

Exam	CISSP
Title	Certified Information Systems Security Professional (CISSP)
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What is the MOST efficient way to secure a production program and its data?

- A. Disable default accounts and implement access control lists (ACL)
- B. Harden the application and encrypt the data
- C. Disable unused services and implement tunneling
- D. Harden the servers and backup the data

Answer: B

### **QUESTION 2**

The use of strong authentication, the encryption of Personally Identifiable Information (PII) on database servers, application security reviews, and the encryption of data transmitted across networks provide

- A. data integrity.
- B. defense in depth.
- C. data availability.
- D. non-repudiation.

Answer: B

#### **QUESTION** 3

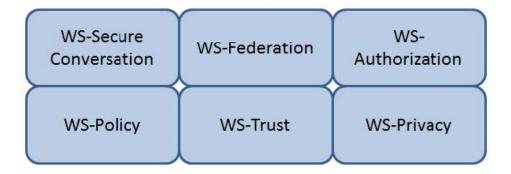
By carefully aligning the pins in the lock, which of the following defines the opening of a mechanical lock without the proper key?

- A. Lock pinging
- B. Lock picking
- C. Lock bumping
- D. Lock bricking

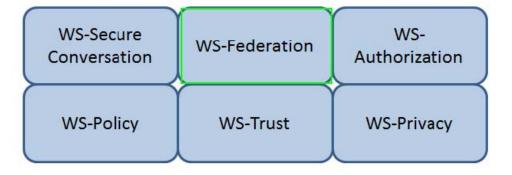
Answer: B

#### **QUESTION** 4

Which Web Services Security (WS-Security) specification maintains a single authenticated identity across multiple dissimilar environments? Click on the correct specification in the image below.



Answer:



# **QUESTION** 5

While investigating a malicious event, only six days of audit logs from the last month were available. What policy should be updated to address this problem?

#### A. Retention

- B. Reporting
- C. Recovery
- D. Remediation

Answer: A

### **QUESTION** 6

Refer to the information below to answer the question.

A large, multinational organization has decided to outsource a portion of their Information Technology (IT) organization to a third-party provider's facility. This provider will be responsible for the design, development, testing, and support of several critical, customer-based applications used by the organization.

What additional considerations are there if the third party is located in a different country?

- A. The organizational structure of the third party and how it may impact timelines within the organization
- B. The ability of the third party to respond to the organization in a timely manner and with accurate information
- C. The effects of transborder data flows and customer expectations regarding the storage or processing of their data
- D. The quantity of data that must be provided to the third party and how it is to be used

Answer: C

### **QUESTION** 7

Refer to the information below to answer the question.

In a Multilevel Security (MLS) system, the following sensitivity labels are used in increasing levels of sensitivity: restricted, confidential, secret, top secret. Table A lists the clearance levels for four users, while Table B lists the security classes of four different files.

In a Bell-LaPadula system, which user has the MOST restrictions when writing data to any of the four files?

Table A

User	Clearance Level	
Α	Restricted	
В	Confidential	
С	Secret	
D	Top Secret	

Table B

Files	Security Class	
1	Restricted	
2	Confidential	
3	Secret	
4	Top Secret	

- A. User A
- B. User B
- C. User C
- D. User D

Answer: D

#### **QUESTION 8**

What does an organization FIRST review to assure compliance with privacy requirements?

- A. Best practices
- B. Business objectives
- C. Legal and regulatory mandates
- D. Employee's compliance to policies and standards

Answer: C

### **QUESTION** 9

In a basic SYN flood attack, what is the attacker attempting to achieve?

- A. Exceed the threshold limit of the connection queue for a given service
- B. Set the threshold to zero for a given service
- C. Cause the buffer to overflow, allowing root access
- D. Flush the register stack, allowing hijacking of the root account

Answer: A

### **QUESTION** 10

A security professional is asked to provide a solution that restricts a bank teller to only perform a savings deposit transaction but allows a supervisor to perform corrections after the transaction. Which of the following is the MOST effective solution?

- A. Access is based on rules.
- B. Access is determined by the system.
- C. Access is based on user's role.
- D. Access is based on data sensitivity.

Answer: C

#### **QUESTION** 11

Which of the following is a critical factor for implementing a successful data classification program?

- A. Executive sponsorship
- B. Information security sponsorship
- C. End-user acceptance
- D. Internal audit acceptance

Answer: A

## **QUESTION 12**

What is the MOST important reason to configure unique user IDs?

- A. Supporting accountability
- B. Reducing authentication errors
- C. Preventing password compromise
- D. Supporting Single Sign On (SSO)

Answer: A

### **QUESTION 13**

What is the MOST critical factor to achieve the goals of a security program?

- A. Capabilities of security resources
- B. Executive management support
- C. Effectiveness of security management
- D. Budget approved for security resources

Answer: B

## **QUESTION 14**

Which of the following BEST avoids data remanence disclosure for cloud hosted resources?

- A. Strong encryption and deletion of the keys after data is deleted.
- B. Strong encryption and deletion of the virtual host after data is deleted.
- C. Software based encryption with two factor authentication.
- D. Hardware based encryption on dedicated physical servers.

Answer: A

#### **QUESTION 15**

Which of the following is a process within a Systems Engineering Life Cycle (SELC) stage?

- A. Requirements Analysis
- B. Development and Deployment
- C. Production Operations
- D. Utilization Support

Answer: A

#### **QUESTION** 16

When designing a vulnerability test, which one of the following is likely to give the BEST indication of what components currently operate on the network?

- A. Topology diagrams
- B. Mapping tools
- C. Asset register
- D. Ping testing

Answer: B

## **QUESTION 17**

Which of the following is the MOST effective method of mitigating data theft from an active user workstation?

- A. Implement full-disk encryption
- B. Enable multifactor authentication
- C. Deploy file integrity checkers
- D. Disable use of portable devices

Answer: D

#### **QUESTION** 18

Internet Protocol (IP) source address spoofing is used to defeat

- A. address-based authentication.
- B. Address Resolution Protocol (ARP).
- C. Reverse Address Resolution Protocol (RARP).
- D. Transmission Control Protocol (TCP) hijacking.

Answer: A

## **QUESTION** 19

Which of the following assessment metrics is BEST used to understand a system's vulnerability to potential exploits?

- A. Determining the probability that the system functions safely during any time period
- B. Quantifying the system's available services
- C. Identifying the number of security flaws within the system
- D. Measuring the system's integrity in the presence of failure

Answer: C

### **QUESTION 20**

Which of the following is the BEST reason to review audit logs periodically?

- A. Verify they are operating properly
- B. Monitor employee productivity
- C. Identify anomalies in use patterns
- D. Meet compliance regulations

Answer: C

#### **QUESTION 21**

A system has been scanned for vulnerabilities and has been found to contain a number of communication ports that have been opened without authority. To which of the following might this system have been subjected?

- A. Trojan horse
- B. Denial of Service (DoS)
- C. Spoofing

### D. Man-in-the-Middle (MITM)

Answer: A

#### **QUESTION 22**

Which of the following is generally indicative of a replay attack when dealing with biometric authentication?

- A. False Acceptance Rate (FAR) is greater than 1 in 100,000
- B. False Rejection Rate (FRR) is greater than 5 in 100
- C. Inadequately specified templates
- D. Exact match

Answer: D

### **QUESTION 23**

Which of the following analyses is performed to protect information assets?

- A. Business impact analysis
- B. Feasibility analysis
- C. Cost benefit analysis
- D. Data analysis

Answer: A

#### **OUESTION 24**

What is the MOST important purpose of testing the Disaster Recovery Plan (DRP)?

- A. Evaluating the efficiency of the plan
- B. Identifying the benchmark required for restoration
- C. Validating the effectiveness of the plan
- D. Determining the Recovery Time Objective (RTO)

Answer: C

## **QUESTION 25**

Which of the following is an advantage of on-premise Credential Management Systems?

- A. Improved credential interoperability
- B. Control over system configuration
- C. Lower infrastructure capital costs
- D. Reduced administrative overhead

Answer: B

In a data classification scheme, the data is owned by the

- A. Information Technology (IT) managers.
- B. business managers.
- C. end users.
- D. system security managers.

Answer: B

#### **QUESTION 27**

Refer to the information below to answer the question.

An organization has hired an information security officer to lead their security department. The officer has adequate people resources but is lacking the other necessary components to have an effective security program. There are numerous initiatives requiring security involvement.

Given the number of priorities, which of the following will MOST likely influence the selection of top initiatives?

- A. Severity of risk
- B. Complexity of strategy
- C. Frequency of incidents
- D. Ongoing awareness

Answer: A

### **QUESTION 28**

Which of the following is the MOST important consideration when storing and processing Personally Identifiable Information (PII)?

- A. Encrypt and hash all PII to avoid disclosure and tampering.
- B. Store PII for no more than one year.
- C. Avoid storing PII in a Cloud Service Provider.
- D. Adherence to collection limitation laws and regulations.

Answer: D

#### **QUESTION** 29

Which of the following explains why record destruction requirements are included in a data retention policy?

- A. To comply with legal and business requirements
- B. To save cost for storage and backup
- C. To meet destruction guidelines
- D. To validate data ownership

Answer: A

A network scan found 50% of the systems with one or more critical vulnerabilities. Which of the following represents the BEST action?

- A. Assess vulnerability risk and program effectiveness.
- B. Assess vulnerability risk and business impact.
- C. Disconnect all systems with critical vulnerabilities.
- D. Disconnect systems with the most number of vulnerabilities.

Answer: B

### **QUESTION 31**

Which of the following BEST describes Recovery Time Objective (RTO)?

- A. Time of data validation after disaster
- B. Time of data restoration from backup after disaster
- C. Time of application resumption after disaster
- D. Time of application verification after disaster

Answer: C

## **QUESTION** 32

Which of the following MOST influences the design of the organization's electronic monitoring policies?

- A. Workplace privacy laws
- B. Level of organizational trust
- C. Results of background checks
- D. Business ethical considerations

Answer: A

#### **QUESTION 33**

Which of the following is a MAJOR consideration in implementing a Voice over IP (VoIP) network?

- A. Use of a unified messaging.
- B. Use of separation for the voice network.
- C. Use of Network Access Control (NAC) on switches.
- D. Use of Request for Comments (RFC) 1918 addressing.

Answer: B

#### **QUESTION 34**

Who is ultimately responsible to ensure that information assets are categorized and adequate measures are taken to protect them?

A. Data Custodian

- B. Executive Management
- C. Chief Information Security Officer
- D. Data/Information/Business Owners

Answer: B

#### **QUESTION** 35

Which of the following describes the BEST configuration management practice?

- A. After installing a new system, the configuration files are copied to a separate back-up system and hashed to detect tampering.
- B. After installing a new system, the configuration files are copied to an air-gapped system and hashed to detect tampering.
- C. The firewall rules are backed up to an air-gapped system.
- D. A baseline configuration is created and maintained for all relevant systems.

Answer: D

### **OUESTION 36**

The type of authorized interactions a subject can have with an object is

- A. control.
- B. permission.
- C. procedure.
- D. protocol.

Answer: B

#### **QUESTION** 37

Are companies legally required to report all data breaches?

- A. No, different jurisdictions have different rules.
- B. No, not if the data is encrypted.
- C. No, companies' codes of ethics don't require it.
- D. No, only if the breach had a material impact.

Answer: A

#### **QUESTION** 38

During a fingerprint verification process, which of the following is used to verify identity and authentication?

- A. A pressure value is compared with a stored template
- B. Sets of digits are matched with stored values
- C. A hash table is matched to a database of stored value
- D. A template of minutiae is compared with a stored template

Answer: D

### **QUESTION** 39

The BEST way to check for good security programming practices, as well as auditing for possible backdoors, is to conduct

- A. log auditing.
- B. code reviews.
- C. impact assessments.
- D. static analysis.

Answer: B

#### **QUESTION** 40

Which of the following is the BIGGEST weakness when using native Lightweight Directory Access Protocol (LDAP) for authentication?

- A. Authorizations are not included in the server response
- B. Unsalted hashes are passed over the network
- C. The authentication session can be replayed
- D. Passwords are passed in cleartext

Answer: D

### **QUESTION** 41

When building a data center, site location and construction factors that increase the level of vulnerability to physical threats include

- A. hardened building construction with consideration of seismic factors.
- B. adequate distance from and lack of access to adjacent buildings.
- C. curved roads approaching the data center.
- D. proximity to high crime areas of the city.

Answer: D

#### **QUESTION** 42

An organization lacks a data retention policy. Of the following, who is the BEST person to consult for such requirement?

- A. Application Manager
- B. Database Administrator
- C. Privacy Officer
- D. Finance Manager

Answer: C

Which of the following is the BEST solution to provide redundancy for telecommunications links?

- A. Provide multiple links from the same telecommunications vendor.
- B. Ensure that the telecommunications links connect to the network in one location.
- C. Ensure that the telecommunications links connect to the network in multiple locations.
- D. Provide multiple links from multiple telecommunications vendors.

Answer: D

### **QUESTION** 44

What principle requires that changes to the plaintext affect many parts of the ciphertext?

- A. Diffusion
- B. Encapsulation
- C. Obfuscation
- D. Permutation

Answer: A

## **QUESTION** 45

Which of the following is the FIRST step of a penetration test plan?

- A. Analyzing a network diagram of the target network
- B. Notifying the company's customers
- C. Obtaining the approval of the company's management
- D. Scheduling the penetration test during a period of least impact

Answer: C

#### **QUESTION** 46

The three PRIMARY requirements for a penetration test are

- A. A defined goal, limited time period, and approval of management
- B. A general objective, unlimited time, and approval of the network administrator
- C. An objective statement, disclosed methodology, and fixed cost
- D. A stated objective, liability waiver, and disclosed methodology

Answer: A

#### **QUESTION** 47

What is the MAIN feature that onion routing networks offer?

- A. Non-repudiation
- B. Traceability

C. Anonymity

D. Resilience

Answer: C

### **OUESTION** 48

Which of the following is the PRIMARY benefit of implementing data-in-use controls?

- A. If the data is lost, it must be decrypted to be opened.
- B. If the data is lost, it will not be accessible to unauthorized users.
- C. When the data is being viewed, it can only be printed by authorized users.
- D. When the data is being viewed, it must be accessed using secure protocols.

Answer: C

#### **OUESTION** 49

What type of encryption is used to protect sensitive data in transit over a network?

- A. Payload encryption and transport encryption
- B. Authentication Headers (AH)
- C. Keyed-Hashing for Message Authentication
- D. Point-to-Point Encryption (P2PE)

Answer: A

### **QUESTION** 50

Which of the following is required to determine classification and ownership?

- A. System and data resources are properly identified
- B. Access violations are logged and audited
- C. Data file references are identified and linked
- D. System security controls are fully integrated

Answer: A

### **QUESTION** 51

Which of the following provides the minimum set of privileges required to perform a job function and restricts the user to a domain with the required privileges?

- A. Access based on rules
- B. Access based on user's role
- C. Access determined by the system
- D. Access based on data sensitivity

Answer: B

Which of the following assures that rules are followed in an identity management architecture?

- A. Policy database
- B. Digital signature
- C. Policy decision point
- D. Policy enforcement point

Answer: D

## **QUESTION** 53

When in the Software Development Life Cycle (SDLC) MUST software security functional requirements be defined?

