CYBS 7357 Lab 07 Quiz

\* Answers are highlighted in yellow

1. Which of the following statements is NOT true of IPsec?

a. IPsec can be used as a VPN service.

b. IPsec can provide authentication but not encryption.

c. IPsec is short for Internet Protocol Security.

d. IPsec authenticates and encrypts data packets.

2. At which layer of the TCP/IP model does IPsec operate?

a. Application

b. Transport

c. Internet

d. Network Access

3. Which of the following is NOT supported by IPsec?

a. Data-origin authentication

b. Data integrity

c. Data confidentiality

d. Data availability

4. Which of the following statements is true regarding key length when configuring a certificate authority (CA) in pfSense firewall?

a. The default key length (in bits) is 1024.

b. The default key length (in bits) is 4096.

c. Keys that are larger than the standard length take more time to process.

d. The larger the key, the less security it offers.

5. When configuring a certificate authority (CA) in pfSense firewall, what is the default Digest Algorithm value?

a. SHA1

b. SHA256

c. 2048

d. 4096

6. When configuring a certificate authority (CA) in pfSense firewall, what does the default Lifetime value refer to?

a. A length of time, in seconds

b. A length of time, in minutes

c. A length of time, in hours

d. A length of time, in days

7. Internet Key Exchange v2 (IKEv2) is an IPsec-based VPN protocol that uses NAT transversal (NAT-T). What is the purpose of NAT-T?

a. It allows IPsec traffic to pass through a NAT server.

b. It defines a long key length for greater security.

c. It limits the amount of traffic that may pass through a VPN server.

d. It allows IKEv2 to use certificates without a public key infrastructure (PKI).

8. When creating a server certificate for an IPsec-based VPN, the Common Name field would ordinarily hold a Fully Qualified Domain Name (FQDN). What other technology is required to use an FQDN in this instance?

a. SHA-1

b. SHA-256

c. A DNS server

d. An email server

9. When enabling IPsec Mobile Client Support for remote VPN users in pfSense firewall, you were instructed to type 172.31.1.0 in the Virtual Address Pool section and select 24 from the subnet drop-down list. What does this step accomplish?

a. Specifies a virtual IPv4 address for clients

b. Specifies a virtual IPv6 address for clients

c. Provides a list of accessible networks to clients

d. Provides a default domain name to clients

10. You are creating a Phase 1 definition for a VPN tunnel in pfSense firewall. Which option in the Proposal section creates a secure tunnel using two-way authentication on both sides of the VPN connection?

a. My identifier > Distinguished name

b. Peer identifier > Any

c. Authentication Method > EAP-MSChapv2

d. My Certificate > IKEv2VPN

11. You are creating a Phase 1 definition for a VPN tunnel in pfSense firewall. Which option in the Proposal section allows connections from any matching client?

a. My identifier > Distinguished name

b. Peer identifier > Any

c. Authentication Method > EAP-MSChapv2

d. My Certificate > IKEv2VPN

12. Which of the following is a type of hashing algorithm?

a. AES-256

b. IKEv2

c. EAP-MSCHAPv2

d. SHA-256

13. Which of the following statements is NOT true of a split tunnel virtual private network (VPN) configuration?

a. Clients keep local traffic on their own network.

b. Clients do not route IPsec traffic through the VPN tunnel.

c. The configuration is optimal for performance.

d. The configuration is less secure than specifying a network address.

14. What is a pre-shared key in a virtual private network (VPN)?

a. A password that is known to both the server and the client

b. A password that is known to the server but not the clients

c. A password that is known to clients but not the server

d. A password that is used once and then discarded

15. Why do you need to configure a pass rule in pfSense firewall when configuring an IPsec VPN?

a. To improve the security of incoming VPN connections

b. To prevent incoming VPN connections from being blocked by the firewall

c. To ensure VPN traffic can be directed to the firewall

d. To ensure VPN traffic uses IPv4

16. Which of the following statements is true when adding a rule in pfSense firewall to allow users the ability to connect with an IPsec VPN?

a. In the Interface box of the Edit Firewall Rule screen, select IKE.

b. In the Protocol drop-down list of the Edit Firewall Rule screen, select none to allow any protocol through the firewall.

c. Select the Add button with the down arrow to add the rule after any existing rules.

d. In the Action drop-down list of the Edit Firewall Rule screen, select Reject to return the packet to the sender if none of the criteria match.

NOTE: the following questions are related to the recent guest speakers.

17. What other language did our guest speaker Charity Wright from Intsights speak?

a. Mandarin.

b. Italian.

c. Polish.

d. Pig Latin.

18. During the table top exercise video at Fidelity, what was the reason for the executive team to be away from the office?

a. Sick from the flu.

b. Planning an acquisition.

c. Volunteering for meals on wheels.

d. In court for insider trading indictment.

19. Where did Jeff Locke say the headquarters of Palo Alto are located?

a. Palo Alto, CA.

b. Frisco, TX.

c. Santa Clara, CA.

d. Austin, TX.

20. Of the companies represented by our guest speakers, which job would you prefer?

a. Intsights Threat Analyst

b. Fidelity SOC Analyst

c. Palo Alto Network Technical Support Analyst

d. Any of Three

NAME:

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