EC-Council

Exam Questions 212-82

Certified Cybersecurity Technician(C|CT)

NEW QUESTION 1
A software company develops new software products by following the best practices for secure application development. Dawson, a software analyst, is responsible for checking the performance of applications in the client's network to determine any issue faced by end users while accessing the application. Which of the following tiers of the secure application development lifecycle involves
checking the application
performance?

A. Development
B. Staging
C. Testing
D. Quality assurance (QA)

Answer: C

Explanation:
Testing is the tier of the secure application development lifecycle that involves checking the application performance in the above scenario. Secure application development is a process that involves designing, developing, deploying, and maintaining software applications that are secure and resilient to threats and attacks. Secure application development can be based on various models or frameworks, such as SDLC (Software Development Life Cycle), OWASP (Open Web Application Security Project), etc. Secure application development consists of various tiers or stages that perform different tasks or roles. Testing is a tier of the secure application development lifecycle that involves verifying and validating the functionality and security of software applications before releasing them to end users. Testing can include various types of tests, such as unit testing, integration testing, system testing, performance testing, security testing, etc. Testing can be used to check the application performance and identify any errors, bugs, or vulnerabilities in the software applications. In the scenario, a software company develops new software products by following the best practices for secure application development. Dawson, a software analyst, is responsible for checking the performance of applications in the client’s network to determine any issue faced by end users while accessing the application. This means that he performs testing for this purpose. Development is a tier of the secure application development lifecycle that involves creating and coding software applications according to the design and specifications. Staging is a tier of the secure application development lifecycle that involves deploying software applications to a simulated or pre-production environment for testing or evaluation purposes. Quality assurance (QA) is a tier of the secure application development lifecycle that involves ensuring that software applications meet the quality standards and expectations of end users and stakeholders

NEW QUESTION 2
in a security incident, the forensic investigation has isolated a suspicious file named "security_update.exe". You are asked to analyze the file in the Documents folder of the "Attacker Machine-1" to determine whether it is malicious. Analyze the suspicious file and identify the malware signature. (Practical Question)

A. Stuxnet
B. KLEZ
C. ZEUS
D. Conficker

Answer: A

Explanation:
Stuxnet is the malware signature of the suspicious file in the above scenario. Malware is malicious software that can harm or compromise the security or functionality of a system or network. Malware can include various types, such as viruses, worms, trojans, ransomware, spyware, etc. Malware signature is a unique pattern or characteristic that identifies a specific malware or malware family. Malware signature can be used to detect or analyze malware by comparing it with known malware signatures in databases or repositories. To analyze the suspicious file and identify the malware signature, one has to follow these steps:
? Navigate to Documents folder of Attacker Machine-1.
? Right-click on security_update.exe file and select Scan with VirusTotal option.
? Wait for VirusTotal to scan the file and display the results.
? Observe the detection ratio and details.
The detection ratio is 59/70, which means that 59 out of 70 antivirus engines detected the file as malicious. The details show that most antivirus engines detected the file as Stuxnet, which is a malware signature of a worm that targets industrial control systems (ICS). Stuxnet can be used to sabotage or damage ICS by modifying their code or behavior. Therefore, Stuxnet is the malware signature of the suspicious file. KLEZ is a malware signature of a worm that spreads via email and network shares. KLEZ can be used to infect or overwrite files, disable antivirus software, or display fake messages. ZEUS is a malware signature of a trojan that targets banking and financial systems. ZEUS can be used to steal or modify banking credentials, perform fraudulent transactions, or install other malware. Conficker is a malware signature of a worm that exploits a vulnerability in Windows operating systems. Conficker can be used to create a botnet, disable security services, or download other malware

NEW QUESTION 3
Kason, a forensic officer, was appointed to investigate a case where a threat actor has bullied certain children online. Before proceeding legally with the case, Kason has documented all the supporting documents, including source of the evidence and its relevance to the case, before presenting it in front of the jury. Which of the following rules of evidence was discussed in the above scenario?