- A. After the system preliminary design has been developed and the data security categorization has been performed
- B. After the business functional analysis and the data security categorization have been performed
- C. After the vulnerability analysis has been performed and before the system detailed design begins
- D. After the system preliminary design has been developed and before the data security categorization begins

Answer: B

### **QUESTION 54**

Which of the following is the MAIN goal of a data retention policy?

- A. Ensure that data is destroyed properly.
- B. Ensure that data recovery can be done on the data.
- C. Ensure the integrity and availability of data for a predetermined amount of time.
- D. Ensure the integrity and confidentiality of data for a predetermined amount of time.

Answer: C

#### **OUESTION 55**

Refer to the information below to answer the question.

A new employee is given a laptop computer with full administrator access. This employee does not have a personal computer at home and has a child that uses the computer to send and receive e-mail, search the web, and use instant messaging. The organization's Information Technology (IT) department discovers that a peer-to-peer program has been installed on the computer using the employee's access.

Which of the following solutions would have MOST likely detected the use of peer-to-peer programs when the computer was connected to the office network?

- A. Anti-virus software
- B. Intrusion Prevention System (IPS)
- C. Anti-spyware software
- D. Integrity checking software

Answer: B

#### **QUESTION 56**

Which of the following is a detective access control mechanism?

- A. Log review
- B. Least privilege
- C. Password complexity
- D. Non-disclosure agreement

Answer: A

## **QUESTION 57**

When designing a networked Information System (IS) where there will be several different types of individual access, what is the FIRST step that should be taken to ensure all access control requirements are addressed?

- A. Create a user profile.
- B. Create a user access matrix.
- C. Develop an Access Control List (ACL).
- D. Develop a Role Based Access Control (RBAC) list.

Answer: B

### **QUESTION 58**

A large bank deploys hardware tokens to all customers that use their online banking system. The token generates and displays a six digit numeric password every 60 seconds. The customers must log into their bank accounts using this numeric password. This is an example of

- A. asynchronous token.
- B. Single Sign-On (SSO) token.
- C. single factor authentication token.
- D. synchronous token.

Answer: D

#### **QUESTION** 59

When implementing a secure wireless network, which of the following supports authentication and authorization for individual client endpoints?

- A. Temporal Key Integrity Protocol (TKIP)
- B. Wi-Fi Protected Access (WPA) Pre-Shared Key (PSK)
- C. Wi-Fi Protected Access 2 (WPA2) Enterprise
- D. Counter Mode with Cipher Block Chaining Message Authentication Code Protocol (CCMP)

Answer: C

What is the MOST effective method for gaining unauthorized access to a file protected with a long complex password?

- A. Brute force attack
- B. Frequency analysis
- C. Social engineering
- D. Dictionary attack

Answer: C

### **OUESTION** 61

An organization has decided to contract with a cloud-based service provider to leverage their identity as a service offering. They will use Open Authentication (OAuth) 2.0 to authenticate external users to the organization's services.

As part of the authentication process, which of the following must the end user provide?

- A. An access token
- B. A username and password
- C. A username
- D. A password

Answer: A

### **QUESTION** 62

Refer to the information below to answer the question.

A large organization uses unique identifiers and requires them at the start of every system session. Application access is based on job classification. The organization is subject to periodic independent reviews of access controls and violations. The organization uses wired and wireless networks and remote access. The organization also uses secure connections to branch offices and secure backup and recovery strategies for selected information and processes.

What MUST the access control logs contain in addition to the identifier?

- A. Time of the access
- B. Security classification
- C. Denied access attempts
- D. Associated clearance

Answer: A

#### **QUESTION** 63

Which of the following secure startup mechanisms are PRIMARILY designed to thwart attacks?

- A. Timing
- B. Cold boot

- C. Side channel
- D. Acoustic cryptanalysis

Answer: B

## **QUESTION** 64

A global organization wants to implement hardware tokens as part of a multifactor authentication solution for remote access. The PRIMARY advantage of this implementation is

- A. the scalability of token enrollment.
- B. increased accountability of end users.
- C. it protects against unauthorized access.
- D. it simplifies user access administration.

Answer: C

### **QUESTION** 65

Application of which of the following Institute of Electrical and Electronics Engineers (IEEE) standards will prevent an unauthorized wireless device from being attached to a network?

A. IEEE 802.1F

B. IEEE 802.1H

C. IEEE 802.1Q

D. IEEE 802.1X

Answer: D

### **OUESTION** 66

Refer to the information below to answer the question.

During the investigation of a security incident, it is determined that an unauthorized individual accessed a system which hosts a database containing financial information.

If the intrusion causes the system processes to hang, which of the following has been affected?

- A. System integrity
- B. System availability
- C. System confidentiality
- D. System auditability

Answer: B

#### **QUESTION** 67

Which of the following is the BEST example of weak management commitment to the protection of security assets and resources?

- A. poor governance over security processes and procedures
- B. immature security controls and procedures

- C. variances against regulatory requirements
- D. unanticipated increases in security incidents and threats

Answer: A

## **QUESTION** 68

What is the GREATEST challenge of an agent-based patch management solution?

- A. Time to gather vulnerability information about the computers in the program
- B. Requires that software be installed, running, and managed on all participating computers
- C. The significant amount of network bandwidth while scanning computers
- D. The consistency of distributing patches to each participating computer

Answer: B

### **QUESTION** 69

Which of the following is the MOST important output from a mobile application threat modeling exercise according to Open Web Application Security Project (OWASP)?

- A. Application interface entry and endpoints
- B. The likelihood and impact of a vulnerability
- C. Countermeasures and mitigations for vulnerabilities
- D. A data flow diagram for the application and attack surface analysis

Answer: D

#### **OUESTION** 70

The World Trade Organization's (WTO) agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) requires authors of computer software to be given the

- A. right to refuse or permit commercial rentals.
- B. right to disguise the software's geographic origin.
- C. ability to tailor security parameters based on location.
- D. ability to confirm license authenticity of their works.

Answer: A

## **QUESTION 71**

An online retail company has formulated a record retention schedule for customer transactions. Which of the following is a valid reason a customer transaction is kept beyond the retention schedule?

- A. Pending legal hold
- B. Long term data mining needs
- C. Customer makes request to retain
- D. Useful for future business initiatives

Answer: A

### **QUESTION 72**

Which of the following is TRUE about Disaster Recovery Plan (DRP) testing?

- A. Operational networks are usually shut down during testing.
- B. Testing should continue even if components of the test fail.
- C. The company is fully prepared for a disaster if all tests pass.
- D. Testing should not be done until the entire disaster plan can be tested.

Answer: B

## **QUESTION 73**

Which of the following is the PRIMARY benefit of a formalized information classification program?

- A. It drives audit processes.
- B. It supports risk assessment.
- C. It reduces asset vulnerabilities.
- D. It minimizes system logging requirements.

Answer: B

#### **QUESTION 74**

Which of the following is an authentication protocol in which a new random number is generated uniquely for each login session?

- A. Challenge Handshake Authentication Protocol (CHAP)
- B. Point-to-Point Protocol (PPP)
- C. Extensible Authentication Protocol (EAP)
- D. Password Authentication Protocol (PAP)

Answer: A

#### **QUESTION 75**

Who must approve modifications to an organization's production infrastructure configuration?

- A. Technical management
- B. Change control board
- C. System operations
- D. System users

Answer: B

## **QUESTION** 76

How can lessons learned from business continuity training and actual recovery incidents

#### BEST be used?

- A. As a means for improvement
- B. As alternative options for awareness and training
- C. As indicators of a need for policy
- D. As business function gap indicators

Answer: A

### **QUESTION 77**

The overall goal of a penetration test is to determine a system's

- A. ability to withstand an attack.
- B. capacity management.
- C. error recovery capabilities.
- D. reliability under stress.

Answer: A

### **QUESTION** 78

When constructing an Information Protection Policy (IPP), it is important that the stated rules are necessary, adequate, and

- A. flexible.
- B. confidential.
- C. focused.
- D. achievable.

Answer: D

#### **OUESTION** 79

Which of the following actions should be performed when implementing a change to a database schema in a production system?

- A. Test in development, determine dates, notify users, and implement in production
- B. Apply change to production, run in parallel, finalize change in production, and develop a back-out strategy
- C. Perform user acceptance testing in production, have users sign off, and finalize change
- D. Change in development, perform user acceptance testing, develop a back-out strategy, and implement change

Answer: D

#### **QUESTION** 80

While impersonating an Information Security Officer (ISO), an attacker obtains information from company employees about their User IDs and passwords. Which method of information gathering has the attacker used?

#### A. Trusted path

- B. Malicious logic
- C. Social engineering
- D. Passive misuse

Answer: C

### **QUESTION** 81

Which of the following could elicit a Denial of Service (DoS) attack against a credential management system?

- A. Delayed revocation or destruction of credentials
- B. Modification of Certificate Revocation List
- C. Unauthorized renewal or re-issuance
- D. Token use after decommissioning

Answer: B

### **QUESTION** 82

Disaster Recovery Plan (DRP) training material should be

- A. consistent so that all audiences receive the same training.
- B. stored in a fire proof safe to ensure availability when needed.
- C. only delivered in paper format.
- D. presented in a professional looking manner.

Answer: A

#### **QUESTION** 83

Which of the following questions can be answered using user and group entitlement reporting?

- A. When a particular file was last accessed by a user
- B. Change control activities for a particular group of users
- C. The number of failed login attempts for a particular user
- D. Where does a particular user have access within the network

Answer: D

#### **QUESTION** 84

Given the various means to protect physical and logical assets, match the access management area to the technology.

<u>Area</u>		Technolog
Facilities		Encryption
Devices		Window
Information		Firewall
Systems		Authenticatio
Answer:		
<u>Area</u>		Technolog
Facilities	Information	Encryption
Devices	Facilities	Window
Information	Devices	Firewall
Systems	Systems	Authenticatio

A system is developed so that its business users can perform business functions but not user administration functions. Application administrators can perform administration functions but not user business functions. These capabilities are BEST described as

- A. least privilege.
- B. rule based access controls.
- C. Mandatory Access Control (MAC).
- D. separation of duties.

Answer: D

### **QUESTION** 86

Which of the following is an essential element of a privileged identity lifecycle management?

- A. Regularly perform account re-validation and approval
- B. Account provisioning based on multi-factor authentication
- C. Frequently review performed activities and request justification
- D. Account information to be provided by supervisor or line manager

Answer: A

### **QUESTION** 87

Which of the following are required components for implementing software configuration management systems?

- A. Audit control and signoff
- B. User training and acceptance
- C. Rollback and recovery processes
- D. Regression testing and evaluation

Answer: C

#### **QUESTION** 88

As one component of a physical security system, an Electronic Access Control (EAC) token is BEST known for its ability to

- A. overcome the problems of key assignments.
- B. monitor the opening of windows and doors.
- C. trigger alarms when intruders are detected.
- D. lock down a facility during an emergency.

Answer: A

#### **OUESTION** 89

Which of the following can BEST prevent security flaws occurring in outsourced software development?

- A. Contractual requirements for code quality
- B. Licensing, code ownership and intellectual property rights
- C. Certification of the quality and accuracy of the work done
- D. Delivery dates, change management control and budgetary control

Answer: C

### **QUESTION** 90

Which of the following is the best practice for testing a Business Continuity Plan (BCP)?

- A. Test before the IT Audit
- B. Test when environment changes
- C. Test after installation of security patches
- D. Test after implementation of system patches

Answer: B

A practice that permits the owner of a data object to grant other users access to that object would usually provide

- A. Mandatory Access Control (MAC).
- B. owner-administered control.
- C. owner-dependent access control.
- D. Discretionary Access Control (DAC).

Answer: D

#### **QUESTION** 92

Which of the following are Systems Engineering Life Cycle (SELC) Technical Processes?

- A. Concept, Development, Production, Utilization, Support, Retirement
- B. Stakeholder Requirements Definition, Architectural Design, Implementation, Verification, Operation
- C. Acquisition, Measurement, Configuration Management, Production, Operation, Support
- D. Concept, Requirements, Design, Implementation, Production, Maintenance, Support, Disposal

Answer: B

#### **QUESTION** 93

During an audit, the auditor finds evidence of potentially illegal activity. Which of the following is the MOST appropriate action to take?

- A. Immediately call the police
- B. Work with the client to resolve the issue internally
- C. Advise the person performing the illegal activity to cease and desist
- D. Work with the client to report the activity to the appropriate authority

Answer: D

#### **QUESTION** 94

A health care provider is considering Internet access for their employees and patients. Which of the following is the organization's MOST secure solution for protection of data?

- A. Public Key Infrastructure (PKI) and digital signatures
- B. Trusted server certificates and passphrases
- C. User ID and password
- D. Asymmetric encryption and User ID

Answer: A

## **QUESTION** 95

If compromised, which of the following would lead to the exploitation of multiple virtual machines?

- A. Virtual device drivers
- B. Virtual machine monitor
- C. Virtual machine instance
- D. Virtual machine file system

Answer: B

### **QUESTION** 96

To prevent inadvertent disclosure of restricted information, which of the following would be the LEAST effective process for eliminating data prior to the media being discarded?

- A. Multiple-pass overwriting
- B. Degaussing
- C. High-level formatting
- D. Physical destruction

Answer: C

### **QUESTION** 97

Which one of the following describes granularity?

- A. Maximum number of entries available in an Access Control List (ACL)
- B. Fineness to which a trusted system can authenticate users
- C. Number of violations divided by the number of total accesses
- D. Fineness to which an access control system can be adjusted

Answer: D

### **QUESTION** 98

Which of the following is the MOST crucial for a successful audit plan?

- A. Defining the scope of the audit to be performed
- B. Identifying the security controls to be implemented
- C. Working with the system owner on new controls
- D. Acquiring evidence of systems that are not compliant

Answer: A

#### **QUESTION** 99

Which of the following is a security limitation of File Transfer Protocol (FTP)?

- A. Passive FTP is not compatible with web browsers.
- B. Anonymous access is allowed.
- C. FTP uses Transmission Control Protocol (TCP) ports 20 and 21.
- D. Authentication is not encrypted.

Answer: D

#### **QUESTION** 100

What would be the PRIMARY concern when designing and coordinating a security assessment for an Automatic Teller Machine (ATM) system?

- A. Physical access to the electronic hardware
- B. Regularly scheduled maintenance process
- C. Availability of the network connection
- D. Processing delays

Answer: A

#### **QUESTION** 101

The implementation of which features of an identity management system reduces costs and administration overhead while improving audit and accountability?

- A. Two-factor authentication
- B. Single Sign-On (SSO)
- C. User self-service
- D. A metadirectory

Answer: C

### **QUESTION** 102

What does secure authentication with logging provide?

- A. Data integrity
- B. Access accountability
- C. Encryption logging format
- D. Segregation of duties

Answer: B

### **QUESTION** 103

Which of the following has the GREATEST impact on an organization's security posture?

- A. International and country-specific compliance requirements
- B. Security violations by employees and contractors
- C. Resource constraints due to increasing costs of supporting security
- D. Audit findings related to employee access and permissions process

Answer: A

Which of the following provides the MOST protection against data theft of sensitive information when a laptop is stolen?

