

CompTIA

Exam SY0-301

CompTIA Security+

Version: 38.0

[Total Questions: 820]



Topic 1, Volume A

Question No : 1 - (Topic 1)

Which of the following is the BEST approach to perform risk mitigation of user access control rights?

- **A.** Conduct surveys and rank the results.
- **B.** Perform routine user permission reviews.
- C. Implement periodic vulnerability scanning.
- **D.** Disable user accounts that have not been used within the last two weeks.

Answer: B

Question No: 2 - (Topic 1)

Which of the following devices is BEST suited for servers that need to store private keys?

- A. Hardware security module
- B. Hardened network firewall
- C. Solid state disk drive
- D. Hardened host firewall

Answer: A

Question No: 3 - (Topic 1)

All of the following are valid cryptographic hash functions EXCEPT:

- A. RIPEMD.
- **B.** RC4.
- C. SHA-512.
- **D.** MD4.

Answer: B

Question No : 4 - (Topic 1)



In regards to secure coding practices, why is input validation important?

- A. It mitigates buffer overflow attacks.
- **B.** It makes the code more readable.
- **C.** It provides an application configuration baseline.
- **D.** It meets gray box testing standards.

Answer: A

Question No : 5 - (Topic 1)

Which of the following would be used when a higher level of security is desired for encryption key storage?

- A. TACACS+
- B. L2TP
- C. LDAP
- D. TPM

Answer: D

Question No : 6 - (Topic 1)

A security administrator needs to determine which system a particular user is trying to login to at various times of the day. Which of the following log types would the administrator check?

- A. Firewall
- **B.** Application
- C. IDS
- **D.** Security

Answer: D

Question No: 7 - (Topic 1)

Which of the following MUST be updated immediately when an employee is terminated to



prevent unauthorized access?

- A. Registration
- B. CA
- C. CRL
- D. Recovery agent

Answer: C

Question No:8 - (Topic 1)

Employee badges are encoded with a private encryption key and specific personal information. The encoding is then used to provide access to the network. Which of the following describes this access control type?

- A. Smartcard
- B. Token
- C. Discretionary access control
- D. Mandatory access control

Answer: A

Question No: 9 - (Topic 1)

Which of the following devices would MOST likely have a DMZ interface?

- A. Firewall
- B. Switch
- C. Load balancer
- **D.** Proxy

Answer: A

Question No: 10 - (Topic 1)

Which of the following application security testing techniques is implemented when an automated system generates random input data?



- **A.** Fuzzing
- B. XSRF
- C. Hardening
- **D.** Input validation

Answer: A

Question No : 11 - (Topic 1)

Which of the following can be used by a security administrator to successfully recover a user's forgotten password on a password protected file?

- A. Cognitive password
- B. Password sniffing
- C. Brute force
- **D.** Social engineering

Answer: C

Question No: 12 - (Topic 1)

A security administrator wants to check user password complexity. Which of the following is the BEST tool to use?

- A. Password history
- **B.** Password logging
- C. Password cracker
- D. Password hashing

Answer: C

Question No: 13 - (Topic 1)

Certificates are used for: (Select TWO).

- A. Client authentication.
- **B.** WEP encryption.



- C. Access control lists.
- D. Code signing.
- E. Password hashing.

Answer: A,D

Question No: 14 - (Topic 1)

Which of the following is a hardware based encryption device?

- A. EFS
- B. TrueCrypt
- C. TPM
- D. SLE

Answer: C

Question No: 15 - (Topic 1)

Which of the following BEST describes a protective countermeasure for SQL injection?

- A. Eliminating cross-site scripting vulnerabilities
- B. Installing an IDS to monitor network traffic
- **C.** Validating user input in web applications
- **D.** Placing a firewall between the Internet and database servers

Answer: C

Question No : 16 - (Topic 1)

Which of the following MOST interferes with network-based detection techniques?

- A. Mime-encoding
- B. SSL
- C. FTP
- D. Anonymous email accounts



Answer: B

Question No : 17 - (Topic 1)

A certificate authority takes which of the following actions in PKI?

- A. Signs and verifies all infrastructure messages
- B. Issues and signs all private keys
- C. Publishes key escrow lists to CRLs
- D. Issues and signs all root certificates

Answer: D

Question No: 18 - (Topic 1)

Use of a smart card to authenticate remote servers remains MOST susceptible to which of the following attacks?

- A. Malicious code on the local system
- B. Shoulder surfing
- C. Brute force certificate cracking
- D. Distributed dictionary attacks

Answer: A

Question No: 19 - (Topic 1)

Separation of duties is often implemented between developers and administrators in order to separate which of the following?

- **A.** More experienced employees from less experienced employees
- **B.** Changes to program code and the ability to deploy to production
- C. Upper level management users from standard development employees
- **D.** The network access layer from the application access layer

Answer: B



Question No: 20 - (Topic 1)

A security administrator needs to update the OS on all the switches in the company. Which of the following MUST be done before any actual switch configuration is performed?

- **A.** The request needs to be sent to the incident management team.
- **B.** The request needs to be approved through the incident management process.
- **C.** The request needs to be approved through the change management process.
- **D.** The request needs to be sent to the change management team.

Answer: C

Question No : 21 - (Topic 1)

Jane, an individual, has recently been calling various financial offices pretending to be another person to gain financial information. Which of the following attacks is being described?

- A. Phishing
- **B.** Tailgating
- C. Pharming
- **D.** Vishing

Answer: D

Question No : 22 - (Topic 1)

A user in the company is in charge of various financial roles but needs to prepare for an upcoming audit. They use the same account to access each financial system. Which of the following security controls will MOST likely be implemented within the company?

- A. Account lockout policy
- B. Account password enforcement
- C. Password complexity enabled
- **D.** Separation of duties

Answer: D



Question No: 23 - (Topic 1)

A CRL is comprised oF.

- A. Malicious IP addresses.
- B. Trusted CA's.
- C. Untrusted private keys.
- D. Public keys.

Answer: D

Question No : 24 - (Topic 1)

Sara, a user, downloads a keygen to install pirated software. After running the keygen, system performance is extremely slow and numerous antivirus alerts are displayed. Which of the following BEST describes this type of malware?

- A. Logic bomb
- B. Worm
- C. Trojan
- D. Adware

Answer: C

Question No : 25 - (Topic 1)

Which of the following may significantly reduce data loss if multiple drives fail at the same time?

- A. Virtualization
- B. RAID
- C. Load balancing
- **D.** Server clustering

Answer: B

Question No: 26 - (Topic 1)



Which of the following should be considered to mitigate data theft when using CAT5 wiring?

- A. CCTV
- B. Environmental monitoring
- C. Multimode fiber
- D. EMI shielding

Answer: D

Question No : 27 - (Topic 1)

To help prevent unauthorized access to PCs, a security administrator implements screen savers that lock the PC after five minutes of inactivity. Which of the following controls is being described in this situation?

- A. Management
- **B.** Administrative
- C. Technical
- **D.** Operational

Answer: C

Question No : 28 - (Topic 1)

Pete, a network administrator, is capturing packets on the network and notices that a large amount of the traffic on the LAN is SIP and RTP protocols. Which of the following should he do to segment that traffic from the other traffic?

- A. Connect the WAP to a different switch.
- B. Create a voice VLAN.
- C. Create a DMZ.
- **D.** Set the switch ports to 802.1q mode.

Answer: B

Question No: 29 - (Topic 1)