1. During an audit of a telecommunication system, an IS auditor finds that the risk of intercepting data transmitted to and from remote sites is very high. The MOST effective control for reducing this exposure is:

## a. Encryption

- b. Callback modems
- c. Message authentication
- d. Dedicated Leased lines
- 2. A digital signature contains a message digest to:
  - a. Show if the message has been altered after transmission
  - b. Define the encryption algorithm
  - c. Confirm the identity of the originator
  - d. Enable message transmission in a digital format
- 3. Digital signatures require the:
  - a. Signer to have a public key and the receiver to have a private key
  - b. Signer to have a private key and the receiver to have a public key
  - c. Signer and receiver to have a public key
  - d. Signer and receiver to have a private key
- 4. When using public key encryption to ensure confidentiality of data being transmitted across a network:
  - a. Both the key used to encrypt and decrypt the data are public
  - b. The key used to encrypt is private, but the key used to decrypt the data is public
  - c. The key used to encrypt is public, but the key used to decrypt the data is private
  - d. Both the key used to encrypt and decrypt the data are private
- 5. During an audit of an enterprise that is dedicated to e-commerce, the IS manager states that digital signatures are used when receiving communications from customers. To substantiate this, an IS auditor must prove that which of the following is used?
  - a. A biometric, digitized and encrypted parameter with the customer's public key
  - b. A hash of the data that is transmitted and encrypted with the customer's private key
  - c. A hash of the data that is transmitted and encrypted with the customer's public key
  - d. The customer's scanned signature encrypted with the customer's public key

- 6. Email message authenticity and confidentiality is BEST achieved by signing the message using the:
  - a. Sender's private key and encrypting the message using the receiver's public key
  - b. Sender's public key and encrypting the message using the receiver's private key
  - c. Receiver's private key and encrypting the message using the sender's public key
  - d. Receiver's public key and encrypting the message using the sender's private key
- 7. Which of the following effectively verifies the originator of a transaction?
  - a. Using a secret password between the originator and the receiver
  - b. Encrypting the transaction with the receiver's public key
  - c. Using a portable document format (PDF) to encapsulate transaction content
  - d. Digitally signing the transaction with the source's private key
- 8. Which of the following is the MOST effective type of antivirus software to detect an infected application?
  - a. Scanners
  - b. Active monitors
  - c. Hash-based integrity checkers
  - d. Vaccines