- A. Set up a BIOS and operating system password
- B. Encrypt the virtual drive where confidential files can be stored
- C. Implement a mandatory policy in which sensitive data cannot be stored on laptops, but only on the corporate network
- D. Encrypt the entire disk and delete contents after a set number of failed access attempts

Answer: D

### **OUESTION** 105

Which of the following methods protects Personally Identifiable Information (PII) by use of a full replacement of the data element?

- A. Transparent Database Encryption (TDE)
- B. Column level database encryption
- C. Volume encryption
- D. Data tokenization

Answer: D

#### **QUESTION** 106

The Structured Query Language (SQL) implements Discretionary Access Controls (DAC) using

- A. INSERT and DELETE.
- B. GRANT and REVOKE.
- C. PUBLIC and PRIVATE.
- D. ROLLBACK and TERMINATE.

Answer: B

#### **QUESTION** 107

What is a common challenge when implementing Security Assertion Markup Language (SAML) for identity integration between on-premise environment and an external identity provider service?

- A. Some users are not provisioned into the service.
- B. SAML tokens are provided by the on-premise identity provider.
- C. Single users cannot be revoked from the service.
- D. SAML tokens contain user information.

Answer: A

## **QUESTION** 108

Which security approach will BEST minimize Personally Identifiable Information (PII) loss from a data breach?

- A. A strong breach notification process
- B. Limited collection of individuals' confidential data
- C. End-to-end data encryption for data in transit
- D. Continuous monitoring of potential vulnerabilities

Answer: B

#### **QUESTION** 109

Which of the following does Temporal Key Integrity Protocol (TKIP) support?

- A. Multicast and broadcast messages
- B. Coordination of IEEE 802.11 protocols
- C. Wired Equivalent Privacy (WEP) systems
- D. Synchronization of multiple devices

Answer: C

### **QUESTION** 110

When transmitting information over public networks, the decision to encrypt it should be based on

- A. the estimated monetary value of the information.
- B. whether there are transient nodes relaying the transmission.
- C. the level of confidentiality of the information.
- D. the volume of the information.

Answer: C

#### **QUESTION** 111

During the procurement of a new information system, it was determined that some of the security requirements were not addressed in the system specification. Which of the following is the MOST likely reason for this?

- A. The procurement officer lacks technical knowledge.
- B. The security requirements have changed during the procurement process.
- C. There were no security professionals in the vendor's bidding team.
- D. The description of the security requirements was insufficient.

Answer: D

#### **QUESTION** 112

Which of the following elements MUST a compliant EU-US Safe Harbor Privacy Policy contain?

- A. An explanation of how long the data subject's collected information will be retained for and how it will be eventually disposed.
- B. An explanation of who can be contacted at the organization collecting the information if corrections are

required by the data subject.

- C. An explanation of the regulatory frameworks and compliance standards the information collecting organization adheres to.
- D. An explanation of all the technologies employed by the collecting organization in gathering information on the data subject.

Answer: B

#### **QUESTION** 113

Which of the following is an example of two-factor authentication?

- A. Retina scan and a palm print
- B. Fingerprint and a smart card
- C. Magnetic stripe card and an ID badge
- D. Password and Completely Automated Public Turing test to tell Computers and Humans Apart (CAPTCHA)

Answer: B

### **QUESTION** 114

An engineer in a software company has created a virus creation tool. The tool can generate thousands of polymorphic viruses. The engineer is planning to use the tool in a controlled environment to test the company's next generation virus scanning software. Which would BEST describe the behavior of the engineer and why?

- A. The behavior is ethical because the tool will be used to create a better virus scanner.
- B. The behavior is ethical because any experienced programmer could create such a tool.
- C. The behavior is not ethical because creating any kind of virus is bad.
- D. The behavior is not ethical because such a tool could be leaked on the Internet.

Answer: A

#### **OUESTION** 115

The goal of software assurance in application development is to

- A. enable the development of High Availability (HA) systems.
- B. facilitate the creation of Trusted Computing Base (TCB) systems.
- C. prevent the creation of vulnerable applications.
- D. encourage the development of open source applications.

Answer: C

#### **QUESTION** 116

Which of the following statements is TRUE regarding value boundary analysis as a functional software testing technique?

- A. It is useful for testing communications protocols and graphical user interfaces.
- B. It is characterized by the stateless behavior of a process implemented in a function.

- C. Test inputs are obtained from the derived threshold of the given functional specifications.
- D. An entire partition can be covered by considering only one representative value from that partition.

Answer: C

## **OUESTION** 117

For a service provider, which of the following MOST effectively addresses confidentiality concerns for customers using cloud computing?

- A. Hash functions
- B. Data segregation
- C. File system permissions
- D. Non-repudiation controls

Answer: B

### **QUESTION** 118

Which of the following BEST describes a rogue Access Point (AP)?

- A. An AP that is not protected by a firewall
- B. An AP not configured to use Wired Equivalent Privacy (WEP) with Triple Data Encryption Algorithm (3DES)
- C. An AP connected to the wired infrastructure but not under the management of authorized network administrators
- D. An AP infected by any kind of Trojan or Malware

Answer: C

#### **QUESTION** 119

Which of the following describes the concept of a Single Sign-On (SSO) system?

- A. Users are authenticated to one system at a time.
- B. Users are identified to multiple systems with several credentials.
- C. Users are authenticated to multiple systems with one login.
- D. Only one user is using the system at a time.

Answer: C

## **QUESTION** 120

Passive Infrared Sensors (PIR) used in a non-climate controlled environment should

- A. reduce the detected object temperature in relation to the background temperature.
- B. increase the detected object temperature in relation to the background temperature.
- C. automatically compensate for variance in background temperature.
- D. detect objects of a specific temperature independent of the background temperature.

Answer: C

### **QUESTION** 121

For an organization considering two-factor authentication for secure network access, which of the following is MOST secure?

- A. Challenge response and private key
- B. Digital certificates and Single Sign-On (SSO)
- C. Tokens and passphrase
- D. Smart card and biometrics

Answer: D

#### **QUESTION** 122

Which of the following is an attacker MOST likely to target to gain privileged access to a system?

- A. Programs that write to system resources
- B. Programs that write to user directories
- C. Log files containing sensitive information
- D. Log files containing system calls

Answer: A

### **QUESTION** 123

Which of the following is the FIRST action that a system administrator should take when it is revealed during a penetration test that everyone in an organization has unauthorized access to a server holding sensitive data?

- A. Immediately document the finding and report to senior management.
- B. Use system privileges to alter the permissions to secure the server
- C. Continue the testing to its completion and then inform IT management
- D. Terminate the penetration test and pass the finding to the server management team

Answer: A

### **QUESTION** 124

Discretionary Access Control (DAC) restricts access according to

- A. data classification labeling.
- B. page views within an application.
- C. authorizations granted to the user.
- D. management accreditation.

Answer: C

Which item below is a federated identity standard?

- A. 802.11i
- B. Kerberos
- C. Lightweight Directory Access Protocol (LDAP)
- D. Security Assertion Markup Language (SAML)

Answer: D

## **QUESTION** 126

Which of the following is the BEST countermeasure to brute force login attacks?

- A. Changing all canonical passwords
- B. Decreasing the number of concurrent user sessions
- C. Restricting initial password delivery only in person
- D. Introducing a delay after failed system access attempts

Answer: D

#### **OUESTION** 127

A business has implemented Payment Card Industry Data Security Standard (PCI-DSS) compliant handheld credit card processing on their Wireless Local Area Network (WLAN) topology. The network team partitioned the WLAN to create a private segment for credit card processing using a firewall to control device access and route traffic to the card processor on the Internet. What components are in the scope of PCI-DSS?

- A. The entire enterprise network infrastructure.
- B. The handheld devices, wireless access points and border gateway.
- C. The end devices, wireless access points, WLAN, switches, management console, and firewall.
- D. The end devices, wireless access points, WLAN, switches, management console, and Internet

Answer: C

#### **OUESTION** 128

Which of the following is an appropriate source for test data?

- A. Production data that is secured and maintained only in the production environment.
- B. Test data that has no similarities to production data.
- C. Test data that is mirrored and kept up-to-date with production data.
- D. Production data that has been sanitized before loading into a test environment.

Answer: D

#### **OUESTION** 129

Which of the following statements is TRUE of black box testing?

- A. Only the functional specifications are known to the test planner.
- B. Only the source code and the design documents are known to the test planner.
- C. Only the source code and functional specifications are known to the test planner.
- D. Only the design documents and the functional specifications are known to the test planner.

Answer: A

### **QUESTION** 130

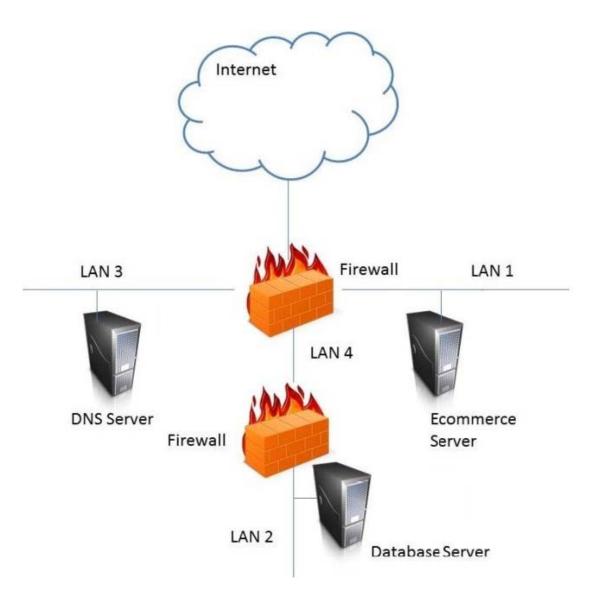
A security manager has noticed an inconsistent application of server security controls resulting in vulnerabilities on critical systems. What is the MOST likely cause of this issue?

- A. A lack of baseline standards
- B. Improper documentation of security guidelines
- C. A poorly designed security policy communication program
- D. Host-based Intrusion Prevention System (HIPS) policies are ineffective

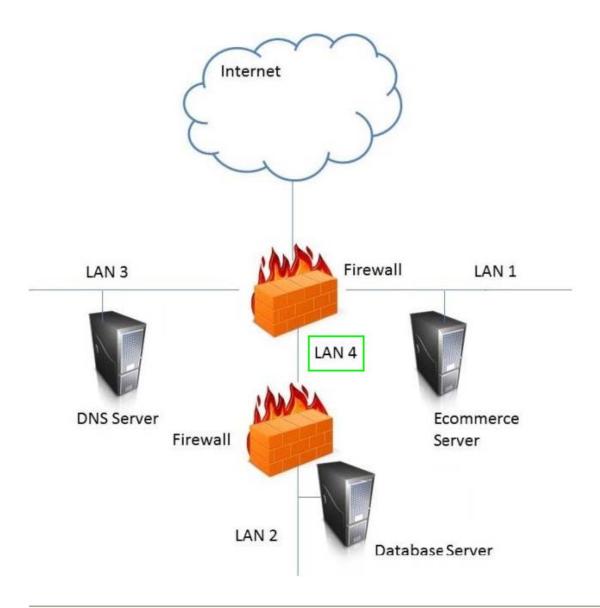
Answer: A

## **QUESTION 131**

In the network design below, where is the MOST secure Local Area Network (LAN) segment to deploy a Wireless Access Point (WAP) that provides contractors access to the Internet and authorized enterprise services?



Answer:



What is the BEST first step for determining if the appropriate security controls are in place for protecting data at rest?

- A. Identify regulatory requirements
- B. Conduct a risk assessment
- C. Determine business drivers
- D. Review the security baseline configuration

Answer: B

# **QUESTION** 133

Refer to the information below to answer the question.

Desktop computers in an organization were sanitized for re-use in an equivalent security environment. The data was destroyed in accordance with organizational policy and all marking and other external indications of the sensitivity of the data that was formerly stored on the magnetic drives were removed.

After magnetic drives were degaussed twice according to the product manufacturer's directions, what is the MOST LIKELY security issue with degaussing?

- A. Commercial products often have serious weaknesses of the magnetic force available in the degausser product.
- B. Degausser products may not be properly maintained and operated.
- C. The inability to turn the drive around in the chamber for the second pass due to human error.
- D. Inadequate record keeping when sanitizing media.

Answer: B

#### **QUESTION** 134

Which of the following roles has the obligation to ensure that a third party provider is capable of processing and handling data in a secure manner and meeting the standards set by the organization?

- A. Data Custodian
- B. Data Owner
- C. Data Creator
- D. Data User

Answer: B

## **QUESTION** 135

Which of the following is the BEST method to assess the effectiveness of an organization's vulnerability management program?

- A. Review automated patch deployment reports
- B. Periodic third party vulnerability assessment
- C. Automated vulnerability scanning
- D. Perform vulnerability scan by security team

Answer: B

#### **QUESTION** 136

Refer to the information below to answer the question.

In a Multilevel Security (MLS) system, the following sensitivity labels are used in increasing levels of sensitivity: restricted, confidential, secret, top secret. Table A lists the clearance levels for four users, while Table B lists the security classes of four different files.

Table A

User	Clearance Leve	
Α	Restricted	
В	Confidential	
С	Secret	
D	Top Secret	

Table B

Files	Security Class	
1	Restricted	
2	Confidential	
3	Secret	
4	Top Secret	

In a Bell-LaPadula system, which user cannot write to File 3?

- A. User A
- B. User B
- C. User C
- D. User D

Answer: D

#### **QUESTION** 137

The application of which of the following standards would BEST reduce the potential for data breaches?

- A. ISO 9000
- B. ISO 20121
- C. ISO 26000
- D. ISO 27001

Answer: D

#### **QUESTION** 138

In Business Continuity Planning (BCP), what is the importance of documenting business processes?

- A. Provides senior management with decision-making tools
- B. Establishes and adopts ongoing testing and maintenance strategies
- C. Defines who will perform which functions during a disaster or emergency
- D. Provides an understanding of the organization's interdependencies

Answer: D

#### **OUESTION** 139

Without proper signal protection, embedded systems may be prone to which type of attack?

- A. Brute force
- B. Tampering
- C. Information disclosure
- D. Denial of Service (DoS)

Answer: C

If an attacker in a SYN flood attack uses someone else's valid host address as the source address, the system under attack will send a large number of Synchronize/Acknowledge (SYN/ACK) packets to the

- A. default gateway.
- B. attacker's address.
- C. local interface being attacked.
- D. specified source address.

Answer: D

## **OUESTION** 141

What do Capability Maturity Models (CMM) serve as a benchmark for in an organization?

- A. Experience in the industry
- B. Definition of security profiles
- C. Human resource planning efforts
- D. Procedures in systems development

Answer: D

#### **QUESTION** 142

The PRIMARY outcome of a certification process is that it provides documented

- A. system weaknesses for remediation.
- B. standards for security assessment, testing, and process evaluation.
- C. interconnected systems and their implemented security controls.
- D. security analyses needed to make a risk-based decision.

Answer: D

#### **OUESTION** 143

Refer to the information below to answer the question.

An organization has hired an information security officer to lead their security department. The officer has adequate people resources but is lacking the other necessary components to have an effective security program.

