between end systems is encrypted using a key, often known as A. temporary key B. line key C. section key D. session key
11	Which is the largest disadvantage of the symmetric Encryption? A. More complex and therefore more time-consuming calculations.

	B. Problem of the secure transmission of the Secret Key. C. Less secure encryption function. D. Isn't used any more.
12	Which is the principle of the encryption using a key? A. The key indicates which funcion is used for encryption. Thereby it is more difficult to decrypt a intercepted message as the function is unknown. B. The key contains the secret function for encryption including parameters. Only a password can activate the key. C. All functions are public, only the key is secret. It contains the parameters used for the encryption resp. decryption. D. The key prevents the user of having to reinstall the software at each change in technology or in the functions for encryption.
13	Private key algorithm is used for _____ encryption and public key algorithm is used for _____ encryption. A. Messages, session key B. Session key, messages C. Can be used for both D. None of the mentioned
14	Which algorithm can be used to sign a message? A. Public key algorithm B. Private key algorithm C. Public and private key algorithm D. None of the mentioned
15	A cryptographic hash function has variable output length. A. TRUE B. FALSE
16	Which of the following keys are known only to the owner? A. public key B. protected key C. Private key D. unique key
17	Examples of hash functions are A. MD5 B. SHA-1 C. Both A and B D. None of the above
18	To verify a digital signature we need the A. Sender's Private key B. Sender's Public key C. Receiver's Private key D. Receiver's Public key
19	_____ involves trying every possible key until a proper translation of cipher text into plain text is obtained. A. Man in the middle attack B. Chosen Plain text Attack C. Brute Force attack D. None of these
20	In Digital Signature, there is _____ relationship between signature and message. A. Many to one B. One to many C. Many to many D. One to one
21	When a Hash function is used to provide message authentication, the hash function value is referred to as A. Message digest B. Message authentication code C. Hashed based MAC D. None of the above

	SA _____ be used for digital signature. A. Must not C. can B. Cannot D. should not	
3	A digital signature is A. a bit string giving identity of a correspondent B. A unique identification of a sender C. an authentication of an electronic record by trying it uniquely to a key only a sender knows D. an encrypted signature of sender	
24	A digital signature is a mathematical technique which validates? A. Integrity C. Authenticity B. Non-repudiation D. All of the above	
25	The key of a pair used to create a digital signature is known as_____ A. public key C. creator key B. private key D. secret key	
26	Blockchain has ____ versions. A. 2 C. 4 B. 3 D. 5	
27	What does a block in a Blockchain have? A. Header & Digital ledger C. Transactions and bitcoins B. Bitcoins & Input D. Header & Transaction	
28	What does UTXO stand for? A. Unspent Trade Offer B. Unspent Transaction xeroxed Output C. Unique Transaction Offer D. Unspent Transaction Output	
29	Transaction 0 in every block of the bitcoin blockchain_____. A. Is for paying the miner fees B. Does not have any input UTXO C. Is called the coinbase transaction D. All of the above	
30	___ hosts the software needed for transaction initiation, validation, mining, block creation, and smart contract execution. A. External Account C.ethereum full node B. EVM D. smart Contract	