

Chapter 2 Questions

Security Essentials Source

Which two methods help to ensure data integrity? (Choose two.)

Select one or more:

- ☐ hashing
- ☐ data consistency checks
- ☐ availability
- ☐ privacy
- ☐ repudiation
- ☐ authorization

What type of cybersecurity laws protect you from an organization that might want to share your sensitive data?

Select one:

- ☐ nonrepudiation
- ☐ authentication
- ☐ integrity
- ☐ confidentiality
- ☐ privacy

What is a method of sending information from one device to another using removable media?

Select one:

- ☐ wired
- ☐ packet
- ☐ LAN
- ☐ sneaker net
- ☐ wireless
- ☐ infrared

What are the three states of data? (Choose three.)

Select one or more:

- ☐ encrypted
- ☐ at rest
- ☐ in-transit
- ☐ in-process
- ☐ in-cloud
- ☐ suspended

What principle prevents the disclosure of information to unauthorized people, resources, and processes?

Select one:

- ☐ integrity
- ☐ confidentiality
- ☐ availability
- ☐ nonrepudiation
- ☐ accounting

What are two common hash functions? (Choose two.)

Select one or more:

- ☐ RSA
- ☐ MD5
- ☐ Blowfish
- ☐ RC4
- ☐ SHA
- ☐ ECC

What name is given to a storage device connected to a network?

Select one:

- ☐ RAID
- ☐ DAS
- ☐ NAS
- ☐ Cloud
- ☐ SAN

For the purpose of authentication, what three methods are used to verify identity? (Choose three.)

Select one or more:

- ☐ something you do
- ☐ something you know
- ☐ where you are
- ☐ something you have
- ☐ something you are

What three tasks are accomplished by a comprehensive security policy? (Choose three.)

Select one or more:

- ☐ sets rules for expected behavior
- ☐ is not legally binding
- ☐ vagueness
- ☐ useful for management
- ☐ defines legal consequences of violations
- ☐ gives security staff the backing of management

What three design principles help to ensure high availability? (Choose three.)

Select one or more:

- ☐ ensure confidentiality
- ☐ use encryption
- ☐ eliminate single points of failure
- ☐ detect failures as they occur
- ☐ provide for reliable crossover
- ☐ check for data consistency

What mechanism can organizations use to prevent accidental changes by authorized users?

Select one:

- ☐ encryption
- ☐ backups
- ☐ SHA-1
- ☐ hashing
- ☐ version control

What are three access control security services? (Choose three.)

Select one or more:

- ☐ access
- ☐ repudiation
- ☐ authentication
- ☐ accounting
- ☐ availability
- ☐ authorization

What is a secure virtual network called that uses the public network?

Select one:

- ☐ VPN
- ☐ MPLS
- ☐ Firewall
- ☐ IDS
- ☐ NAC
- ☐ IPS

What three methods help to ensure system availability? (Choose three.)

Select one or more:

- ☐ system backups
- ☐ system resiliency
- ☐ equipment maintenance
- ☐ fire extinguishers
- ☐ integrity checking
- ☐ up-to-date operating systems

What are the three foundational principles of the cybersecurity domain? (Choose three.)

Select one or more:

- ☐ encryption
- ☐ availability
- ☐ policy
- ☐ security
- ☐ confidentiality
- ☐ integrity

What service determines which resources a user can access along with the operations that a user can perform?

Select one:

- ☐ authentication
- ☐ accounting
- ☐ authorization
- ☐ biometric
- ☐ token

What is identified by the first dimension of the cybersecurity cube?

Select one:

- ☐ tools
- ☐ rules
- ☐ knowledge
- ☐ goals
- ☐ safeguards

What are three types of sensitive information? (Choose three.)

Select one or more:

- ☐ business
- ☐ declassified
- ☐ public
- ☐ classified
- ☐ published
- ☐ PII

What name is given to any changes to the original data such as users manually modifying data, programs processing and changing data, and equipment failures?

Select one:

- ☐ modification
- ☐ integrity
- ☐ corruption
- ☐ backup
- ☐ deletion
- ☐ dissemination

What are two methods that ensure confidentiality? (Choose two.)

Select one or more:

- ☐ authorization
- ☐ encryption
- ☐ authentication
- ☐ availability
- ☐ nonrepudiation
- ☐ integrity

END

Solutions

What are three types of sensitive information? (Choose three.)

Select one or more:

- ☒ PII
- ☐ published
- ☐ public
- ☒ classified
- ☐ declassified
- ☒ business

Refer to curriculum topic: 2.2.1

Sensitive information is information that would otherwise cause harm to a company or individual if publicly disclosed.

The correct answers are: PII, business, classified

What are two common hash functions? (Choose two.)

Select one or more:

- ☐ ECC
- ☒ MD5
- ☐ RC4
- ☐ Blowfish
- ☒ SHA
- ☐ RSA

Refer to curriculum topic: 2.2.2

SHA and MD5 use complex mathematical algorithms to compute hash values.

The correct answers are: SHA, MD5

What service determines which resources a user can access along with the operations that a user can perform?

Select one:

- ☐ token
- ☐ biometric
- ☐ accounting
- ☐ authentication
- ☒ authorization



Refer to curriculum topic: 2.2.1

Authorization determines whether a user has certain access privileges.

The correct answer is: authorization

What name is given to a storage device connected to a network?

Select one:

- ☐ RAID
- ☐ SAN
- ☐ DAS
- ☒ NAS
- ☐ Cloud



Refer to curriculum topic: 2.3.1

NAS refers to a storage device connected to a network that allows storage and retrieval of data from a centralized location by authorized network users.