There are numerous initiatives requiring security involvement.

The effectiveness of the security program can PRIMARILY be measured through

- A. audit findings.
- B. risk elimination.
- C. audit requirements.
- D. customer satisfaction.

Answer: A

Which one of the following security mechanisms provides the BEST way to restrict the execution of privileged procedures?

- A. Role Based Access Control (RBAC)
- B. Biometric access control
- C. Federated Identity Management (IdM)
- D. Application hardening

Answer: A

#### **QUESTION** 145

Secure Sockets Layer (SSL) encryption protects

- A. data at rest.
- B. the source IP address.
- C. data transmitted.
- D. data availability.

Answer: C

# **QUESTION** 146

Refer to the information below to answer the question.

A new employee is given a laptop computer with full administrator access. This employee does not have a personal computer at home and has a child that uses the computer to send and receive e-mail, search the web, and use instant messaging. The organization's Information Technology (IT) department discovers that a peer-to-peer program has been installed on the computer using the employee's access.

Which of the following methods is the MOST effective way of removing the Peer-to-Peer (P2P) program from the computer?

- A. Run software uninstall
- B. Re-image the computer
- C. Find and remove all installation files
- D. Delete all cookies stored in the web browser cache

Answer: B

#### **QUESTION** 147

The BEST example of the concept of "something that a user has" when providing an authorized user access to a computing system is

- A. the user's hand geometry.
- B. a credential stored in a token.
- C. a passphrase.
- D. the user's face.

Answer: B

#### **QUESTION** 148

The amount of data that will be collected during an audit is PRIMARILY determined by the

- A. audit scope.
- B. auditor's experience level.
- C. availability of the data.
- D. integrity of the data.

Answer: A

# **QUESTION** 149

A large university needs to enable student access to university resources from their homes. Which of the following provides the BEST option for low maintenance and ease of deployment?

- A. Provide students with Internet Protocol Security (IPSec) Virtual Private Network (VPN) client software.
- B. Use Secure Sockets Layer (SSL) VPN technology.
- C. Use Secure Shell (SSH) with public/private keys.
- D. Require students to purchase home router capable of VPN.

Answer: B

## **QUESTION** 150

Which of the following prevents improper aggregation of privileges in Role Based Access Control (RBAC)?

- A. Hierarchical inheritance
- B. Dynamic separation of duties
- C. The Clark-Wilson security model
- D. The Bell-LaPadula security model

Answer: B

#### **QUESTION** 151

An organization is selecting a service provider to assist in the consolidation of multiple computing sites including development, implementation and ongoing support of various computer systems. Which of the following MUST be verified by the Information Security Department?

- A. The service provider's policies are consistent with ISO/IEC27001 and there is evidence that the service provider is following those policies.
- B. The service provider will segregate the data within its systems and ensure that each region's policies are met.
- C. The service provider will impose controls and protections that meet or exceed the current systems controls and produce audit logs as verification.
- D. The service provider's policies can meet the requirements imposed by the new environment even if they differ from the organization's current policies.

Answer: D

#### **QUESTION** 152

An auditor carrying out a compliance audit requests passwords that are encrypted in the system to verify that the passwords are compliant with policy. Which of the following is the BEST response to the auditor?

- A. Provide the encrypted passwords and analysis tools to the auditor for analysis.
- B. Analyze the encrypted passwords for the auditor and show them the results.
- C. Demonstrate that non-compliant passwords cannot be created in the system.
- D. Demonstrate that non-compliant passwords cannot be encrypted in the system.

Answer: C

#### **OUESTION** 153

Refer to the information below to answer the question.

An organization has hired an information security officer to lead their security department. The officer has adequate people resources but is lacking the other necessary components to have an effective security program. There are numerous initiatives requiring security involvement.

The security program can be considered effective when

- A. vulnerabilities are proactively identified.
- B. audits are regularly performed and reviewed.
- C. backups are regularly performed and validated.
- D. risk is lowered to an acceptable level.

Answer: D

#### **QUESTION** 154

Two companies wish to share electronic inventory and purchase orders in a supplier and client relationship. What is the BEST security solution for them?

- A. Write a Service Level Agreement (SLA) for the two companies.
- B. Set up a Virtual Private Network (VPN) between the two companies.
- C. Configure a firewall at the perimeter of each of the two companies.
- D. Establish a File Transfer Protocol (FTP) connection between the two companies.

Answer: B

#### **QUESTION** 155

The BEST method to mitigate the risk of a dictionary attack on a system is to

- A. use a hardware token.
- B. use complex passphrases.
- C. implement password history.
- D. encrypt the access control list (ACL).

Answer: A

#### **QUESTION** 156

Which of the following is the BEST way to determine if a particular system is able to identify malicious software without executing it?

- A. Testing with a Botnet
- B. Testing with an EICAR file
- C. Executing a binary shellcode
- D. Run multiple antivirus programs

Answer: B

# **QUESTION** 157

The BEST method of demonstrating a company's security level to potential customers is

- A. a report from an external auditor.
- B. responding to a customer's security questionnaire.
- C. a formal report from an internal auditor.
- D. a site visit by a customer's security team.

Answer: A

## **QUESTION** 158

Which of the following is considered best practice for preventing e-mail spoofing?

- A. Spam filtering
- B. Cryptographic signature
- C. Uniform Resource Locator (URL) filtering
- D. Reverse Domain Name Service (DNS) lookup

Answer: B

#### **QUESTION** 159

What technique BEST describes antivirus software that detects viruses by watching anomalous behavior?

- A. Signature
- B. Inference
- C. Induction
- D. Heuristic

Answer: D

# **QUESTION** 160

Refer to the information below to answer the question.

A security practitioner detects client-based attacks on the organization's network. A plan will be necessary to address these concerns.

What MUST the plan include in order to reduce client-side exploitation?

- A. Approved web browsers
- B. Network firewall procedures
- C. Proxy configuration
- D. Employee education

Answer: D

## **QUESTION** 161

Which of the following disaster recovery test plans will be MOST effective while providing minimal risk?

- A. Read-through
- B. Parallel
- C. Full interruption
- D. Simulation

Answer: B

# **QUESTION** 162

Software Code signing is used as a method of verifying what security concept?

- A. Integrity
- B. Confidentiality
- C. Availability
- D. Access Control

Answer: A

#### **QUESTION** 163

Refer to the information below to answer the question.

A large organization uses unique identifiers and requires them at the start of every system session. Application access is based on job classification. The organization is subject to periodic independent reviews of access controls and violations. The organization uses wired and wireless networks and remote access. The organization also uses secure connections to branch offices and secure backup and recovery strategies for selected information and processes.

Which of the following BEST describes the access control methodology used?

- A. Least privilege
- B. Lattice Based Access Control (LBAC)
- C. Role Based Access Control (RBAC)
- D. Lightweight Directory Access Control (LDAP)

Answer: C

QUESTION 164
Drag the following Security Engineering terms on the left to the BEST definition on the right.

Security Engineering	<u>Definition</u>
Security Risk Treatment	The method used to identify the confidentiality, integrity, and availability requirements for organizational and system assets and to characterize the adverse impact or consequences should the asset be lost, modified, degraded, disrupted, compromised, or
Threat Assessment	A measure of the extent to which an entity is threatened by a potential circumstance or event, the adverse impacts that would arise if the circumstance or event occurs, and the likelihood of occurrence.
Protection Needs	The method used to identify and characterize the dangers anticipated throughout the life cycle of the system.
Risk Answer:	The method used to identify feasible security risk mitigation options and plans.

## Definition Security Engineering Security Risk Treatment The method used to Protection Needs identify the confidentiality, integrity, and availability requirements for organizational and system assets and to characterize the adverse impact or consequences should the asset be lost, modified, degraded, disrupted, compromised, or become unavailable. Threat Assessment Risk A measure of the extent to which an entity is threatened by a potential circumstance or event, the adverse impacts that would arise if the circumstance or event occurs, and the likelihood of occurrence. Protection Needs Threat Assessment The method used to identify and characterize the dangers anticipated throughout the life cycle of the system. Risk Security Risk Treatment The method used to identify feasible security risk mitigation options and plans.

## **QUESTION** 165

Which one of the following affects the classification of data?

- A. Passage of time
- B. Assigned security label
- C. Multilevel Security (MLS) architecture
- D. Minimum query size

Answer: A

Which of the following entities is ultimately accountable for data remanence vulnerabilities with data replicated by a cloud service provider?

- A. Data owner
- B. Data steward
- C. Data custodian
- D. Data processor

Answer: A

#### **QUESTION** 167

Which of the following violates identity and access management best practices?

- A. User accounts
- B. System accounts
- C. Generic accounts
- D. Privileged accounts

Answer: C

# **QUESTION** 168

How does Encapsulating Security Payload (ESP) in transport mode affect the Internet Protocol (IP)?

- A. Encrypts and optionally authenticates the IP header, but not the IP payload
- B. Encrypts and optionally authenticates the IP payload, but not the IP header
- C. Authenticates the IP payload and selected portions of the IP header
- D. Encrypts and optionally authenticates the complete IP packet

Answer: B

#### **QUESTION** 169

Refer to the information below to answer the question.

A large, multinational organization has decided to outsource a portion of their Information Technology (IT) organization to a third-party provider's facility. This provider will be responsible for the design, development, testing, and support of several critical, customer-based applications used by the organization.

The third party needs to have

- A. processes that are identical to that of the organization doing the outsourcing.
- B. access to the original personnel that were on staff at the organization.
- C. the ability to maintain all of the applications in languages they are familiar with.
- D. access to the skill sets consistent with the programming languages used by the organization.

Answer: D

#### **OUESTION** 170

An organization has hired a security services firm to conduct a penetration test. Which of the following will the organization provide to the tester?

- A. Limits and scope of the testing.
- B. Physical location of server room and wiring closet.
- C. Logical location of filters and concentrators.
- D. Employee directory and organizational chart.

Answer: A

## **QUESTION 171**

Which of the following is most helpful in applying the principle of LEAST privilege?

- A. Establishing a sandboxing environment
- B. Setting up a Virtual Private Network (VPN) tunnel
- C. Monitoring and reviewing privileged sessions
- D. Introducing a job rotation program

Answer: A

#### **QUESTION** 172

With data labeling, which of the following MUST be the key decision maker?

- A. Information security
- B. Departmental management
- C. Data custodian
- D. Data owner

Answer: D

#### **QUESTION** 173

Following the completion of a network security assessment, which of the following can BEST be demonstrated?

- A. The effectiveness of controls can be accurately measured
- B. A penetration test of the network will fail
- C. The network is compliant to industry standards
- D. All unpatched vulnerabilities have been identified

Answer: A

#### **OUESTION 174**

The PRIMARY characteristic of a Distributed Denial of Service (DDoS) attack is that it

- A. exploits weak authentication to penetrate networks.
- B. can be detected with signature analysis.

C. looks like normal network activity.

D. is commonly confused with viruses or worms.

Answer: C

# **QUESTION 175**

Refer to the information below to answer the question.

A large organization uses unique identifiers and requires them at the start of every system session. Application access is based on job classification. The organization is subject to periodic independent reviews of access controls and violations. The organization uses wired and wireless networks and remote access. The organization also uses secure connections to branch offices and secure backup and recovery strategies for selected information and processes.

Following best practice, where should the permitted access for each department and job classification combination be specified?

- A. Security procedures
- B. Security standards
- C. Human resource policy
- D. Human resource standards

Answer: B

#### **QUESTION** 176

A thorough review of an organization's audit logs finds that a disgruntled network administrator has intercepted emails meant for the Chief Executive Officer (CEO) and changed them before forwarding them to their intended recipient. What type of attack has MOST likely occurred?

- A. Spoofing
- B. Eavesdropping
- C. Man-in-the-middle
- D. Denial of service

Answer: C

#### **QUESTION** 177

Which of the following is a network intrusion detection technique?

- A. Statistical anomaly
- B. Perimeter intrusion
- C. Port scanning
- D. Network spoofing

Answer: A

# **QUESTION** 178

Refer to the information below to answer the question.

A security practitioner detects client-based attacks on the organization's network. A plan will be necessary to address these concerns.

In addition to web browsers, what PRIMARY areas need to be addressed concerning mobile code used for malicious purposes?

- A. Text editors, database, and Internet phone applications
- B. Email, presentation, and database applications
- C. Image libraries, presentation and spreadsheet applications
- D. Email, media players, and instant messaging applications

Answer: D

## **OUESTION** 179

Which of the following is a potential risk when a program runs in privileged mode?

- A. It may serve to create unnecessary code complexity
- B. It may not enforce job separation duties
- C. It may create unnecessary application hardening
- D. It may allow malicious code to be inserted

Answer: D

#### **QUESTION** 180

Which of the following BEST represents the principle of open design?

- A. Disassembly, analysis, or reverse engineering will reveal the security functionality of the computer system.
- B. Algorithms must be protected to ensure the security and interoperability of the designed system.
- C. A knowledgeable user should have limited privileges on the system to prevent their ability to compromise security capabilities.
- D. The security of a mechanism should not depend on the secrecy of its design or implementation.

Answer: D

#### **QUESTION** 181

What is the PRIMARY advantage of using automated application security testing tools?

- A. The application can be protected in the production environment.
- B. Large amounts of code can be tested using fewer resources.
- C. The application will fail less when tested using these tools.
- D. Detailed testing of code functions can be performed.

Answer: B

#### **OUESTION 182**

Which of the following is critical for establishing an initial baseline for software components in the operation and maintenance of applications?

- A. Application monitoring procedures
- B. Configuration control procedures
- C. Security audit procedures
- D. Software patching procedures

Answer: B

# **QUESTION** 183

The FIRST step in building a firewall is to

- A. assign the roles and responsibilities of the firewall administrators.
- B. define the intended audience who will read the firewall policy.
- C. identify mechanisms to encourage compliance with the policy.
- D. perform a risk analysis to identify issues to be addressed.

Answer: D

# **QUESTION** 184

In the area of disaster planning and recovery, what strategy entails the presentation of information about the plan?

- A. Communication
- B. Planning
- C. Recovery
- D. Escalation

Answer: A

# **QUESTION** 185

A mobile device application that restricts the storage of user information to just that which is needed to accomplish lawful business goals adheres to what privacy principle?

- A. Onward transfer
- B. Collection Limitation
- C. Collector Accountability
- D. Individual Participation

Answer: B

#### **QUESTION** 186

Which of the following is a function of Security Assertion Markup Language (SAML)?

- A. File allocation
- B. Redundancy check
- C. Extended validation

# D. Policy enforcement

Answer: D

#### **QUESTION** 187

An organization is found lacking the ability to properly establish performance indicators for its Web hosting solution during an audit. What would be the MOST probable cause?

- A. Improper deployment of the Service-Oriented Architecture (SOA)
- B. Absence of a Business Intelligence (BI) solution
- C. Inadequate cost modeling
- D. Insufficient Service Level Agreement (SLA)

Answer: D

## **QUESTION** 188

Which of the following statements is TRUE for point-to-point microwave transmissions?

- A. They are not subject to interception due to encryption.
- B. Interception only depends on signal strength.
- C. They are too highly multiplexed for meaningful interception.
- D. They are subject to interception by an antenna within proximity.

