

11. The most common authentication mechanism used in operating systems.
 a) Digital signature C
 b) Iris recognition
 c) Password comparison
 d) Face recognition
12. A security tool by which the executable memory is separated from data memory for each user, making it harder for attacks to overwrite code.
 a) Two pairs of base/bounds registers A
 b) Fence register
 c) Base/bounds registers
 d) Fixed fence
13. A type of countermeasures that can be used for the system recovery in case an intrusion does succeed.
 a) Detection B
 b) Response
 c) Prevention
 d) Deflection
14. Time-based authentication can be implemented through
 a) Fingerprint B
 b) Tokens
 c) Passwords
 d) Security questions
15. Which of the following techniques helps in implementing the authentication?
 a) Symmetric encryption
 b) Asymmetric encryption B
 c) DES
 d) AES
16. A measure by which the DBMS ensures that the value of a specific data field is changed only by authorized parties.
 a) Database integrity
 b) Element accuracy D
 c) Database Reliability
 d) Element integrity
17. Which of the following statements is NOT true?
 a) Law is applied to everyone
 b) Ethics are enforced by courts
 c) Ethics are chosen personally
 d) Ethics are interpreted by each individual
18. A security tool by which the program is divided into separate logical pieces or parts, and each part has its own set of access rights.
 a) Sandbox C
 b) Paging
 c) Segmentation
 d) Tagged Architecture
19. In digital signature technique, the receiver can verify the signature of the sender using
 a) The sender's private key
 b) The receiver's private key C
 c) The sender's public key
 d) The receiver's public key
20. A theory of ethics that is concerned with the consequences of actions to individual and society.
 a) Rule-deontology
 b) Teleological
 c) The right to privacy
 d) Universal natural rules

- Signature-based IDS
2. A DoS attack by which the attacker sends broadcast ECHO request to the network with spoofed victim's address as source address. **B**
- a) Teardrop Attack
 - b) Anomaly-based IDS
 - c) SYN Flood attack
 - d) Behavior-based IDS
3. A code testing for verifying that the system components work together. **D**
- a) Regression testing
 - b) Smurf attack
 - c) Penetration testing
 - d) TCP Session Hijacking
4. Attack on password where the attacker tries all possible combinations of a password. **A**
- a) Brute-force attack
 - b) Unit testing
 - c) Inferring likely passwords
 - d) Integration testing
5. _____ is considered a security goal for ensuring that the transmitted message between sender and receiver is preserved intact, and it is modified only by authorized parties. **A**
- a) Integrity
 - b) Dictionary attack
 - c) Availability
 - d) Rainbow tables
6. One of the required criteria for a cryptographic hash function. **A**
- a) It is infeasible to start with a digest value and infer the input
 - b) It is computationally easy to start with a digest value and infer the input
 - c) It is feasible to find a pair of inputs that produce the same digest
 - d) It is possible to find many data objects that map to the same hash
7. Regarding database security, what is the appropriate suppression technique when a small number of people make up a large proportion of a category? **D**
- a) Random sample
 - b) Swapping
 - c) Random data perturbations
 - d) Blocking small sample sizes
8. In DES algorithm, at each round the 32-bits right half of data is _____ **D**
- a) Expanded to 56-bits by repeating certain bits
 - b) Reduced to 16-bits by dropping parity bits
 - c) Replaced with 64-bits using S-boxes
 - d) Expanded to 48-bits by repeating certain bits
9. Cybercrime is difficult to prosecute because _____ **B**
- a) Lack of physical evidence
 - b) It is depletable
 - c) It is transferred tangibly
 - d) Domain understanding by courts
10. Operating system can realize the access control through _____ **B**
- a) Canary value
 - b) Reference monitor
 - c) Null-terminated string
 - d) RootKit
 - e) _____