

All the Multiple Choice Question and Answer (MCQs) have been compiled from the books of Data Communication and Networking by the well known author behrouz A forouzan.

This Data Communication and Networking – **Network Security** multiple choice questions and answers (MCQ) PDF covers the below lists of topics.

1. Network Security Multiple Choice Question and Answer.

Practice now to sharpen your concept.

1. Message _____ means that the sender and the receiver expect privacy

- A. confidentiality
- B. integrity
- C. authentication
- D. none of the above

2. Message _____ means that the data must arrive at the receiver exactly as sent

- A. confidentiality
- B. integrity
- C. authentication
- D. none of the above

3. Message _____ means that the receiver is ensured that the message is coming from the intended sender, not an imposter

- A. confidentiality

- B. integrity
- C. authentication
- D. none of the above

4. _____ means that a sender must not be able to deny sending a message that he sent.

- A. Confidentiality
- B. Integrity
- C. Authentication
- D. Nonrepudiation

5. _____ means to prove the identity of the entity that tries to access the system's resources.

- A. Message authentication
- B. Entity authentication
- C. Message confidentiality
- D. none of the above

6. A(n) _____ can be used to preserve the integrity of a document or a message.

- A. message digest
- B. message summary
- C. encrypted message
- D. none of the above

7. A(n) _____ function creates a message digest out of a message.

- A. encryption
- B. decryption
- C. hash
- D. none of the above

8. A hash function must meet _____ criteria.

- A. two
- B. three
- C. four
- D. none of the above

9. A _____ message digest is used as an MDC.

- A. keyless
- B. keyed
- C. either (a) or (b)
- D. neither (a) nor (b)

10. To authenticate the data origin, one needs a(n) _____.

- A. MDC
- B. MAC
- C. either (a) or (b)
- D. neither (a) nor (b)

Answer key for MCQ SET- 1	
Q-1	Correct Answer :confidentiality
Q-2	Correct Answer :integrity
Q-3	Correct Answer :authentication
Q-4	Correct Answer :Nonrepudiation
Q-5	Correct Answer :Entity authentication
Q-6	Correct Answer :message digest
Q-7	Correct Answer :hash
Q-8	Correct Answer :three

Q-9	Correct Answer :keyless
Q-10	Correct Answer :MAC

Network Security multiple choice questions and answers MCQ Set-2

- 1. A _____ signature is included in the document; a _____ signature is a separate entity.**
 - A. conventional; digital
 - B. digital; digital
 - C. either (a) or (b)
 - D. neither (a) nor (b)

- 2. Digital signature provides _____**
 - A. authentication
 - B. nonrepudiation
 - C. both (a) and (b)
 - D. neither (a) nor (b)

- 3. Digital signature cannot provide _____ for the message**
 - A. integrity
 - B. confidentiality
 - C. nonrepudiation
 - D. authentication

- 4. If _____ is needed, a cryptosystem must be applied over the scheme**
 - A. integrity
 - B. confidentiality
 - C. nonrepudiation

D. authentication

5. A digital signature needs a(n) _____ system

- A. symmetric-key
- B. asymmetric-key
- C. either (a) or (b)
- D. neither (a) nor (b)

6. A witness used in entity authentication is _____

- A. something known
- B. something possessed
- C. something inherent
- D. all of the above

7. In _____, a claimant proves her identity to the verifier by using one of the three kinds of witnesses

- A. message authentication
- B. entity authentication
- C. message confidentiality
- D. message integrity

8. Password-based authentication can be divided into two broad categories: _____ and _____

- A. fixed; variable
- B. time-stamped; fixed
- C. fixed; one-time
- D. none of the above

9. In _____ authentication, the claimant proves that she knows a secret without actually sending it

- A. password-based
- B. challenge-response
- C. either (a) or (b)
- D. neither (a) nor (b)

10. Challenge-response authentication can be done using _____

- A. symmetric-key ciphers
- B. asymmetric-key ciphers
- C. keyed-hash functions
- D. all of the above

Answer key for MCQ SET- 2	
Q-1	Correct Answer :conventional; digital
Q-2	Correct Answer :both (a) and (b)
Q-3	Correct Answer :confidentiality
Q-4	Correct Answer :confidentiality
Q-5	Correct Answer :asymmetric-key
Q-6	Correct Answer :all of the above
Q-7	Correct Answer :entity authentication
Q-8	Correct Answer :fixed; one-time
Q-9	Correct Answer :challenge-response
Q-10	Correct Answer :all of the above

Network Security multiple choice questions and answers MCQ Set-3

1. A(n) _____ is a trusted third party that assigns a symmetric key to two parties.

- A. KDC
- B. CA
- C. KDD
- D. none of the above

2. A(n) _____ creates a secret key only between a member and the center.

- A. CA
- B. KDC
- C. KDD
- D. none of the above

3. The secret key between members needs to be created as a _____ key when two members contact KDC.

- A. public
- B. session
- C. complimentary
- D. none of the above

4. _____ is a popular session key creator protocol that requires an authentication server and a ticket-granting server.

- A. KDC
- B. Kerberos
- C. CA
- D. none of the above

5. A(n) _____ is a federal or state organization that binds a public key to an entity and issues a certificate.

- A. KDC
- B. Kerberos
- C. CA
- D. none of the above

6. A(n) _____ is a hierarchical system that answers queries about key certification.

- A. KDC
- B. PKI
- C. CA
- D. none of the above

7. The _____ criterion states that it must be extremely difficult or impossible to create the message if the message digest is given.

- A. one-wayness
- B. weak-collision-resistance
- C. strong-collision-resistance
- D. none of the above

8. The _____ criterion ensures that a message cannot easily be forged.

- A. one-wayness
- B. weak-collision-resistance
- C. strong-collision-resistance
- D. none of the above

9. The _____ criterion ensures that we cannot find two messages that hash to the same digest

- A. one-wayness
- B. weak-collision-resistance
- C. strong-collision-resistance
- D. none of the above

Answer key for MCQ SET- 3	
Q-1	Correct Answer :KDC
Q-2	Correct Answer :KDC
Q-3	Correct Answer :session
Q-4	Correct Answer :Kerberos
Q-5	Correct Answer :CA
Q-6	Correct Answer :CA
Q-7	Correct Answer :one-wayness
Q-8	Correct Answer :weak-collision-resistance
Q-09	Correct Answer :strong-collision-resistance