Answer: D

## **QUESTION** 189

Which of the following is a method used to prevent Structured Query Language (SQL) injection attacks?

- A. Data compression
- B. Data classification
- C. Data warehousing
- D. Data validation

Answer: D

#### **OUESTION** 190

According to best practice, which of the following is required when implementing third party software in a production environment?

- A. Scan the application for vulnerabilities
- B. Contract the vendor for patching
- C. Negotiate end user application training
- D. Escrow a copy of the software

Answer: A

Which of the following is the MOST important element of change management documentation?

- A. List of components involved
- B. Number of changes being made
- C. Business case justification
- D. A stakeholder communication

Answer: C

# **QUESTION** 192

What component of a web application that stores the session state in a cookie can be bypassed by an attacker?

- A. An initialization check
- B. An identification check
- C. An authentication check
- D. An authorization check

Answer: C

#### **OUESTION** 193

According to best practice, which of the following groups is the MOST effective in performing an information security compliance audit?

- A. In-house security administrators
- B. In-house Network Team
- C. Disaster Recovery (DR) Team
- D. External consultants

Answer: D

#### **QUESTION** 194

Which of the following types of security testing is the MOST effective in providing a better indication of the everyday security challenges of an organization when performing a security risk assessment?

- A. External
- B. Overt
- C. Internal
- D. Covert

Answer: D

# **QUESTION** 195

Which of the following is a limitation of the Common Vulnerability Scoring System (CVSS) as it relates to conducting code review?

- A. It has normalized severity ratings.
- B. It has many worksheets and practices to implement.
- C. It aims to calculate the risk of published vulnerabilities.
- D. It requires a robust risk management framework to be put in place.

Answer: C

# **QUESTION** 196

Which of the following protocols would allow an organization to maintain a centralized list of users that can read a protected webpage?

- A. Lightweight Directory Access Control (LDAP)
- B. Security Assertion Markup Language (SAML)
- C. Hypertext Transfer Protocol (HTTP)
- D. Kerberos

Answer: A

#### **QUESTION** 197

Which of the following methods provides the MOST protection for user credentials?

- A. Forms-based authentication
- B. Digest authentication
- C. Basic authentication
- D. Self-registration

Answer: B

#### **QUESTION** 198

What is the MOST effective countermeasure to a malicious code attack against a mobile system?

- A. Sandbox
- B. Change control
- C. Memory management
- D. Public-Key Infrastructure (PKI)

Answer: A

#### **QUESTION** 199

What is the PRIMARY difference between security policies and security procedures?

- A. Policies are used to enforce violations, and procedures create penalties
- B. Policies point to guidelines, and procedures are more contractual in nature
- C. Policies are included in awareness training, and procedures give guidance
- D. Policies are generic in nature, and procedures contain operational details

Answer: D

#### **QUESTION** 200

Refer to the information below to answer the question.

A new employee is given a laptop computer with full administrator access. This employee does not have a personal computer at home and has a child that uses the computer to send and receive e-mail, search the web, and use instant messaging. The organization's Information Technology (IT) department discovers that a peer-to-peer program has been installed on the computer using the employee's access.

Which of the following could have MOST likely prevented the Peer-to-Peer (P2P) program from being installed on the computer?

- A. Removing employee's full access to the computer
- B. Supervising their child's use of the computer
- C. Limiting computer's access to only the employee
- D. Ensuring employee understands their business conduct guidelines

Answer: A

## **QUESTION** 201

Which one of the following is a common risk with network configuration management?

- A. Patches on the network are difficult to keep current.
- B. It is the responsibility of the systems administrator.
- C. User ID and passwords are never set to expire.
- D. Network diagrams are not up to date.

Answer: D

#### **QUESTION** 202

Refer to the information below to answer the question.

During the investigation of a security incident, it is determined that an unauthorized individual accessed a system which hosts a database containing financial information.

Aside from the potential records which may have been viewed, which of the following should be the PRIMARY concern regarding the database information?

- A. Unauthorized database changes
- B. Integrity of security logs
- C. Availability of the database
- D. Confidentiality of the incident

Answer: A

#### **OUESTION 203**

The PRIMARY purpose of a security awareness program is to

- A. ensure that everyone understands the organization's policies and procedures.
- B. communicate that access to information will be granted on a need-to-know basis.
- C. warn all users that access to all systems will be monitored on a daily basis.
- D. comply with regulations related to data and information protection.

Answer: A

## **QUESTION 204**

An organization has developed a major application that has undergone accreditation testing. After receiving the results of the evaluation, what is the final step before the application can be accredited?

- A. Acceptance of risk by the authorizing official
- B. Remediation of vulnerabilities
- C. Adoption of standardized policies and procedures
- D. Approval of the System Security Plan (SSP)

Answer: A

#### **QUESTION 205**

When using third-party software developers, which of the following is the MOST effective method of providing software development Quality Assurance (QA)?

- A. Retain intellectual property rights through contractual wording.
- B. Perform overlapping code reviews by both parties.
- C. Verify that the contractors attend development planning meetings.
- D. Create a separate contractor development environment.

Answer: B

# **QUESTION** 206

What physical characteristic does a retinal scan biometric device measure?

- A. The amount of light reflected by the retina
- B. The size, curvature, and shape of the retina
- C. The pattern of blood vessels at the back of the eye
- D. The pattern of light receptors at the back of the eye

Answer: C

#### **QUESTION** 207

Which of the following is the MAIN reason that system re-certification and re-accreditation are needed?

- A. To assist data owners in making future sensitivity and criticality determinations
- B. To assure the software development team that all security issues have been addressed
- C. To verify that security protection remains acceptable to the organizational security policy

D. To help the security team accept or reject new systems for implementation and production

Answer: C

#### **QUESTION** 208

A security professional has been asked to evaluate the options for the location of a new data center within a multifloor building. Concerns for the data center include emanations and physical access controls. Which of the following is the BEST location?

- A. On the top floor
- B. In the basement
- C. In the core of the building
- D. In an exterior room with windows

Answer: C

#### **QUESTION** 209

Data remanence refers to which of the following?

- A. The remaining photons left in a fiber optic cable after a secure transmission.
- B. The retention period required by law or regulation.
- C. The magnetic flux created when removing the network connection from a server or personal computer.
- D. The residual information left on magnetic storage media after a deletion or erasure.

Answer: D

#### **QUESTION** 210

Which of the following provides effective management assurance for a Wireless Local Area Network (WLAN)?

- A. Maintaining an inventory of authorized Access Points (AP) and connecting devices
- B. Setting the radio frequency to the minimum range required
- C. Establishing a Virtual Private Network (VPN) tunnel between the WLAN client device and a VPN concentrator
- D. Verifying that all default passwords have been changed

Answer: A

# **QUESTION 211**

Which of the following actions MUST be taken if a vulnerability is discovered during the maintenance stage in a System Development Life Cycle (SDLC)?

- A. Make changes following principle and design guidelines.
- B. Stop the application until the vulnerability is fixed.
- C. Report the vulnerability to product owner.
- D. Monitor the application and review code.

Answer: C

#### **QUESTION** 212

To protect auditable information, which of the following MUST be configured to only allow read access?

- A. Logging configurations
- B. Transaction log files
- C. User account configurations
- D. Access control lists (ACL)

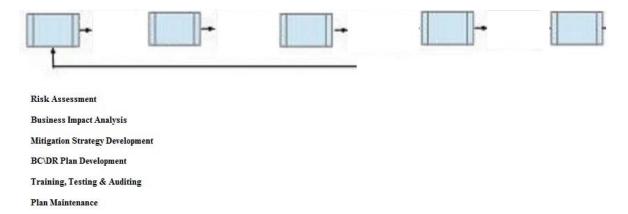
Answer: B

# **QUESTION 213**

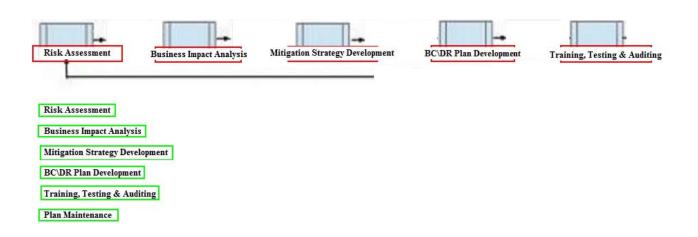
During the risk assessment phase of the project the CISO discovered that a college within the University is collecting Protected Health Information (PHI) data via an application that was developed in-house. The college collecting this data is fully aware of the regulations for Health Insurance Portability and Accountability Act (HIPAA) and is fully compliant.

What is the best approach for the CISO?

Below are the common phases to creating a Business Continuity/Disaster Recovery (BC/DR) plan. Drag the remaining BC\DR phases to the appropriate corresponding location.



Answer:



#### **OUESTION 214**

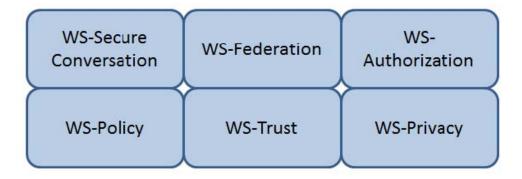
Which security action should be taken FIRST when computer personnel are terminated from their jobs?

- A. Remove their computer access
- B. Require them to turn in their badge
- C. Conduct an exit interview
- D. Reduce their physical access level to the facility

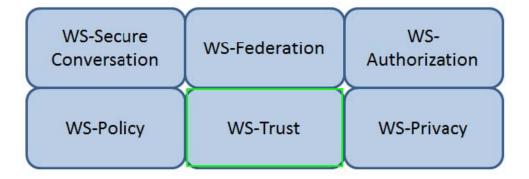
Answer: A

#### **QUESTION** 215

Which Web Services Security (WS-Security) specification negotiates how security tokens will be issued, renewed and validated? Click on the correct specification in the image below.



#### Answer:



#### **OUESTION 216**

Refer to the information below to answer the question.

An organization experiencing a negative financial impact is forced to reduce budgets and the number of Information Technology (IT) operations staff performing basic logical access security administration functions. Security processes have been tightly integrated into normal IT operations and are not separate and distinct roles. Which of the following will be the PRIMARY security concern as staff is released from the organization?

- A. Inadequate IT support
- B. Loss of data and separation of duties
- C. Undocumented security controls
- D. Additional responsibilities for remaining staff

Answer: B

#### **QUESTION** 217

Which one of the following transmission media is MOST effective in preventing data interception?

- A. Microwave
- B. Twisted-pair
- C. Fiber optic
- D. Coaxial cable

Answer: C

Which of the following command line tools can be used in the reconnaisance phase of a network vulnerability assessment?

- A. dig
- B. ifconfig
- C. ipconfig
- D. nbtstat

Answer: A

#### **QUESTION** 219

Multi-Factor Authentication (MFA) is necessary in many systems given common types of password attacks. Which of the following is a correct list of password attacks?

- A. Masquerading, salami, malware, polymorphism
- B. Brute force, dictionary, phishing, keylogger
- C. Zeus, netbus, rabbit, turtle
- D. Token, biometrics, IDS, DLP

Answer: B

#### **QUESTION** 220

Including a Trusted Platform Module (TPM) in the design of a computer system is an example of a technique to what?

- A. Interface with the Public Key Infrastructure (PKI)
- B. Improve the quality of security software
- C. Prevent Denial of Service (DoS) attacks
- D. Establish a secure initial state

Answer: D

#### **QUESTION** 221

A security professional has just completed their organization's Business Impact Analysis (BIA). Following Business Continuity Plan/Disaster Recovery Plan (BCP/DRP) best practices, what would be the professional's NEXT step?

- A. Identify and select recovery strategies.
- B. Present the findings to management for funding.
- C. Select members for the organization's recovery teams.
- D. Prepare a plan to test the organization's ability to recover its operations.

Answer: A

If an identification process using a biometric system detects a 100% match between a presented template and a stored template, what is the interpretation of this result?

- A. User error
- B. Suspected tampering
- C. Accurate identification
- D. Unsuccessful identification

Answer: B

#### **QUESTION** 223

An organization's data policy MUST include a data retention period which is based on

- A. application dismissal.
- B. business procedures.
- C. digital certificates expiration.
- D. regulatory compliance.

Answer: D

#### **QUESTION** 224

Which of the following problems is not addressed by using OAuth (Open Standard to Authorization) 2.0 to integrate a third-party identity provider for a service?

- A. Resource Servers are required to use passwords to authenticate end users.
- B. Revocation of access of some users of the third party instead of all the users from the third party.
- C. Compromise of the third party means compromise of all the users in the service.
- D. Guest users need to authenticate with the third party identity provider.

Answer: C

#### **QUESTION** 225

A Business Continuity Plan (BCP) is based on

- A. the policy and procedures manual.
- B. an existing BCP from a similar organization.
- C. a review of the business processes and procedures.
- D. a standard checklist of required items and objectives.

Answer: C

## **OUESTION 226**

An organization publishes and periodically updates its employee policies in a file on their intranet. Which of the following is a PRIMARY security concern?

- A. Availability
- B. Confidentiality
- C. Integrity
- D. Ownership

Answer: C

# **QUESTION 227**

A software scanner identifies a region within a binary image having high entropy. What does this MOST likely indicate?

- A. Encryption routines
- B. Random number generator
- C. Obfuscated code
- D. Botnet command and control

Answer: C

#### **QUESTION 228**

After a thorough analysis, it was discovered that a perpetrator compromised a network by gaining access to the network through a Secure Socket Layer (SSL) Virtual Private Network (VPN) gateway. The perpetrator guessed a username and brute forced the password to gain access. Which of the following BEST mitigates this issue?

- A. Implement strong passwords authentication for VPN
- B. Integrate the VPN with centralized credential stores
- C. Implement an Internet Protocol Security (IPSec) client
- D. Use two-factor authentication mechanisms

Answer: D

#### **QUESTION** 229

What is the GREATEST challenge to identifying data leaks?

- A. Available technical tools that enable user activity monitoring.
- B. Documented asset classification policy and clear labeling of assets.
- C. Senior management cooperation in investigating suspicious behavior.
- D. Law enforcement participation to apprehend and interrogate suspects.

Answer: B

#### **QUESTION** 230

What is one way to mitigate the risk of security flaws in custom software?

- A. Include security language in the Earned Value Management (EVM) contract
- B. Include security assurance clauses in the Service Level Agreement (SLA)

- C. Purchase only Commercial Off-The-Shelf (COTS) products
- D. Purchase only software with no open source Application Programming Interfaces (APIs)

Answer: B

#### **QUESTION 231**

While inventorying storage equipment, it is found that there are unlabeled, disconnected, and powered off devices. Which of the following is the correct procedure for handling such equipment?

- A. They should be recycled to save energy.
- B. They should be recycled according to NIST SP 800-88.
- C. They should be inspected and sanitized following the organizational policy.
- D. They should be inspected and categorized properly to sell them for reuse.

Answer: C

#### **QUESTION** 232

Which one of the following operates at the session, transport, or network layer of the Open System Interconnection (OSI) model?

