ASS22&23

1. What does the "CIA Triad" stand for in cybersecurity?

A) Confidentiality, Integrity, Availability - The "CIA Triad" stands for these three principles in cybersecurity

- 2. Which of the following is NOT a type of threat actor?
 - C) Packet analyzers: cause Packet analyzers are tools, not threat actors
 - 3. In which layer of the OSI model does a firewall primarily operate?
- B) Layer 3 (Network)

Firewalls primarily operate at Layer 3 of the OSI model, filtering traffic based on IP addresses.

- 4. What is a benefit of using a Security Information and Event Management (SIEM) system?
- **B)** It provides real-time analysis of security alerts SIEM systems are designed for real-time security monitoring and analysis.
 - 5. Which protocol is responsible for encrypting web traffic?
- C) HTTPS
 - 6. What is the purpose of a VPN in network security?
- B) To provide secure communication over an untrusted network
 - 7. Which security tool is used for network packet capture and analysis?

8. What is the primary function of an Intrusion Detection System (IDS)?

B) To detect suspicious activities in real-time

IDS is designed to monitor for and detect potential security breaches.

9. Which device is used to segment a network into different broadcast domains?

C) Router

Routers are used to segment networks into different broadcast domains.

10. What kind of attack involves overwhelming a system with traffic to make it unavailable to users?

B) Denial of Service (DoS) attack

11. Which type of malware encrypts files on the victim's computer and demands payment to unlock them?

B) Ransomware

Ransomware encrypts files and demands payment to unlock them.

12. What is the main purpose of cryptographic hashing in cybersecurity?

C) To verify data integrity

Cryptographic hashing is used to ensure the integrity of data by verifying that it has not been altered.

13. Which of the following is a security best practice for managing user accounts?

B) Enabling multi-factor authentication (MFA)

MFA is a best practice for securing user accounts.

14. Which protocol is responsible for network device communication on local networks and translates IP addresses into MAC addresses?

C) ARP

The ARP protocol resolves IP addresses to MAC addresses on local networks.

15. What does a vulnerability assessment primarily identify?

B) Security weaknesses that may be exploited

A vulnerability assessment identifies weaknesses that could potentially be exploited.