A. Authentic
B. Understandable
C. Reliable
D. Admissible

Answer: D

Explanation:
Admissible is the rule of evidence discussed in the above scenario. A rule of evidence is a criterion or principle that determines whether a piece of evidence can be used in a legal proceeding or investigation. Admissible is a rule of evidence that states that the evidence must be relevant, reliable, authentic, and understandable to be accepted by a court or a jury . Admissible also means that the evidence must be obtained legally and ethically, without violating any laws or rights. In the scenario, Kason has documented all the supporting documents, including source of the evidence and its relevance to the case, before presenting it in front of the jury, which means that he has followed the admissible rule of evidence. Authentic is a rule of evidence that states that the evidence must be original or verifiable as genuine and not altered or tampered with. Understandable is a rule of evidence that states that the evidence must be clear and comprehensible to the court or jury and not ambiguous or confusing. Reliable is a rule of evidence that states that the evidence must be consistent and trustworthy and not based on hearsay or speculation.

NEW QUESTION 4
Grace, an online shopping freak, has purchased a smart TV using her debit card. During online payment, Grace's browser redirected her from ecommerce website to a third-party payment gateway, where she provided her debit card details and OTP received on her registered mobile phone. After completing the transaction, Grace navigated to her online bank account and verified the current balance in her savings account.
Identify the state of data when it is being processed between the ecommerce website and the payment gateway in the above scenario.

A. Data at rest
B. Data in inactive
C. Data in transit
D. Data in use

Answer: C

Explanation:
Data in transit is the state of data when it is being processed between the ecommerce website and the payment gateway in the above scenario. Data in transit is data that is moving from one location to another over a network, such as the internet, a LAN, or a WAN. Data in transit can be vulnerable to interception, modification, or theft by unauthorized parties, so it needs to be protected by encryption, authentication, and other security measures . Data at rest is data that is stored on a device or a media, such as a hard drive, a flash drive, or a cloud storage. Data in active is data that is currently being accessed or modified by an application or a user. Data in use is data that is loaded into the memory of a device or a system for processing or computation.

NEW QUESTION 5
Calvin spotted blazing flames originating from a physical file storage location in his organization because of a Short circuit. In response to the incident, he used a fire suppression system that helped curb the incident in the initial stage and prevented it from spreading over a large area. Which of the following firefighting systems did Calvin use in this scenario?

A. Fire detection system
B. Sprinkler system
C. Smoke detectors
D. Fire extinguisher

Answer: D

Explanation:
Fire extinguisher is the firefighting system that Calvin used in this scenario. A firefighting system is a system that detects and suppresses fire in a physical location or environment. A firefighting system can consist of various components, such as sensors, alarms, sprinklers, extinguishers, etc. A firefighting system can use various agents or substances to suppress fire, such as water, foam, gas, powder, etc. A fire extinguisher is a portable device that contains an agent or substance that can be sprayed or discharged onto a fire to extinguish it . A fire extinguisher can be used to curb fire in the initial stage and prevent it from spreading over a large area . In the scenario, Calvin spotted blazing flames originating from a physical file storage location in his organization because of a short circuit. In response to the incident, he used a fire suppression system that helped curb the incident in the initial stage and prevented it from spreading over a large area. This means that he used a fire extinguisher for this purpose. A fire detection system is a system that detects the presence of fire by sensing its characteristics, such as smoke, heat, flame, etc., and alerts the occupants or authorities about it . A sprinkler system is a system that consists of pipes and sprinkler heads that release water onto a fire when activated by heat
or smoke. A smoke detector is a device that senses smoke and emits an audible or visual signal to warn about fire.

NEW QUESTION 6
Cairo, an incident responder. was handling an incident observed in an organizational network. After performing all IH&R steps, Cairo initiated post-incident activities. He determined all types of losses caused by the incident by identifying And evaluating all affected devices, networks, applications, and software. Identify the post-incident activity performed by Cairo in this scenario.