- A. Data at rest encryption
- B. Configuration Management
- C. Integrity checking software
- D. Cyclic redundancy check (CRC)

Answer: D

#### **OUESTION** 233

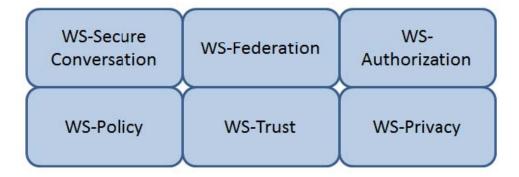
Which of the following controls is the FIRST step in protecting privacy in an information system?

- A. Data Redaction
- B. Data Minimization
- C. Data Encryption
- D. Data Storage

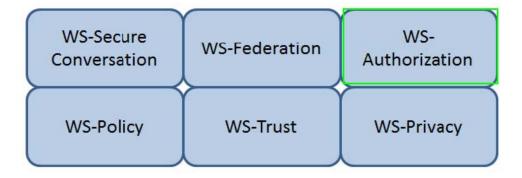
Answer: B

#### **OUESTION** 234

Which Web Services Security (WS-Security) specification handles the management of security tokens and the underlying policies for granting access? Click on the correct specification in the image below.



#### Answer:



# **QUESTION** 235

Which of the following is the MOST likely cause of a non-malicious data breach when the source of the data breach was an un-marked file cabinet containing sensitive documents?

- A. Ineffective data classification
- B. Lack of data access controls
- C. Ineffective identity management controls
- D. Lack of Data Loss Prevention (DLP) tools

Answer: A

## **QUESTION 236**

Refer to the information below to answer the question.

A large organization uses unique identifiers and requires them at the start of every system session. Application access is based on job classification. The organization is subject to periodic independent reviews of access controls and violations. The organization uses wired and wireless networks and remote access. The organization also uses secure connections to branch offices and secure backup and recovery strategies for selected information and processes.

In addition to authentication at the start of the user session, best practice would require re-authentication

- A. periodically during a session.
- B. for each business process.
- C. at system sign-off.
- D. after a period of inactivity.

Answer: D

#### **QUESTION** 237

Which of the following MUST be done when promoting a security awareness program to senior management?

- A. Show the need for security; identify the message and the audience
- B. Ensure that the security presentation is designed to be all-inclusive
- C. Notify them that their compliance is mandatory
- D. Explain how hackers have enhanced information security

Answer: A

#### **OUESTION 238**

What should be the INITIAL response to Intrusion Detection System/Intrusion Prevention System (IDS/IPS) alerts?

- A. Ensure that the Incident Response Plan is available and current.
- B. Determine the traffic's initial source and block the appropriate port.
- C. Disable or disconnect suspected target and source systems.
- D. Verify the threat and determine the scope of the attack.

Answer: D

## **QUESTION 239**

During an audit of system management, auditors find that the system administrator has not been trained. What

actions need to be taken at once to ensure the integrity of systems?

- A. A review of hiring policies and methods of verification of new employees
- B. A review of all departmental procedures
- C. A review of all training procedures to be undertaken
- D. A review of all systems by an experienced administrator

Answer: D

#### **QUESTION 240**

Which of the following is a reason to use manual patch installation instead of automated patch management?

- A. The cost required to install patches will be reduced.
- B. The time during which systems will remain vulnerable to an exploit will be decreased.
- C. The likelihood of system or application incompatibilities will be decreased.
- D. The ability to cover large geographic areas is increased.

Answer: C

## **QUESTION 241**

Which of the following Disaster Recovery (DR) sites is the MOST difficult to test?

- A. Hot site
- B. Cold site
- C. Warm site
- D. Mobile site

Answer: B

#### **QUESTION 242**

Refer to the information below to answer the question.

An organization experiencing a negative financial impact is forced to reduce budgets and the number of Information Technology (IT) operations staff performing basic logical access security administration functions. Security processes have been tightly integrated into normal IT operations and are not separate and distinct roles. Which of the following will MOST likely allow the organization to keep risk at an acceptable level?

- A. Increasing the amount of audits performed by third parties
- B. Removing privileged accounts from operational staff
- C. Assigning privileged functions to appropriate staff
- D. Separating the security function into distinct roles

Answer: C

#### **OUESTION 243**

What is an important characteristic of Role Based Access Control (RBAC)?

- A. Supports Mandatory Access Control (MAC)
- B. Simplifies the management of access rights
- C. Relies on rotation of duties
- D. Requires two factor authentication

Answer: B

## **QUESTION 244**

Changes to a Trusted Computing Base (TCB) system that could impact the security posture of that system and trigger a recertification activity are documented in the

- A. security impact analysis.
- B. structured code review.
- C. routine self assessment.
- D. cost benefit analysis.

Answer: A

## **QUESTION 245**

What security management control is MOST often broken by collusion?

- A. Job rotation
- B. Separation of duties
- C. Least privilege model
- D. Increased monitoring

Answer: B

#### **QUESTION** 246

Which of the following is an effective method for avoiding magnetic media data remanence?

- A. Degaussing
- B. Encryption
- C. Data Loss Prevention (DLP)
- D. Authentication

Answer: A

#### **QUESTION 247**

Which of the following is the BEST approach to take in order to effectively incorporate the concepts of business continuity into the organization?

- A. Ensure end users are aware of the planning activities
- B. Validate all regulatory requirements are known and fully documented
- C. Develop training and awareness programs that involve all stakeholders
- D. Ensure plans do not violate the organization's cultural objectives and goals

Answer: C

#### **QUESTION** 248

Which of the following BEST describes the purpose of the security functional requirements of Common Criteria?

- A. Level of assurance of the Target of Evaluation (TOE) in intended operational environment
- B. Selection to meet the security objectives stated in test documents
- C. Security behavior expected of a TOE
- D. Definition of the roles and responsibilities

Answer: C

#### **QUESTION** 249

What is the MOST effective method of testing custom application code?

- A. Negative testing
- B. White box testing
- C. Penetration testing
- D. Black box testing

Answer: B

## **QUESTION** 250

Which of the following BEST describes the purpose of performing security certification?

- A. To identify system threats, vulnerabilities, and acceptable level of risk
- B. To formalize the confirmation of compliance to security policies and standards
- C. To formalize the confirmation of completed risk mitigation and risk analysis
- D. To verify that system architecture and interconnections with other systems are effectively implemented

Answer: B

#### **QUESTION** 251

Which of the following statements is TRUE regarding state-based analysis as a functional software testing technique?

- A. It is useful for testing communications protocols and graphical user interfaces.
- B. It is characterized by the stateless behavior of a process implemented in a function.
- C. Test inputs are obtained from the derived boundaries of the given functional specifications.
- D. An entire partition can be covered by considering only one representative value from that partition.

Answer: A

Refer to the information below to answer the question.

An organization experiencing a negative financial impact is forced to reduce budgets and the number of Information Technology (IT) operations staff performing basic logical access security administration functions. Security processes have been tightly integrated into normal IT operations and are not separate and distinct roles. When determining appropriate resource allocation, which of the following is MOST important to monitor?

- A. Number of system compromises
- B. Number of audit findings
- C. Number of staff reductions
- D. Number of additional assets

Answer: B

#### **QUESTION** 253

When implementing controls in a heterogeneous end-point network for an organization, it is critical that

- A. hosts are able to establish network communications.
- B. users can make modifications to their security software configurations.
- C. common software security components be implemented across all hosts.
- D. firewalls running on each host are fully customizable by the user.

Answer: C

#### **OUESTION 254**

A disadvantage of an application filtering firewall is that it can lead to

- A. a crash of the network as a result of user activities.
- B. performance degradation due to the rules applied.
- C. loss of packets on the network due to insufficient bandwidth.
- D. Internet Protocol (IP) spoofing by hackers.

Answer: B

#### **QUESTION** 255

What is an effective practice when returning electronic storage media to third parties for repair?

- A. Ensuring the media is not labeled in any way that indicates the organization's name.
- B. Disassembling the media and removing parts that may contain sensitive data.
- C. Physically breaking parts of the media that may contain sensitive data.
- D. Establishing a contract with the third party regarding the secure handling of the media.

Answer: D

# **QUESTION** 256

Which Hyper Text Markup Language 5 (HTML5) option presents a security challenge for network data leakage

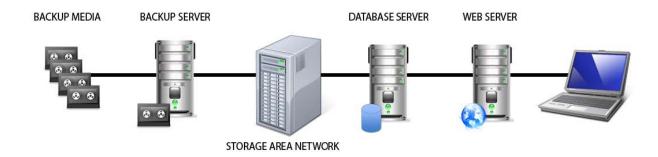
prevention and/or monitoring?

- A. Cross Origin Resource Sharing (CORS)
- B. WebSockets
- C. Document Object Model (DOM) trees
- D. Web Interface Definition Language (IDL)

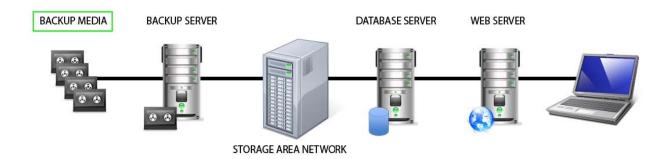
Answer: B

## **QUESTION 257**

Identify the component that MOST likely lacks digital accountability related to information access. Click on the correct device in the image below.



#### Answer:



## **QUESTION 258**

Which of the following is an essential step before performing Structured Query Language (SQL) penetration tests on a production system?

- A. Verify countermeasures have been deactivated.
- B. Ensure firewall logging has been activated.
- C. Validate target systems have been backed up.
- D. Confirm warm site is ready to accept connections.

Answer: C

Checking routing information on e-mail to determine it is in a valid format and contains valid information is an example of which of the following anti-spam approaches?

- A. Simple Mail Transfer Protocol (SMTP) blacklist
- B. Reverse Domain Name System (DNS) lookup
- C. Hashing algorithm
- D. Header analysis

Answer: D

# **QUESTION** 260

Which one of the following considerations has the LEAST impact when considering transmission security?

- A. Network availability
- B. Data integrity
- C. Network bandwidth
- D. Node locations

Answer: C

## **QUESTION 261**

Which type of control recognizes that a transaction amount is excessive in accordance with corporate policy?

- A. Detection
- B. Prevention
- C. Investigation
- D. Correction

Answer: A

## **QUESTION** 262

Place the following information classification steps in sequential order.

Steps		<u>Orde</u> ı
Declassify information when appropriate		Step
Apply the appropriate security markings		Step
Conduct periodic classification reviews		Step
Assign a classification		Step
Document the information assets		Step
Answer:		
<u>Steps</u>		<u>Orde</u> ı
Declassify information when appropriate	Document the information assets	Step
Apply the appropriate security markings	Assign a classification	Step
Conduct periodic classification reviews	Apply the appropriate security markings	Step
Assign a classification	Conduct periodic classification reviews	Step
Document the information assets	Declassify information when appropriate	Step

# **QUESTION** 263

Sensitive customer data is going to be added to a database. What is the MOST effective implementation for ensuring data privacy?

- A. Discretionary Access Control (DAC) procedures
- B. Mandatory Access Control (MAC) procedures
- C. Data link encryption
- D. Segregation of duties

Answer: B

### **QUESTION 264**

Which methodology is recommended for penetration testing to be effective in the development phase of the life-cycle process?

- A. White-box testing
- B. Software fuzz testing
- C. Black-box testing
- D. Visual testing

Answer: A

### **QUESTION** 265

Logical access control programs are MOST effective when they are

- A. approved by external auditors.
- B. combined with security token technology.
- C. maintained by computer security officers.
- D. made part of the operating system.

Answer: D

### **QUESTION 266**

Place in order, from BEST (1) to WORST (4), the following methods to reduce the risk of data remanence on magnetic media.

Sequence	Method
1	Overwriting
2	Degaussing
3	Destruction
4	Deleting

Answer:

Sequence		Method
1	3	Overwriting
2	2	Degaussing
3	1	Destruction
4	4	Deleting

### **OUESTION 267**

The 802.1x standard provides a framework for what?

- A. Network authentication for only wireless networks
- B. Network authentication for wired and wireless networks
- C. Wireless encryption using the Advanced Encryption Standard (AES)
- D. Wireless network encryption using Secure Sockets Layer (SSL)

Answer: B

### **OUESTION 268**

Which of the following does the Encapsulating Security Payload (ESP) provide?

- A. Authorization and integrity
- B. Availability and integrity
- C. Integrity and confidentiality
- D. Authorization and confidentiality

Answer: C

### **QUESTION** 269

What is the FIRST step in developing a security test and its evaluation?

- A. Determine testing methods
- B. Develop testing procedures
- C. Identify all applicable security requirements
- D. Identify people, processes, and products not in compliance

Answer: C

### **QUESTION** 270

Refer to the information below to answer the question.

Desktop computers in an organization were sanitized for re-use in an equivalent security environment. The data was destroyed in accordance with organizational policy and all marking and other external indications of the

sensitivity of the data that was formerly stored on the magnetic drives were removed.

Organizational policy requires the deletion of user data from Personal Digital Assistant (PDA) devices before disposal. It may not be possible to delete the user data if the device is malfunctioning. Which destruction method below provides the BEST assurance that the data has been removed?

- A. Knurling
- B. Grinding
- C. Shredding
- D. Degaussing

Answer: C

# **QUESTION** 271

What is the PRIMARY reason for ethics awareness and related policy implementation?

- A. It affects the workflow of an organization.
- B. It affects the reputation of an organization.
- C. It affects the retention rate of employees.
- D. It affects the morale of the employees.

Answer: B

# **QUESTION** 272

Why MUST a Kerberos server be well protected from unauthorized access?

- A. It contains the keys of all clients.
- B. It always operates at root privilege.
- C. It contains all the tickets for services.
- D. It contains the Internet Protocol (IP) address of all network entities.

Answer: A

#### **OUESTION** 273

Which one of these risk factors would be the LEAST important consideration in choosing a building site for a new computer facility?

- A. Vulnerability to crime
- B. Adjacent buildings and businesses
- C. Proximity to an airline flight path
- D. Vulnerability to natural disasters

Answer: C

#### **OUESTION** 274

What maintenance activity is responsible for defining, implementing, and testing updates to application systems?

- A. Program change control
- B. Regression testing
- C. Export exception control
- D. User acceptance testing

Answer: A

#### **QUESTION** 275

What type of test assesses a Disaster Recovery (DR) plan using realistic disaster scenarios while maintaining minimal impact to business operations?

- A. Parallel
- B. Walkthrough
- C. Simulation
- D. Tabletop

Answer: C

### **QUESTION 276**

Refer to the information below to answer the question.

A security practitioner detects client-based attacks on the organization's network. A plan will be necessary to address these concerns.

What is the BEST reason for the organization to pursue a plan to mitigate client-based attacks?

- A. Client privilege administration is inherently weaker than server privilege administration.
- B. Client hardening and management is easier on clients than on servers.
- C. Client-based attacks are more common and easier to exploit than server and network based attacks.
- D. Client-based attacks have higher financial impact.

Answer: C

### **QUESTION** 277

Single Sign-On (SSO) is PRIMARILY designed to address which of the following?

- A. Confidentiality and Integrity
- B. Availability and Accountability
- C. Integrity and Availability
- D. Accountability and Assurance

Answer: D

# **QUESTION 278**

Which one of the following is a fundamental objective in handling an incident?

