



قائمة الاسئلة

(40) الامتحان درجة - المعلومات وتكنولوجيا الحاسوب كلية - الكل - سيبراني أمن- الثالث المستوى- mobile and wireless security

- 1) What is the key difference between a passive and an active attack?
 - 1) - A) Passive attacks modify data, while active attacks only observe data.
 - 2) + B) Passive attacks observe data, while active attacks modify or disrupt data.
 - 3) - C) Both involve modifying data.
 - 4) - D) Neither involves modifying data.
- 2) Which of the following is NOT a key component of Wireless Networks?
 - 1) - A) Access Point
 - 2) - B) Router
 - 3) + C) Ethernet Cable
 - 4) - D) Wireless Client
- 3) Which of the following is NOT a key security objective in Wireless Networks?
 - 1) - A) Confidentiality
 - 2) - B) Integrity
 - 3) + C) Accessibility
 - 4) - D) Availability
- 4) Which of the following is a Bluetooth security vulnerability?
 - 1) - A) Strong encryption by default
 - 2) + B) Man-in-the-middle attack
 - 3) - C) No risk of unauthorized access
 - 4) - D) Bluetooth does not support wireless connections
- 5) Which of the following is a procedure for physically securing WLAN?
 - 1) - A) Placing access points in open areas
 - 2) - B) Using strong passwords only
 - 3) + C) Restricting access to network equipment
 - 4) - D) Disabling encryption
- 6) What is a key difference between SSL VPN and IPSec VPN?
 - 1) + A) SSL VPN encrypts only specific applications, while IPSec VPN encrypts entire networks.
 - 2) - B) IPSec VPN is faster than SSL VPN in all cases.
 - 3) - C) SSL VPN requires complex hardware, while IPSec VPN does not.
 - 4) - D) Both provide the same level of security and functionality.
- 7) What does EAP stand for in network authentication?
 - 1) - A) Enhanced Authentication Protocol
 - 2) + B) Extensible Authentication Protocol
 - 3) - C) Encrypted Access Protection
 - 4) - D) External Access Process
- 8) Which of the following is a key component of IPSec?
 - 1) - A) Firewall
 - 2) - B) VPN Gateway
 - 3) + C) Authentication Header (AH)
 - 4) - D) Wi-Fi Router
- 9) Which of the following should be included in a Wireless Security Policy?
 - 1) - A) Password complexity requirements
 - 2) - B) Allowed and restricted devices
 - 3) - C) Encryption methods used
 - 4) + D) All of the above



- 10) What is the difference between Circuit Switching and Packet Switching?
- 1) ☒ A) Circuit switching establishes a dedicated path, while packet switching sends packets independently.
 - 2) ☐ B) Packet switching establishes a dedicated path, while circuit switching sends packets independently.
 - 3) ☐ C) Both methods establish dedicated paths for data transmission.
 - 4) ☐ D) Neither method is used in modern networking.
- 11) What is the main security vulnerability of 1G cellular networks?
- 1) ☐ A) Strong encryption
 - 2) ☐ B) Limited bandwidth
 - 3) ☒ C) Electronic Serial Number (ESN) cloning
 - 4) ☐ D) Multi-factor authentication
- 12) What component in GSM stores security-related information like the authentication key (KI) and the IMSI?
- 1) ☐ A) Base Station Controller (BSC)
 - 2) ☐ B) Home Location Register (HLR)
 - 3) ☒ C) Subscriber Identity Module (SIM)
 - 4) ☐ D) Equipment Identity Register (EIR)
- 13) Which of the following is NOT a security feature of GSM?
- 1) ☐ A) Authentication of registered subscribers
 - 2) ☐ B) Secure data transfer using encryption
 - 3) ☒ C) Duplicate SIMs allowed on the network
 - 4) ☐ D) Securely stored authentication key (KI)
- 14) In GSM authentication, what algorithm is used to verify the subscriber's identity?
- 1) ☐ A) A5
 - 2) ☒ B) A3
 - 3) ☐ C) A8
 - 4) ☐ D) COMP128
- 15) Why is Temporary Mobile Subscriber Identity (TMSI) used in GSM?
- 1) ☐ A) To encrypt user data
 - 2) ☒ B) To replace IMSI for anonymity
 - 3) ☐ C) To manage network congestion
 - 4) ☐ D) To authenticate mobile stations
- 16) What is an improvement in 3G (UMTS) security over GSM?
- 1) ☐ A) No need for encryption
 - 2) ☒ B) Stronger authentication algorithms
 - 3) ☐ C) Reduced cryptographic key length
 - 4) ☐ D) No encryption used in core networks
- 17) What security feature is introduced in 4G LTE that was not present in GSM?
- 1) ☒ A) Mutual authentication
 - 2) ☐ B) SIM card storage
 - 3) ☐ C) A3 authentication algorithm
 - 4) ☐ D) Circuit-switched calls
- 18) What type of attack targets LTE's lack of integrity protection in AES-CTR encryption?
- 1) ☐ A) Denial of Service (DoS)
 - 2) ☐ B) Crypto-attack
 - 3) ☒ C) aLTER attack
 - 4) ☐ D) SIM swapping
- 19) What is another name for a cellular network?
- 1) ☐ A) Satellite network