A. Incident impact assessment
B. Close the investigation
C. Review and revise policies
D. Incident disclosure

Answer: A

Explanation:
Incident impact assessment is the post-incident activity performed by Cairo in this scenario. Incident impact assessment is a post-incident activity that involves determining all types of losses caused by the incident by identifying and evaluating all affected devices, networks, applications, and software. Incident impact assessment can include measuring financial losses, reputational damages, operational disruptions, legal liabilities, or regulatory penalties1. References: Incident Impact Assessment

NEW QUESTION 7
The IH&R team in an organization was handling a recent malware attack on one of the hosts connected to the organization's network. Edwin, a member of the IH&R team, was involved in reinstating lost data from the backup media. Before performing this step, Edwin ensured that the backup does not have any traces of malware.
Identify the IH&R step performed by Edwin in the above scenario.

A. Eradication
B. Incident containment
C. Notification
D. Recovery

Answer: D

Explanation:
Recovery is the IH&R step performed by Edwin in the above scenario. IH&R (Incident Handling and Response) is a process that involves identifying, analyzing, containing, eradicating, recovering from, and reporting on security incidents that affect an organization’s network or system. Recovery is the IH&R step that involves restoring the normal operation of the system or network after eradicating the incident. Recovery can include reinstating lost data from the backup media, applying patches or updates, reconfiguring settings, testing functionality, etc. Recovery also involves ensuring that the backup does not have any traces of

malware or compromise . Eradication is the IH&R step that involves removing all traces of the incident from the system or network, such as malware, backdoors, compromised files, etc. Incident containment is the IH&R step that involves implementing appropriate measures to stop the infection from spreading to other organizational assets and to prevent further damage to the organization. Notification is the IH&R step that involves informing relevant stakeholders, authorities, or customers about the incident and its impact.

NEW QUESTION 8
Tristan, a professional penetration tester, was recruited by an organization to test its network infrastructure. The organization wanted to understand its current security posture and its strength in defending against external threats. For this purpose, the organization did not provide any information about their IT infrastructure to Tristan. Thus, Tristan initiated zero-knowledge attacks, with no information or assistance from the organization.
Which of the following types of penetration testing has Tristan initiated in the above scenario?

A. Black-box testing
B. White-box testing
C. Gray-box testing
D. Translucent-box testing

Answer: A

Explanation:
Black-box testing is a type of penetration testing where the tester has no prior knowledge of the target system or network and initiates zero-knowledge attacks, with no information or assistance from the organization. Black-box testing simulates the perspective of an external attacker who tries to find and exploit vulnerabilities without any insider information. Black-box testing can help identify unknown or hidden vulnerabilities that may not be detected by other types of testing. However, black-box testing can also be time-consuming, costly, and incomplete, as it depends on the tester's skills and tools.

NEW QUESTION 9
Desmond, a forensic officer, was investigating a compromised machine involved in various online attacks. For this purpose. Desmond employed a forensic tool to extract and analyze computer-based evidence to retrieve information related to websites accessed from the victim machine. Identify the computer-created evidence retrieved by Desmond in this scenario.

A. Cookies
B. Documents
C. Address books
D. Compressed files

Answer: A

Explanation:
Cookies are the computer-created evidence retrieved by Desmond in this scenario. Cookies are small files that are stored on a user's computer by a web browser when the user visits a website. Cookies can contain information such as user preferences, login details, browsing history, or tracking data. Cookies can be used to extract and analyze computer-based evidence to retrieve information related to websites accessed from the victim machine2. References: Cookies

NEW QUESTION 10
Walker, a security team member at an organization, was instructed to check if a deployed cloud service is working as expected. He performed an independent examination of cloud service controls to verify adherence to standards through a review of objective evidence. Further, Walker evaluated the services provided by the CSP regarding security controls, privacy impact, and performance.
Identify the role played by Walker in the above scenario.