A. To restore control of the affected systems

- B. To confiscate the suspect's computers
- C. To prosecute the attacker
- D. To perform full backups of the system

Answer: A

### **QUESTION** 279

Which one of the following is the MOST important in designing a biometric access system if it is essential that no one other than authorized individuals are admitted?

- A. False Acceptance Rate (FAR)
- B. False Rejection Rate (FRR)
- C. Crossover Error Rate (CER)
- D. Rejection Error Rate

Answer: A

### **OUESTION** 280

An internal Service Level Agreement (SLA) covering security is signed by senior managers and is in place. When should compliance to the SLA be reviewed to ensure that a good security posture is being delivered?

- A. As part of the SLA renewal process
- B. Prior to a planned security audit
- C. Immediately after a security breach
- D. At regularly scheduled meetings

Answer: D

### **QUESTION** 281

Copyright provides protection for which of the following?

- A. Ideas expressed in literary works
- B. A particular expression of an idea
- C. New and non-obvious inventions
- D. Discoveries of natural phenomena

Answer: B

#### **QUESTION** 282

Which of the following is a recommended alternative to an integrated email encryption system?

- A. Sign emails containing sensitive data
- B. Send sensitive data in separate emails
- C. Encrypt sensitive data separately in attachments
- D. Store sensitive information to be sent in encrypted drives

### **QUESTION 283**

Which of the following is the PRIMARY security concern associated with the implementation of smart cards?

- A. The cards have limited memory
- B. Vendor application compatibility
- C. The cards can be misplaced
- D. Mobile code can be embedded in the card

Answer: C

# **QUESTION 284**

Which of the following methods can be used to achieve confidentiality and integrity for data in transit?

- A. Multiprotocol Label Switching (MPLS)
- B. Internet Protocol Security (IPSec)
- C. Federated identity management
- D. Multi-factor authentication

Answer: B

### **QUESTION** 285

The birthday attack is MOST effective against which one of the following cipher technologies?

- A. Chaining block encryption
- B. Asymmetric cryptography
- C. Cryptographic hash
- D. Streaming cryptography

Answer: C

### **QUESTION 286**

Which of the following is the BEST mitigation from phishing attacks?

- A. Network activity monitoring
- B. Security awareness training
- C. Corporate policy and procedures
- D. Strong file and directory permissions

Answer: B

### **QUESTION 287**

The PRIMARY security concern for handheld devices is the

- A. strength of the encryption algorithm.
- B. spread of malware during synchronization.
- C. ability to bypass the authentication mechanism.
- D. strength of the Personal Identification Number (PIN).

### **QUESTION 288**

Which of the following would be the FIRST step to take when implementing a patch management program?

- A. Perform automatic deployment of patches.
- B. Monitor for vulnerabilities and threats.
- C. Prioritize vulnerability remediation.
- D. Create a system inventory.

Answer: D

### **QUESTION** 289

A software security engineer is developing a black box-based test plan that will measure the system's reaction to incorrect or illegal inputs or unexpected operational errors and situations. Match the functional testing techniques on the left with the correct input parameters on the right.

Functional Testing Techniques	Input Parameter Selection
State-Based Analysis	Select one input that does not belong to any of the identified partitions.
Equivalence Class Analysis	Select inputs that are at the external limits of the domain of valid values.
Decision Table Analysis	Select invalid combinations of input values.
Boundary Value Analysis	Select unexpected inputs corresponding to each known condition.
Answer:	

Functional Testing Techniques		Input Parameter Selection
State-Based Analysis	Equivalence Class Analysis	Select one input that does not belong to any of the identified partitions.
Equivalence Class Analysis	Boundary Value Analysis	Select inputs that are at the external limits of the domain of valid values.
Decision Table Analysis	Decision Table Analysis	Select invalid combinations of input values.
Boundary Value Analysis	State-Based Analysis	Select unexpected inputs corresponding to each known condition.

### **QUESTION** 290

Which of the following MUST system and database administrators be aware of and apply when configuring systems used for storing personal employee data?

- A. Secondary use of the data by business users
- B. The organization's security policies and standards
- C. The business purpose for which the data is to be used
- D. The overall protection of corporate resources and data

Answer: B

### **QUESTION** 291

A Simple Power Analysis (SPA) attack against a device directly observes which of the following?

- A. Static discharge
- B. Consumption
- C. Generation
- D. Magnetism

Answer: B

# **QUESTION** 292

What should happen when an emergency change to a system must be performed?

A. The change must be given priority at the next meeting of the change control board.

- B. Testing and approvals must be performed quickly.
- C. The change must be performed immediately and then submitted to the change board.
- D. The change is performed and a notation is made in the system log.

Answer: B

### **QUESTION 293**

Refer to the information below to answer the question.

During the investigation of a security incident, it is determined that an unauthorized individual accessed a system which hosts a database containing financial information.

If it is discovered that large quantities of information have been copied by the unauthorized individual, what attribute of the data has been compromised?

- A. Availability
- B. Integrity
- C. Accountability
- D. Confidentiality

Answer: D

#### **OUESTION** 294

Which of the following is the MOST difficult to enforce when using cloud computing?

- A. Data access
- B. Data backup
- C. Data recovery
- D. Data disposal

Answer: D

#### **OUESTION** 295

During an investigation of database theft from an organization's web site, it was determined that the Structured Query Language (SQL) injection technique was used despite input validation with client-side scripting. Which of the following provides the GREATEST protection against the same attack occurring again?

- A. Encrypt communications between the servers
- B. Encrypt the web server traffic
- C. Implement server-side filtering
- D. Filter outgoing traffic at the perimeter firewall

Answer: C

# **QUESTION** 296

Which of the following is the BEST way to verify the integrity of a software patch?

A. Cryptographic checksums

- B. Version numbering
- C. Automatic updates
- D. Vendor assurance

Answer: A

### **QUESTION** 297

In the Open System Interconnection (OSI) model, which layer is responsible for the transmission of binary data over a communications network?

- A. Application Layer
- B. Physical Layer
- C. Data-Link Layer
- D. Network Layer

Answer: B

### **OUESTION 298**

From a security perspective, which of the following is a best practice to configure a Domain Name Service (DNS) system?

- A. Configure secondary servers to use the primary server as a zone forwarder.
- B. Block all Transmission Control Protocol (TCP) connections.
- C. Disable all recursive queries on the name servers.
- D. Limit zone transfers to authorized devices.

Answer: D

### **QUESTION** 299

The Hardware Abstraction Layer (HAL) is implemented in the

- A. system software.
- B. system hardware.
- C. application software.
- D. network hardware.

Answer: A

### **QUESTION** 300

Refer to the information below to answer the question.

A large, multinational organization has decided to outsource a portion of their Information Technology (IT) organization to a third-party provider's facility. This provider will be responsible for the design, development, testing, and support of several critical, customer-based applications used by the organization.

The organization should ensure that the third party's physical security controls are in place so that they

A. are more rigorous than the original controls.

- B. are able to limit access to sensitive information.
- C. allow access by the organization staff at any time.
- D. cannot be accessed by subcontractors of the third party.

Answer: B

### **QUESTION** 301

Which of the following activities BEST identifies operational problems, security misconfigurations, and malicious attacks?

- A. Policy documentation review
- B. Authentication validation
- C. Periodic log reviews
- D. Interface testing

Answer: C

### **OUESTION 302**

Which one of the following effectively obscures network addresses from external exposure when implemented on a firewall or router?

- A. Network Address Translation (NAT)
- B. Application Proxy
- C. Routing Information Protocol (RIP) Version 2
- D. Address Masking

Answer: A

### **QUESTION** 303

What is the ultimate objective of information classification?

- A. To assign responsibility for mitigating the risk to vulnerable systems
- B. To ensure that information assets receive an appropriate level of protection
- C. To recognize that the value of any item of information may change over time
- D. To recognize the optimal number of classification categories and the benefits to be gained from their use

Answer: B

# **QUESTION** 304

How does an organization verify that an information system's current hardware and software match the standard system configuration?

- A. By reviewing the configuration after the system goes into production
- B. By running vulnerability scanning tools on all devices in the environment
- C. By comparing the actual configuration of the system against the baseline
- D. By verifying all the approved security patches are implemented

# **QUESTION** 305

Order the below steps to create an effective vulnerability management process.

Step	<u>Orde</u> ı
Identify risks	1
Implement patch	2
Implement recurring	3
Identify assets	4
Implement change	5

Answer:

Step		<u>Orde</u> ı
Identify risks	Identify assets	1
Implement patch	Identify risks	2
Implement recurring	Implement change	3
Identify assets	Implement patch	4
Implement change	Implement recurring	5

# **QUESTION** 306

Which of the following is ensured when hashing files during chain of custody handling?

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

### **QUESTION** 307

Contingency plan exercises are intended to do which of the following?

- A. Train personnel in roles and responsibilities
- B. Validate service level agreements
- C. Train maintenance personnel
- D. Validate operation metrics

Answer: A

### **QUESTION** 308

Which of the following is a BEST practice when traveling internationally with laptops containing Personally Identifiable Information (PII)?

- A. Use a thumb drive to transfer information from a foreign computer.
- B. Do not take unnecessary information, including sensitive information.
- C. Connect the laptop only to well-known networks like the hotel or public Internet cafes.
- D. Request international points of contact help scan the laptop on arrival to ensure it is protected.

Answer: B

### **QUESTION** 309

Which of the following is the PRIMARY issue when collecting detailed log information?

- A. Logs may be unavailable when required
- B. Timely review of the data is potentially difficult
- C. Most systems and applications do not support logging
- D. Logs do not provide sufficient details of system and individual activities

Answer: B

### **QUESTION** 310

During the risk assessment phase of the project the CISO discovered that a college within the University is collecting Protected Health Information (PHI) data via an application that was developed in-house. The college collecting this data is fully aware of the regulations for Health Insurance Portability and Accountability Act (HIPAA) and is fully compliant.

What is the best approach for the CISO?

During the risk assessment phase of the project the CISO discovered that a college within the University is

collecting Protected Health Information (PHI) data via an application that was developed in-house. The college collecting this data is fully aware of the regulations for Health Insurance Portability and Accountability Act (HIPAA) and is fully compliant.

What is the best approach for the CISO?

- A. Document the system as high risk
- B. Perform a vulnerability assessment
- C. Perform a quantitative threat assessment
- D. Notate the information and move on

Answer: B

### **QUESTION** 311

Which of the following is the PRIMARY concern when using an Internet browser to access a cloud-based service?

- A. Insecure implementation of Application Programming Interfaces (API)
- B. Improper use and storage of management keys
- C. Misconfiguration of infrastructure allowing for unauthorized access
- D. Vulnerabilities within protocols that can expose confidential data

Answer: D

### **QUESTION** 312

Which of the following wraps the decryption key of a full disk encryption implementation and ties the hard disk drive to a particular device?

- A. Trusted Platform Module (TPM)
- B. Preboot eXecution Environment (PXE)
- C. Key Distribution Center (KDC)
- D. Simple Key-Management for Internet Protocol (SKIP)

Answer: A

#### **QUESTION** 313

Which of the following is a security feature of Global Systems for Mobile Communications (GSM)?

- A. It uses a Subscriber Identity Module (SIM) for authentication.
- B. It uses encrypting techniques for all communications.
- C. The radio spectrum is divided with multiple frequency carriers.
- D. The signal is difficult to read as it provides end-to-end encryption.

Answer: A

### **QUESTION** 314

When dealing with compliance with the Payment Card Industry-Data Security Standard (PCI-DSS), an

organization that shares card holder information with a service provider MUST do which of the following?

- A. Perform a service provider PCI-DSS assessment on a yearly basis.
- B. Validate the service provider's PCI-DSS compliance status on a regular basis.
- C. Validate that the service providers security policies are in alignment with those of the organization.
- D. Ensure that the service provider updates and tests its Disaster Recovery Plan (DRP) on a yearly basis.

Answer: B

### **QUESTION** 315

Which one of the following is a threat related to the use of web-based client side input validation?

- A. Users would be able to alter the input after validation has occurred
- B. The web server would not be able to validate the input after transmission
- C. The client system could receive invalid input from the web server
- D. The web server would not be able to receive invalid input from the client

Answer: A

### **QUESTION** 316

In order for a security policy to be effective within an organization, it MUST include

- A. strong statements that clearly define the problem.
- B. a list of all standards that apply to the policy.
- C. owner information and date of last revision.
- D. disciplinary measures for non compliance.

Answer: D

### **QUESTION** 317

An organization allows ping traffic into and out of their network. An attacker has installed a program on the network that uses the payload portion of the ping packet to move data into and out of the network. What type of attack has the organization experienced?

- A. Data leakage
- B. Unfiltered channel
- C. Data emanation
- D. Covert channel

Answer: D

### **QUESTION** 318

Refer to the information below to answer the question.

An organization experiencing a negative financial impact is forced to reduce budgets and the number of Information Technology (IT) operations staff performing basic logical access security administration functions. Security processes have been tightly integrated into normal IT operations and

are not separate and distinct roles.

Which of the following will indicate where the IT budget is BEST allocated during this time?

- A. Policies
- B. Frameworks
- C. Metrics
- D. Guidelines

Answer: C

# **QUESTION** 319

The MAIN reason an organization conducts a security authorization process is to

- A. force the organization to make conscious risk decisions.
- B. assure the effectiveness of security controls.
- C. assure the correct security organization exists.
- D. force the organization to enlist management support.

Answer: A

#### **OUESTION** 320

Host-Based Intrusion Protection (HIPS) systems are often deployed in monitoring or learning mode during their initial implementation. What is the objective of starting in this mode?

- A. Automatically create exceptions for specific actions or files
- B. Determine which files are unsafe to access and blacklist them
- C. Automatically whitelist actions or files known to the system
- D. Build a baseline of normal or safe system events for review

Answer: D

### **QUESTION** 321

In which order, from MOST to LEAST impacted, does user awareness training reduce the occurrence of the events below?

Event	Orde
Disloyal employees	1
User-instigated	2
Targeted infiltration	3
Virus infiltrations	4

Answer:

Event		Ordei
Disloyal employees	Disloyal employees	1
User-instigated	User-instigated	2
Targeted infiltration	Targeted infiltration	3
Virus infiltrations	Virus infiltrations	4

### **OUESTION** 322

What security risk does the role-based access approach mitigate MOST effectively?

- A. Excessive access rights to systems and data
- B. Segregation of duties conflicts within business applications
- C. Lack of system administrator activity monitoring
- D. Inappropriate access requests

Answer: A

### **QUESTION** 323

After acquiring the latest security updates, what must be done before deploying to production systems?

- A. Use tools to detect missing system patches
- B. Install the patches on a test system
- C. Subscribe to notifications for vulnerabilities
- D. Assess the severity of the situation

Answer: B

### **QUESTION** 324

Refer to the information below to answer the question.

A new employee is given a laptop computer with full administrator access. This employee does not have a personal computer at home and has a child that uses the computer to send and receive e-mail, search the web, and use instant messaging. The organization's Information Technology (IT) department discovers that a peer-to-peer program has been installed on the computer using the employee's access.

Which of the following documents explains the proper use of the organization's assets?

- A. Human resources policy
- B. Acceptable use policy
- C. Code of ethics
- D. Access control policy

Answer: B

# **QUESTION 325**

Which of the following standards/guidelines requires an Information Security Management System (ISMS) to be defined?