The correct answer is: NAS

What is a method of sending information from one device to another using removable media?

Select one:

- ☒ sneaker net
- ☐ infrared
- ☐ wireless
- ☐ wired
- ☐ LAN
- ☐ packet

Refer to curriculum topic: 2.3.2

Sneaker net refers to hand delivering the removable data.

The correct answer is: sneaker net

What are the three foundational principles of the cybersecurity domain? (Choose three.)

Select one or more:

- ☒ integrity
- ☐ policy
- ☐ security
- ☐ encryption
- ☒ availability
- ☒ confidentiality

Refer to curriculum topic: 2.1.1

Three foundational security principles are confidentiality, integrity and availability.

The correct answers are: confidentiality, integrity, availability

What are the three states of data? (Choose three.)

Select one or more:

- ☒ at rest
- ☐ in-cloud
- ☒ in-process
- ☐ encrypted
- ☒ in-transit
- ☐ suspended

✓

✓

✓

Refer to curriculum topic: 2.3.1

The protection of the cyber world requires cybersecurity professionals to account for the safeguarding of data in-transit, in-cloud, and at rest.

The correct answers are: at rest, in-transit, in-process

What three methods help to ensure system availability? (Choose three.)

Select one or more:

- ☒ up-to-date operating systems
- ☐ integrity checking
- ☐ fire extinguishers
- ☐ system resiliency
- ☒ equipment maintenance
- ☒ system backups

✓

✓

✓

The correct answers are: system backups, equipment maintenance, up-to-date operating systems

Which two methods help to ensure data integrity? (Choose two.)

Select one or more:

- ☒ hashing
- ☐ repudiation
- ☐ privacy
- ☐ authorization
- ☐ availability
- ☒ data consistency checks



Refer to curriculum topic: 2.2.2

Data integrity systems include one of the two data integrity methods.

The correct answers are: hashing, data consistency checks

What three tasks are accomplished by a comprehensive security policy? (Choose three.)

Select one or more:

- ☐ is not legally binding
- ☐ vagueness
- ☒ gives security staff the backing of management
- ☐ useful for management
- ☒ defines legal consequences of violations
- ☒ sets rules for expected behavior



Refer to curriculum topic: 2.4.3

Policy sets the establishment of rules and guidelines for the business.

The correct answers are: sets rules for expected behavior, defines legal consequences of violations, gives security staff the backing of management

What name is given to any changes to the original data such as users manually modifying data, programs processing and changing data, and equipment failures?

Select one:

- ☒ modification
- ☐ backup
- ☐ corruption
- ☐ integrity
- ☐ dissemination
- ☐ deletion



Refer to curriculum topic: 2.3.3

Modification involves changes to the original data and not complete deletion of the data.

The correct answer is: modification

What type of cybersecurity laws protect you from an organization that might want to share your sensitive data?

Select one:

- ☒ privacy
- ☐ nonrepudiation
- ☐ authentication
- ☐ confidentiality
- ☐ integrity



Refer to curriculum topic: 2.2.1

Privacy laws control appropriate use of data and access to data.

The correct answer is: privacy

What are two methods that ensure confidentiality? (Choose two.)

Select one or more:

- ☐ nonrepudiation
- ☒ encryption
- ☐ integrity
- ☐ availability
- ☒ authentication
- ☐ authorization



Refer to curriculum topic: 2.2.1

Confidentiality means viewing of information only for those who need to know. This can be accomplished by encrypting data and authenticating users who request access.

The correct answers are: encryption, authentication

What three design principles help to ensure high availability? (Choose three.)

Select one or more:

- ☐ ensure confidentiality
- ☐ check for data consistency
- ☒ detect failures as they occur
- ☒ eliminate single points of failure
- ☐ use encryption
- ☒ provide for reliable crossover



Refer to curriculum topic: 2.2.3

High availability systems typically include these three design principles.

The correct answers are: detect failures as they occur, provide for reliable crossover, eliminate single points of failure

What is identified by the first dimension of the cybersecurity cube?

Select one:

- ☐ safeguards
- ☐ rules
- ☒ goals
- ☐ tools
- ☐ knowledge



Refer to curriculum topic: 2.1.1

The first dimension of the cybersecurity sorcery cube identifies the goals or security principles required to protect the cyber world.

The correct answer is: goals

What are three access control security services? (Choose three.)

Select one or more:

- ☒ authentication
- ☐ availability
- ☒ accounting
- ☒ authorization
- ☐ repudiation
- ☐ access



Refer to curriculum topic: 2.2.1

This question refers to AAA authentication, authorization, and accountability.

The correct answers are: authentication, authorization, accounting

What principle prevents the disclosure of information to unauthorized people, resources, and processes?

Select one:

- ☐ nonrepudiation
- ☐ integrity
- ☐ accounting
- ☒ confidentiality
- ☐ availability



Refer to curriculum topic: 2.2.1

The security principle of confidentiality refers to the prevention of the disclosure of information to unauthorized people, resources, and processes.

The correct answer is: confidentiality

What mechanism can organizations use to prevent accidental changes by authorized users?

Select one:

- ☐ hashing
- ☐ backups
- ☒ version control
- ☐ SHA-1
- ☐ encryption



Refer to curriculum topic: 2.2.2

Version control ensures that two users cannot update the same object.

The correct answer is: version control

What is a secure virtual network called that uses the public network?

Select one:

- ☐ IDS
- ☒ VPN
- ☐ MPLS
- ☐ NAC
- ☐ Firewall
- ☐ IPS



Refer to curriculum topic: 2.4.1

The term VPN describes a virtual network that uses encryption to protect data when traveling across Internet media.

The correct answer is: VPN