- 2) - B) Fiber-optic network
3) + C) Mobile network
4) - D) Bluetooth network
- 20) What was a key feature of 1G cellular networks?
1) - A) Digital communication
2) + B) Only for voice communication
3) - C) High-speed internet
4) - D) Video calling
- 21) Which of the following technologies was introduced in 2G networks?
1) - A) Advanced Mobile Phone System (AMPS)
2) + B) GSM/CDMA/Edge
3) - C) 4G LTE
4) - D) Evolved Packet Core
- 22) What was a major improvement of 3G networks compared to 2G?
1) - A) Analog voice transmission
2) - B) No support for video calling
3) + C) Introduction of UMTS (Universal Mobile Telecommunications System)
4) - D) Limited data services
- 23) What is one of the primary features of 4G LTE networks?
1) - A) Support for analog voice calls
2) - B) Low-speed data transmission
3) + C) HD video streaming
4) - D) Limited user connections
- 24) In 4G LTE architecture, what does the Mobility Management Entity (MME) control?
1) - A) Internet browsing
2) + B) Device authentication and mobility control
3) - C) Video streaming quality
4) - D) Voice call compression
- 25) What is the role of the Packet Data Network (PDN) Gateway (P-GW) in 4G LTE?
1) - A) Managing user identities
2) - B) Handling handovers between networks
3) + C) Providing internet connectivity
4) - D) Encrypting voice calls
- 26) What is the primary purpose of Mobile IP?
1) - A) Allow devices to change IP addresses frequently
2) + B) Ensure seamless and continuous internet connectivity while moving between networks
3) - C) Reduce data consumption in mobile devices
4) - D) Prevent unauthorized network access
- 27) Security audits help organizations?
1) - A) Identify security loopholes
2) - B) Create new security policies
3) - C) Track the effectiveness of security strategies
4) + D) All of the above
- 28) Which of the following is an example of an external security audit?
1) - A) Conducted by the internal IT team
2) + B) Performed by an outside organization
3) - C) Checking employees' computer screens manually
4) - D) Running an antivirus scan
- 29) What is the primary purpose of a security audit?



- 1) - A) To track employee attendance
 - 2) ☒ B) To evaluate an information system's security
 - 3) - C) To monitor financial transactions
 - 4) - D) To install new security software
- 30) Which of the following is a common wireless security auditing tool?
- 1) - A) Microsoft Word
 - 2) ☒ B) Wireshark
 - 3) - C) Google Chrome
 - 4) - D) Adobe Photoshop
- 31) MAC addresses change every time a device connects to a network
- 1) - True
 - 2) ☒ Fales
- 32) Using VPNs over public Wi-Fi improves security
- 1) ☒ True
 - 2) - Fales
- 33) WPA3 is less secure than WPA2.
- 1) - True
 - 2) ☒ Fales
- 34) SSID cloaking completely hides a Wi-Fi network from attackers.
- 1) - True
 - 2) ☒ Fales
- 35) Rogue access points can be used to perform man-in-the-middle attacks
- 1) ☒ True
 - 2) - Fales
- 36) IMSI is a permanent subscriber identity that can never change.
- 1) - True
 - 2) ☒ Fales
- 37) Public key cryptography requires two keys: one public and one private.
- 1) ☒ True
 - 2) - Fales
- 38) Firewalls prevent all cyberattacks.
- 1) - True
 - 2) ☒ Fales
- 39) Security audits help identify weaknesses in a system.
- 1) ☒ True
 - 2) - Fales
- 40) GSM authentication relies on the A3 algorithm
- 1) ☒ True
 - 2) - Fales