- A. International Organization for Standardization (ISO) 27000 family
- B. Information Technology Infrastructure Library (ITIL)
- C. Payment Card Industry Data Security Standard (PCIDSS)
- D. ISO/IEC 20000

Answer: A

### **OUESTION** 326

The process of mutual authentication involves a computer system authenticating a user and authenticating the

- A. user to the audit process.
- B. computer system to the user.
- C. user's access to all authorized objects.
- D. computer system to the audit process.

Answer: B

### **QUESTION** 327

An advantage of link encryption in a communications network is that it

- A. makes key management and distribution easier.
- B. protects data from start to finish through the entire network.
- C. improves the efficiency of the transmission.
- D. encrypts all information, including headers and routing information.

Answer: D

#### **OUESTION** 328

A risk assessment report recommends upgrading all perimeter firewalls to mitigate a particular finding. Which of the following BEST supports this recommendation?

- A. The inherent risk is greater than the residual risk.
- B. The Annualized Loss Expectancy (ALE) approaches zero.
- C. The expected loss from the risk exceeds mitigation costs.
- D. The infrastructure budget can easily cover the upgrade costs.

Answer: C

### **QUESTION** 329

At a MINIMUM, a formal review of any Disaster Recovery Plan (DRP) should be conducted

- A. monthly.
- B. quarterly.
- C. annually.
- D. bi-annually.

### **QUESTION** 330

A vulnerability test on an Information System (IS) is conducted to

- A. exploit security weaknesses in the IS.
- B. measure system performance on systems with weak security controls.
- C. evaluate the effectiveness of security controls.
- D. prepare for Disaster Recovery (DR) planning.

Answer: C

### **OUESTION 331**

What is the term commonly used to refer to a technique of authenticating one machine to another by forging packets from a trusted source?

- A. Man-in-the-Middle (MITM) attack
- B. Smurfing
- C. Session redirect
- D. Spoofing

Answer: D

### **QUESTION** 332

Refer to the information below to answer the question.

In a Multilevel Security (MLS) system, the following sensitivity labels are used in increasing levels of sensitivity: restricted, confidential, secret, top secret. Table A lists the clearance levels for four users, while Table B lists the security classes of four different files.

Table A

User	Clearance Level		
Α	Restricted		
В	Confidential		
С	Secret		
D	Top Secret		

Table B

Files		Security Class		
	1	Restricted		
2		Confidential		
	3	Secret		
Γ	4	Top Secret		

Which of the following is true according to the star property (\*property)?

- A. User D can write to File 1
- B. User B can write to File 1

- C. User A can write to File 1
- D. User C can write to File 1

# **QUESTION** 333

In a financial institution, who has the responsibility for assigning the classification to a piece of information?

- A. Chief Financial Officer (CFO)
- B. Chief Information Security Officer (CISO)
- C. Originator or nominated owner of the information
- D. Department head responsible for ensuring the protection of the information

Answer: C

### **OUESTION** 334

The goal of a Business Continuity Plan (BCP) training and awareness program is to

- A. enhance the skills required to create, maintain, and execute the plan.
- B. provide for a high level of recovery in case of disaster.
- C. describe the recovery organization to new employees.
- D. provide each recovery team with checklists and procedures.

Answer: A

### **QUESTION** 335

An organization is designing a large enterprise-wide document repository system. They plan to have several different classification level areas with increasing levels of controls. The BEST way to ensure document confidentiality in the repository is to

- A. encrypt the contents of the repository and document any exceptions to that requirement.
- B. utilize Intrusion Detection System (IDS) set drop connections if too many requests for documents are detected.
- C. keep individuals with access to high security areas from saving those documents into lower security areas.
- D. require individuals with access to the system to sign Non-Disclosure Agreements (NDA).

Answer: C

#### **QUESTION** 336

Which of the following PRIMARILY contributes to security incidents in web-based applications?

- A. Systems administration and operating systems
- B. System incompatibility and patch management
- C. Third-party applications and change controls
- D. Improper stress testing and application interfaces

### **QUESTION** 337

Which of the following is the MOST effective attack against cryptographic hardware modules?

- A. Plaintext
- B. Brute force
- C. Power analysis
- D. Man-in-the-middle (MITM)

Answer: C

### **QUESTION** 338

Refer to the information below to answer the question.

A security practitioner detects client-based attacks on the organization's network. A plan will be necessary to address these concerns.

In the plan, what is the BEST approach to mitigate future internal client-based attacks?

- A. Block all client side web exploits at the perimeter.
- B. Remove all non-essential client-side web services from the network.
- C. Screen for harmful exploits of client-side services before implementation.
- D. Harden the client image before deployment.

Answer: D

### **QUESTION** 339

Which of the following is a physical security control that protects Automated Teller Machines (ATM) from skimming?

- A. Anti-tampering
- B. Secure card reader
- C. Radio Frequency (RF) scanner
- D. Intrusion Prevention System (IPS)

Answer: A

### **QUESTION** 340

Discretionary Access Control (DAC) is based on which of the following?

- A. Information source and destination
- B. Identification of subjects and objects
- C. Security labels and privileges
- D. Standards and guidelines

Answer: B

### **QUESTION** 341

By allowing storage communications to run on top of Transmission Control Protocol/Internet Protocol (TCP/IP) with a Storage Area Network (SAN), the

- A. confidentiality of the traffic is protected.
- B. opportunity to sniff network traffic exists.
- C. opportunity for device identity spoofing is eliminated.
- D. storage devices are protected against availability attacks.

Answer: B

### **OUESTION** 342

What is the BEST method to detect the most common improper initialization problems in programming languages?

- A. Use and specify a strong character encoding.
- B. Use automated static analysis tools that target this type of weakness.
- C. Perform input validation on any numeric inputs by assuring that they are within the expected range.
- D. Use data flow analysis to minimize the number of false positives.

Answer: B

### **QUESTION** 343

An Intrusion Detection System (IDS) is generating alarms that a user account has over 100 failed login attempts per minute. A sniffer is placed on the network, and a variety of passwords for that user are noted. Which of the following is MOST likely occurring?

- A. A dictionary attack
- B. A Denial of Service (DoS) attack
- C. A spoofing attack
- D. A backdoor installation

Answer: A

### **QUESTION** 344

The key benefits of a signed and encrypted e-mail include

- A. confidentiality, authentication, and authorization.
- B. confidentiality, non-repudiation, and authentication.
- C. non-repudiation, authorization, and authentication.
- D. non-repudiation, confidentiality, and authorization.

Answer: B

### **QUESTION** 345

Why must all users be positively identified prior to using multi-user computers?

- A. To provide access to system privileges
- B. To provide access to the operating system
- C. To ensure that unauthorized persons cannot access the computers
- D. To ensure that management knows what users are currently logged on

Answer: C

# **QUESTION** 346

When planning a penetration test, the tester will be MOST interested in which information?

- A. Places to install back doors
- B. The main network access points
- C. Job application handouts and tours
- D. Exploits that can attack weaknesses

Answer: B

#### **OUESTION** 347

For privacy protected data, which of the following roles has the highest authority for establishing dissemination rules for the data?

- A. Information Systems Security Officer
- B. Data Owner
- C. System Security Architect
- D. Security Requirements Analyst

Answer: B

### **QUESTION** 348

Data leakage of sensitive information is MOST often concealed by which of the following?

- A. Secure Sockets Layer (SSL)
- B. Secure Hash Algorithm (SHA)
- C. Wired Equivalent Privacy (WEP)
- D. Secure Post Office Protocol (POP)

Answer: A

#### **OUESTION** 349

Why is a system's criticality classification important in large organizations?

- A. It provides for proper prioritization and scheduling of security and maintenance tasks.
- B. It reduces critical system support workload and reduces the time required to apply patches.

- C. It allows for clear systems status communications to executive management.
- D. It provides for easier determination of ownership, reducing confusion as to the status of the asset.

Answer: A

### **OUESTION** 350

How can a forensic specialist exclude from examination a large percentage of operating system files residing on a copy of the target system?

- A. Take another backup of the media in question then delete all irrelevant operating system files.
- B. Create a comparison database of cryptographic hashes of the files from a system with the same operating system and patch level.
- C. Generate a message digest (MD) or secure hash on the drive image to detect tampering of the media being examined.
- D. Discard harmless files for the operating system, and known installed programs.

Answer: B

### **QUESTION** 351

The use of proximity card to gain access to a building is an example of what type of security control?

- A. Legal
- B. Logical
- C. Physical
- D. Procedural

Answer: C

### **QUESTION** 352

Which layer of the Open Systems Interconnections (OSI) model implementation adds information concerning the logical connection between the sender and receiver?

- A. Physical
- B. Session
- C. Transport
- D. Data-Link

Answer: C

### **QUESTION** 353

The stringency of an Information Technology (IT) security assessment will be determined by the

- A. system's past security record.
- B. size of the system's database.
- C. sensitivity of the system's data.
- D. age of the system.

### **QUESTION** 354

Which of the following BEST mitigates a replay attack against a system using identity federation and Security Assertion Markup Language (SAML) implementation?

- A. Two-factor authentication
- B. Digital certificates and hardware tokens
- C. Timed sessions and Secure Socket Layer (SSL)
- D. Passwords with alpha-numeric and special characters

Answer: C

### **QUESTION** 355

What is the process called when impact values are assigned to the security objectives for information types?

- A. Qualitative analysis
- B. Quantitative analysis
- C. Remediation
- D. System security categorization

Answer: D

### **QUESTION** 356

An external attacker has compromised an organization's network security perimeter and installed a sniffer onto an inside computer. Which of the following is the MOST effective layer of security the organization could have implemented to mitigate the attacker's ability to gain further information?

- A. Implement packet filtering on the network firewalls
- B. Require strong authentication for administrators
- C. Install Host Based Intrusion Detection Systems (HIDS)
- D. Implement logical network segmentation at the switches

Answer: D

#### **QUESTION** 357

Which of the following BEST describes a Protection Profile (PP)?

- A. A document that expresses an implementation independent set of security requirements for an IT product that meets specific consumer needs.
- B. A document that is used to develop an IT security product from its security requirements definition.
- C. A document that expresses an implementation dependent set of security requirements which contains only the security functional requirements.
- D. A document that represents evaluated products where there is a one-to-one correspondence between a PP and a Security Target (ST).

#### Answer: A

### **QUESTION** 358

Which of the following MUST be part of a contract to support electronic discovery of data stored in a cloud environment?

- A. Integration with organizational directory services for authentication
- B. Tokenization of data
- C. Accommodation of hybrid deployment models
- D. Identification of data location

Answer: D

### **QUESTION** 359

Regarding asset security and appropriate retention, which of the following INITIAL top three areas are important to focus on?

- A. Security control baselines, access controls, employee awareness and training
- B. Human resources, asset management, production management
- C. Supply chain lead time, inventory control, encryption
- D. Polygraphs, crime statistics, forensics

Answer: A

### **OUESTION** 360

Refer to the information below to answer the question.

An organization has hired an information security officer to lead their security department. The officer has adequate people resources but is lacking the other necessary components to have an effective security program. There are numerous initiatives requiring security involvement.

Which of the following is considered the MOST important priority for the information security officer?

- A. Formal acceptance of the security strategy
- B. Disciplinary actions taken against unethical behavior
- C. Development of an awareness program for new employees
- D. Audit of all organization system configurations for faults

Answer: A

### **QUESTION** 361

In Disaster Recovery (DR) and business continuity training, which BEST describes a functional drill?

- A. A full-scale simulation of an emergency and the subsequent response functions
- B. A specific test by response teams of individual emergency response functions
- C. A functional evacuation of personnel
- D. An activation of the backup site

Answer: B

### **QUESTION** 362

Retaining system logs for six months or longer can be valuable for what activities?

- A. Disaster recovery and business continuity
- B. Forensics and incident response
- C. Identity and authorization management
- D. Physical and logical access control

Answer: B

# **QUESTION** 363

Multi-threaded applications are more at risk than single-threaded applications to

- A. race conditions.
- B. virus infection.
- C. packet sniffing.
- D. database injection.

Answer: A

### **QUESTION** 364

An organization decides to implement a partial Public Key Infrastructure (PKI) with only the servers having digital certificates. What is the security benefit of this implementation?

- A. Clients can authenticate themselves to the servers.
- B. Mutual authentication is available between the clients and servers.
- C. Servers are able to issue digital certificates to the client.
- D. Servers can authenticate themselves to the client.

Answer: D

### **QUESTION** 365

What is the PRIMARY goal for using Domain Name System Security Extensions (DNSSEC) to sign records?

- A. Integrity
- B. Confidentiality
- C. Accountability
- D. Availability

Answer: A

### **QUESTION** 366

Which of the following is a strategy of grouping requirements in developing a Security Test and Evaluation

### (ST&E)?

- A. Standards, policies, and procedures
- B. Tactical, strategic, and financial
- C. Management, operational, and technical
- D. Documentation, observation, and manual

Answer: C

### **QUESTION** 367

When is security personnel involvement in the Systems Development Life Cycle (SDLC) process MOST beneficial?

- A. Testing phase
- B. Development phase
- C. Requirements definition phase
- D. Operations and maintenance phase

Answer: C

#### **OUESTION** 368

Which of the following defines the key exchange for Internet Protocol Security (IPSec)?

- A. Secure Sockets Layer (SSL) key exchange
- B. Internet Key Exchange (IKE)
- C. Security Key Exchange (SKE)
- D. Internet Control Message Protocol (ICMP)

Answer: B

#### **OUESTION** 369

Which of the following secures web transactions at the Transport Layer?

- E. Secure HyperText Transfer Protocol (S-HTTP)
- F. Secure Sockets Layer (SSL)
- G. Socket Security (SOCKS)
- H. Secure Shell (SSH)

Answer: B

#### **QUESTION** 370

A security consultant has been asked to research an organization's legal obligations to protect privacy-related information. What kind of reading material is MOST relevant to this project?

- A. The organization's current security policies concerning privacy issues
- B. Privacy-related regulations enforced by governing bodies applicable to the organization
- C. Privacy best practices published by recognized security standards organizations

D.	Organizational	procedures	designed to	protect	privacy	<i>i</i> nformation
		P		P	J J	

Answer: B

# **QUESTION** 371

Which of the following is the MOST beneficial to review when performing an IT audit?

- A. Audit policy
- B. Security log
- C. Security policies
- D. Configuration settings

Answer: C

### **QUESTION** 372

Alternate encoding such as hexadecimal representations is MOST often observed in which of the following forms of attack?

- A. Smurf
- B. Rootkit exploit
- C. Denial of Service (DoS)
- D. Cross site scripting (XSS)

Answer: D

# **QUESTION** 373

Match the objectives to the assessment questions in the governance domain of Software Assurance Maturity Model (SAMM).

Secure Architecture	Do you advertise shared security services with guidance for project teams?
Education & Guidance	Are most people tested to ensure a baseline skill- set for secure development practices?
Strategy & Metrics	Does most of the organization know about what's required based on risk ratings?
Vulnerability Management	Are most project teams aware of their security point(s) of contact and response team(s)?

Answer:

Secure Architecture	Secure Architecture	Do you advertise shared security services with guidance for project teams?
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