A. Cloud auditor
B. Cloud provider
C. Cloud carrier
D. Cloud consumer

Answer: A

Explanation:
A cloud auditor is a role played by Walker in the above scenario. A cloud auditor is a third party who examines controls of cloud computing service providers. Cloud auditor performs an audit to verify compliance with the standards and expressed his opinion through a report89. A cloud provider is an entity that provides cloud services, such as infrastructure, platform, or software, to cloud consumers10. A cloud carrier is an entity that provides connectivity and transport of cloud services between cloud providers and cloud consumers10. A cloud consumer is an entity that uses cloud services for its own purposes or on behalf of another entity

NEW QUESTION 10
Nicolas, a computer science student, decided to create a guest OS on his laptop for different lab operations. He adopted a virtualization approach in which the guest OS will not be aware that it is running in a virtualized environment. The virtual machine manager (VMM) will directly interact with the computer hardware, translate commands to binary instructions, and forward them to the host OS.
Which of the following virtualization approaches has Nicolas adopted in the above scenario?

A. Hardware-assisted virtualization
B. Full virtualization
C. Hybrid virtualization
D. OS-assisted virtualization

Answer: A

Explanation:
Hardware-assisted virtualization is a virtualization approach in which the guest OS will not be aware that it is running in a virtualized environment. The virtual machine manager (VMM) will directly interact with the computer hardware, translate commands to binary instructions, and forward them to the host OS. Hardware-assisted virtualization relies on special hardware features in the CPU and chipset to create and manage virtual machines efficiently and securely34. Full virtualization is a virtualization approach in which the guest OS will not be aware that it is running in a virtualized environment, but the VMM will run in software and

emulate all the hardware resources for each virtual machine5. Hybrid virtualization is a virtualization approach that combines hardware-assisted and full virtualization techniques to optimize performance and compatibility6. OS-assisted virtualization is a virtualization approach in which the guest OS will be modified to run in a virtualized environment and cooperate with the VMM to access the hardware resources

NEW QUESTION 13
Jaden, a network administrator at an organization, used the ping command to check the status of a system connected to the organization's network. He received an ICMP error message stating that the IP header field contains invalid information. Jaden examined the ICMP packet and identified that it is an IP parameter problem.
Identify the type of ICMP error message received by Jaden in the above scenario.

A. Type =12
B. Type = 8
C. Type = 5
D. Type = 3

Answer: A

Explanation:
Type = 12 is the type of ICMP error message received by Jaden in the above scenario. ICMP (Internet Control Message Protocol) is a protocol that sends error and control messages between network devices. ICMP error messages are categorized by types and codes, which indicate the cause and nature of the error. Type = 12 is the type of ICMP error message that indicates an IP parameter problem, which means that the IP header field contains invalid information . Type = 8 is the type of ICMP message that indicates an echo request, which is used to test the connectivity and reachability of a destination host. Type = 5 is the type of ICMP error message that indicates a redirect, which means that a better route to the destination host is available. Type = 3 is the type of ICMP error message that indicates a destination unreachable, which means that the destination host or network cannot be reached.

NEW QUESTION 18
A software company has implemented a wireless technology to track the employees' attendance by recording their in and out timings. Each employee in the company will have an entry card that is embedded with a tag. Whenever an employee enters the office premises, he/she is required to swipe the card at the entrance. The wireless technology uses radio-frequency electromagnetic waves to transfer data for automatic identification and for tracking tags attached to objects.
Which of the following technologies has the software company implemented in the above scenario?

A. WiMAX
B. RFID
C. Bluetooth
D. Wi-Fi

Answer: B

Explanation:
RFID (Radio Frequency Identification) is the wireless technology that the software company has implemented in the above scenario. RFID uses radio-frequency electromagnetic waves to transfer data for automatic identification and for tracking tags attached to objects1112. WiMAX (Worldwide Interoperability for Microwave Access) is a wireless technology that provides high-speed broadband access over long distances13. Bluetooth is a wireless technology that enables short-range data communication between devices, such as phones, laptops, printers, etc.14. Wi-Fi (Wireless Fidelity) is a wireless technology that allows devices to connect to a local area network or the internet using radio waves

NEW QUESTION 23
In an organization, all the servers and database systems are guarded in a sealed room with a single-entry point. The entrance is protected with a physical lock system that requires typing a sequence of numbers and letters by using a rotating dial that intermingles with several other rotating discs.
Which of the following types of physical locks is used by the organization in the above scenario?

