

## CYBER SECURITY

1. \_\_\_\_\_ encompasses spyware, adware, dialers, joke programs, remote access tools, and any other unwelcome files and programs apart from viruses that are designed to harm the performance of computers on your network.
  - a. Spyware
  - b. Adware
  - c. Grayware
  - d. Malware

**Competency:** Computer Attacks (virus, spam, spyware, etc.)

**Task:** Identify basic security risks and issues to computer hardware, software, and data.

2. When the sender and the recipient can transmit data to each other over an unsecured or monitored link by encrypting messages without worrying that their communications are being monitored, it is called:
  - a. authentication
  - b. confidentiality
  - c. integrity
  - d. nonrepudiation

**Competency:** Network Security

**Task:** Explain principles of basic network security (e.g., IP spoofing, packet sniffing, password compromise, and encryption).

3. Which one of the following is a primary mechanism for a malicious code to enter a desktop?
  - a. e-mail messages
  - b. e-mail attachments
  - c. worms
  - d. Trojan horses

**Competency:** E-mail Security

**Task:** Identify common problems associated with electronic communication (e.g., delivery failure, junk mail, fraud hoaxes, and viruses).

4. Networks that allow access to some database materials and e-mail are called:
  - a. campus networks
  - b. trusted networks
  - c. semi-trusted networks
  - d. untrusted networks

**Competency:** Firewalls

**Task:** Distinguish among the following security methods: DMZ (including dual-homed and triple-homed firewalls), VLAN, intranet, extranet, and PKI.

5. Which one of the following is a message signed with a sender's private key that can be verified by anyone who has access to the sender's public key, thereby proving that the sender had access to the private key (and therefore is likely to be the person associated with the public key used), and the part of the message that has not been tampered with.
- Linked Keys
  - Public Key Encryption
  - CryptoSystems
  - Digital Signature

**Competency:** Public Key

**Task:** Distinguish between public key encryption and digital signatures.

6. An individual's \_\_\_\_\_ is unique.
- shoe size
  - hair color
  - fingerprint
  - eye color

**Competency:** Authentication

**Task:** Describe the biometrics authentication method.

7. A \_\_\_\_\_ is a duplicate of some or all of a main database's data stored on a separate computer from the main database.
- database backup
  - data warehouse
  - DFS
  - disk mirror

**Competency:** Disaster Recovery

**Task:** Describe the purpose and characteristics of disaster recovery: backup/restore; offsite storage; hot and cold spares; and hot, warm, and cold sites.

8. A prolonged increase in the voltage level is called a:
- fault
  - sag
  - spike
  - surge

**Competency:** Physical Security

**Task:** Identify and analyze environmental hazards (e.g., fire, flood, moisture, temperature, and electricity,) and establish environmental security controls to protect and restore.

9. What is the default cipher for the IPSec?

- a. PGP
- b. ESP
- c. 3DES
- d. DES-CBC

**Competency:** Cryptography

**Task:** Describe DES (Data Encryption Standards) and explain how it operates.

10. When it comes to magnetic media sanitization, what difference can be made between clearing and purging information?

- a. Clearing renders information unrecoverable against a laboratory attack and purging renders information unrecoverable to a keyboard attack.
- b. Clearing completely erases the media whereas purging only removes file headers, allowing the recovery of files.
- c. Clearing renders information unrecoverable by a keyboard attack and purging renders information unrecoverable against laboratory attack.
- d. They both involve rewriting the media.

**Competency:** Forensics Security

**Task:** Identify recoverable evidence.

## Cyber Security Answer Key

1. C
2. B
3. B
4. C
5. D
6. C
7. B
8. D
9. D
10. C

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