

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 – **Security in the Internet: IPSec, SSL/TLS, PGP, VPN, and Firewalls** multiple choice Questions and Answers (MCQ) PDF covers the below lists of topics.

1. Security in the Internet Multiple Choice Question and Answer.
2. IPSec, SSL/TLS, PGP, VPN, and Firewalls Multiple Choice Question and Answer.

Practice now to sharpen your concept.

1. _____ is a collection of protocols designed by the IETF (Internet Engineering Task Force) to provide security for a packet at the network level.

- A. IPSec
- B. SSL
- C. PGP
- D. none of the above

2. _____ operates in the transport mode or the tunnel mode.

- A. IPSec
- B. SSL
- C. PGP
- D. none of the above

3. In the _____ mode, IPSec protects information delivered from the transport layer to the network layer.

- A. transport
- B. tunnel
- C. either (a) or (b)
- D. neither (a) nor (b)

4. IPSec in the _____ mode does not protect the IP header.

- A. transport
- B. tunnel
- C. either (a) or (b)
- D. neither (a) nor (b)

5. The _____ mode is normally used when we need host-to-host (end-to-end) protection of data

- A. transport
- B. tunnel
- C. either (a) or (b)
- D. neither (a) nor (b)

6. In the _____ mode, IPSec protects the whole IP packet, including the original IP header.

- A. transport
- B. tunnel
- C. either (a) or (b)
- D. neither (a) nor (b)

7. IPSec defines two protocols: _____ and _____

- A. AH; SSL
- B. PGP; ESP
- C. AH; ESP
- D. none of the above

8. _____ provides authentication at the IP level.

- A. AH
- B. ESP
- C. PGP
- D. SSL

9. _____ provides either authentication or encryption, or both, for packets at the IP level.

- A. AH
- B. ESP
- C. PGP
- D. SSL

10. IPSec uses a set of SAs called the _____

- A. SAD
- B. SAB
- C. SADB
- D. none of the above

Answer key for MCQ SET- 1	
Q-1	Correct Answer :IPSec
Q-2	Correct Answer :IPSec
Q-3	Correct Answer :transport
Q-4	Correct Answer :transport
Q-5	Correct Answer :transport
Q-6	Correct Answer :tunnel
Q-7	Correct Answer :AH; ESP

Q-8	Correct Answer :AH
Q-9	Correct Answer :ESP
Q-10	Correct Answer :SADB

Security in the Internet multiple choice questions and answers MCQ Set-

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1. _____ is the protocol designed to create security associations, both inbound and outbound.

- A. SA
- B. CA
- C. KDC
- D. IKE

2. IKE creates SAs for _____

- A. SSL
- B. PGP
- C. IPsec
- D. VP

3. IKE is a complex protocol based on _____ other protocols

- A. two
- B. three
- C. four
- D. five

4. IKE uses _____

- A. Oakley
- B. SKEME
- C. ISAKMP
- D. all of the above

5. A _____ network is used inside an organization.

- A. private
- B. public
- C. semi-private
- D. semi-public

6. An _____ is a private network that uses the Internet model

- A. intranet
- B. internet
- C. extranet
- D. none of the above

7. An _____ is a network that allows authorized access from outside users

- A. intranet
- B. internet
- C. extranet
- D. none of the above

8. The Internet authorities have reserved addresses for _____

- A. intranets
- B. internets
- C. extranets
- D. none of the above

9. A _____ provides privacy for LANs that must communicate through the global Internet.

- A. VPP
- B. VNP
- C. VNN
- D. VPN

10. A _____ layer security protocol provides end-to-end security services for applications.

- A. data link
- B. network
- C. transport
- D. none of the above

Answer key for MCQ SET- 2	
Q-1	Correct Answer :IKE
Q-2	Correct Answer :IPSec
Q-3	Correct Answer :three
Q-4	Correct Answer :all of the above
Q-5	Correct Answer :private
Q-6	Correct Answer :intranet
Q-7	Correct Answer :extranet
Q-8	Correct Answer :none of the above
Q-9	Correct Answer :VPN
Q-10	Correct Answer :transport

Security in the Internet multiple choice questions and answers MCQ Set-

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- 1. _____ is actually an IETF version of _____**
 - A. TLS; TSS
 - B. SSL; TLS
 - C. TLS; SSL
 - D. SSL; SLT

- 2. _____ provide security at the transport layer.**
 - A. SSL
 - B. TLS
 - C. either (a) or (b)
 - D. both (a) and (b)

- 3. _____ is designed to provide security and compression services to data generated from the application layer.**
 - A. SSL
 - B. TLS
 - C. either (a) or (b)
 - D. both (a) and (b)

- 4. Typically, _____ can receive application data from any application layer protocol, but the protocol is normally HTTP**
 - A. SSL
 - B. TLS
 - C. either (a) or (b)
 - D. both (a) and (b)

- 5. SSL provides _____**
- A. message integrity
 - B. confidentiality
 - C. compression
 - D. all of the above
- 6. The combination of key exchange, hash, and encryption algorithms defines a _____ for each SSL session**
- A. list of protocols
 - B. cipher suite
 - C. list of keys
 - D. none of the above
- 7. In _____, the cryptographic algorithms and secrets are sent with the message.**
- A. IPSec
 - B. SSL
 - C. TLS
 - D. PGP
- 8. One security protocol for the e-mail system is _____**
- A. IPSec
 - B. SSL
 - C. PGP
 - D. none of the above
- 9. _____ was invented by Phil Zimmerman**
- A. IPSec
 - B. SSL
 - C. PGP
 - D. none of the above

10. ____ provides privacy, integrity, and authentication in e-mail

- A. IPsec
- B. SSL
- C. PGP
- D. none of the above

Answer key for MCQ SET- 3	
Q-1	Correct Answer :TLS; SSL
Q-2	Correct Answer :both (a) and (b)
Q-3	Correct Answer :both (a) and (b)
Q-4	Correct Answer :both (a) and (b)
Q-5	Correct Answer :all of the above
Q-6	Correct Answer :cipher suite
Q-7	Correct Answer :PGP
Q-8	Correct Answer :PGP
Q-9	Correct Answer :PGP
Q-10	Correct Answer :PGP