A. Digital locks
B. Combination locks
C. Mechanical locks
D. Electromagnetic locks

Answer: B

Explanation:
It identifies the type of physical lock used by the organization in the above scenario. A physical lock is a device that prevents unauthorized access to a door, gate, cabinet, or other enclosure by using a mechanism that requires a key, code, or biometric factor to open or close it. There are different types of physical locks, such as:
? Combination lock: This type of lock requires typing a sequence of numbers and letters by using a rotating dial that intermingles with several other rotating discs. This type of lock is suitable for securing safes, lockers, or cabinets that store valuable items or documents.
? Digital lock: This type of lock requires entering a numeric or alphanumeric code by using a keypad or touchscreen. This type of lock is suitable for securing doors or gates that require frequent access or multiple users.
? Mechanical lock: This type of lock requires inserting and turning a metal key that matches the shape and size of the lock. This type of lock is suitable for securing doors or gates that require simple and reliable access or single users.
? Electromagnetic lock: This type of lock requires applying an electric current to a magnet that attracts a metal plate attached to the door or gate. This type of lock is suitable for securing doors or gates that require remote control or integration with other security systems.
In the above scenario, the organization used a combination lock that requires typing a sequence of numbers and letters by using a rotating dial that intermingles with several other rotating discs. Option A is incorrect, as it does not identify the type of physical lock used by the organization in the above scenario. A digital lock requires entering a numeric or alphanumeric code by using a keypad or touchscreen. In the above scenario, the organization did not use a digital lock, but a combination lock. Option C is incorrect, as it does not identify the type of physical lock used by the organization in the above scenario. A mechanical lock requires inserting and turning a metal key that matches the shape and size of the lock. In the above scenario, the organization did not use a mechanical lock, but a combination lock. Option D is incorrect, as it does not identify the type of physical lock used by the organization in the above scenario. An electromagnetic lock requires applying an electric current to a magnet that attracts a metal plate attached to the door or gate. In the above scenario, the organization did not use an electromagnetic lock, but a combination lock. References: , Section 7.2

NEW QUESTION 26
Andre, a security professional, was tasked with segregating the employees' names, phone numbers, and credit card numbers before sharing the database with clients. For this purpose, he implemented a deidentification technique that can replace the critical information in database fields with special characters such as asterisks (*) and hashes (#).
Which of the following techniques was employed by Andre in the above scenario?

A. Tokenization
B. Masking
C. Hashing
D. Bucketing

Answer: B

Explanation:
Masking is the technique that Andre employed in the above scenario. Masking is a deidentification technique that can replace the critical information in database fields with special characters such as asterisks (*) and hashes (#). Masking can help protect sensitive data from unauthorized access or disclosure, while preserving the format and structure of the original data . Tokenization is a deidentification technique that can replace the critical information in database fields with random tokens that have no meaning or relation to the original data. Hashing is a deidentification technique that can transform the critical information in database fields into fixed-length strings using a mathematical function. Bucketing is a deidentification technique that can group the critical information in database fields into ranges or categories based on certain criteria.

NEW QUESTION 28
Grace, an online shopping enthusiast, purchased a smart TV using her debit card. During online payment. Grace's browser redirected her from the e-commerce website to a third- party payment gateway, where she provided her debit card details and the OTP received on her registered mobile phone. After completing the transaction, Grace logged Into her online bank account and verified the current balance in her savings account, identify the state of data being processed between the e-commerce website and payment gateway in the above scenario.

A. Data in inactive
B. Data in transit
C. Data in use
D. Data at rest

Answer: B

Explanation:
Data in transit is the state of data being processed between the e-commerce website and payment gateway in the above scenario. Data in transit is the data that is moving from one location to another over a network, such as the internet. Data in transit can be vulnerable to interception, modification, or theft by unauthorized parties. Therefore, data in transit should be protected using encryption, authentication, and secure protocols2. References: Data in Transit

NEW QUESTION 31
The SOC department in a multinational organization has collected logs of a security event as
"Windows.events.evtx". Study the Audit Failure logs in the event log file located in the Documents folder of the -Attacker Maehine-1" and determine the IP address of the attacker. (Note: The event ID of Audit failure logs is 4625.)
(Practical Question)

A. 10.10.1.12
B. 10.10.1.10
C. 10.10.1.16
D. 10.10.1.19

Answer: C

Explanation:
The IP address of the attacker is 10.10.1.16. This can be verified by analyzing the Windows.events.evtx file using a tool such as Event Viewer or Log Parser. The file contains several Audit Failure logs with event ID 4625, which indicate failed logon attempts to the system. The logs show that the source network address of the failed logon attempts is 10.10.1.16, which is the IP address of the attacker3. The screenshot below shows an example of viewing one of the logs using Event Viewer4: References: Audit Failure Log, [Windows.events.evtx], [Screenshot of Event Viewer showing Audit Failure log]

NEW QUESTION 32
A threat intelligence feed data file has been acquired and stored in the Documents folder of Attacker Machine-1 (File Name: Threatfeed.txt). You are a cybersecurity technician working for an ABC organization. Your organization has assigned you a task to analyze the data and submit a report on the threat landscape. Select the IP address linked with http://securityabc.s21sec.com.

A. 5.9.200.200
B. 5.9.200.150
C. 5.9.110.120
D. 5.9.188.148

Answer: D

Explanation:
5.9.188.148 is the IP address linked with http://securityabc.s21sec.com in the above scenario. A threat intelligence feed is a source of data that provides information about current or potential threats and attacks that can affect an organization’s network or system. A threat intelligence feed can include indicators of compromise (IoCs), such as IP addresses, domain names, URLs, hashes, etc., that can be used to detect or prevent malicious activities. To analyze the threat intelligence feed data file and determine the IP address linked with http://securityabc.s21sec.com, one has to follow these steps:
? Navigate to the Documents folder of Attacker-1 machine.
? Open Threatfeed.txt file with a text editor.
? Search for http://securityabc.s21sec.com in the file.
? Observe the IP address associated with the URL.
The IP address associated with the URL is 5.9.188.148, which is the IP address linked with http://securityabc.s21sec.com.

NEW QUESTION 37
An organization's risk management team identified the risk of natural disasters in the organization's current location. Because natural disasters cannot be prevented using security controls, the team suggested to build a new office in another location to eliminate the identified risk. Identify the risk treatment option suggested by the risk management team in this scenario.

A. Risk modification
B. Risk avoidance
C. Risk sharing
D. Risk retention

Answer: B

Explanation:
Risk avoidance is the risk treatment option suggested by the risk management team in this scenario. Risk avoidance is a risk treatment option that involves eliminating the identified risk by changing the scope, requirements, or objectives of the project or activity. Risk avoidance can be used when the risk cannot be prevented using security controls or when the risk outweighs the benefits2. References: Risk Avoidance

NEW QUESTION 38
Stella purchased a smartwatch online using her debit card. After making payment for the product through the payment gateway, she received a transaction text message with a deducted and available balance from her bank.
Identify the information security element that ensures that Stella's transaction status is immediately reflected in her bank account in this scenario.

A. Non-repudiation
B. Integrity
C. Availability
D. Confidentiality

Answer: C

Explanation:
Availability is the information security element that ensures that Stella’s transaction status is immediately reflected in her bank account in this scenario. Information security is the practice of protecting information and information systems from unauthorized access, use, disclosure, modification, or destruction. Information security can be based on three fundamental principles: confidentiality, integrity, and availability. Confidentiality is the principle that ensures that information is accessible only to authorized parties and not disclosed to unauthorized parties. Integrity is the principle that ensures that information is accurate, complete, and consistent and not altered or corrupted by unauthorized parties. Availability is the principle that ensures that information and information systems are accessible and usable by authorized parties when needed. In the scenario, Stella purchased a smartwatch online using her debit card. After making payment for the product through the payment gateway, she received a transaction text message with a deducted and available balance from her bank. This means that her transaction status was immediately reflected in her bank account, which indicates that availability was ensured by her bank’s information system.

NEW QUESTION 39
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