

**Exam : Network and Security
Foundation**

**Title : Network-and-Security-
Foundation**

Version : DEMO

1.Which scenario demonstrates a violation of the integrity component of the CIA triad?

- A. A network's domain name system server has not been fully operational for one month.
- B. An employee accidentally modified a customer account incorrectly.
- C. A company has an unacceptably high network downtime during high-traffic time periods.
- D. A company stores sensitive customer data without access controls.

Answer: B

Explanation:

A violation of integrity occurs when data is modified incorrectly, whether intentionally or by accident. In this case, an employee modifying a customer account incorrectly demonstrates a breach of data integrity.

A and C relate to availability, as they describe system downtime.

D relates to confidentiality, as it describes improper data protection.

2.A company is developing a data protection methodology in order to improve data protection measures. What is a strategy that should be used?

- A. Use a variable network topology
- B. Increase wireless access point range
- C. Enhance physical resource security
- D. Implement wired equivalent privacy (WEP)

Answer: C

Explanation:

Enhancing physical resource security ensures that servers, networking devices, and data storage facilities are protected from unauthorized physical access, theft, or tampering. This includes measures like biometric authentication, surveillance, and restricted access zones.

Using a variable network topology does not directly protect data.

Increasing wireless access point range may improve connectivity but does not enhance security.

WEP is weak and should not be used for data protection.

3.A host is already set up with an operating system. An administrator wants to install a hypervisor atop the operating system to allow for setting up virtual machines.

Which hypervisor should be used?

- A. Open source
- B. Proprietary
- C. Type 1
- D. Type 2

Answer: D

Explanation:

A Type 2 hypervisor (hosted hypervisor) runs on top of an existing operating system and allows for the creation of virtual machines. Examples include VMware Workstation and Oracle VirtualBox.

Type 1 hypervisors run directly on hardware without an OS (e.g., VMware ESXi, Microsoft Hyper-V).

Open-source and proprietary describe licensing models, not hypervisor types.

4.A company wants to use a cloud service to obtain virtual machines with pre-installed and configured software.

Which cloud service model should be used?

- A. Software as a Service (SaaS)
- B. Infrastructure as a Service (IaaS)
- C. Platform as a Service (PaaS)
- D. Function as a Service (FaaS)

Answer: C

Explanation:

Platform as a Service (PaaS) provides a pre-configured computing environment that includes an operating system, runtime, and development tools, making it ideal for developers who want a ready-to-use platform. Examples include Google App Engine and Microsoft Azure App Services.

SaaS provides fully hosted applications, not just pre-configured virtual machines.

IaaS provides infrastructure without pre-installed software.

FaaS executes specific functions without persistent infrastructure.

5. Which component of the IT security CIA triad is a driver for enabling data encryption?

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

Answer: C

Explanation:

Confidentiality ensures that sensitive information is protected from unauthorized access. Encryption is a key mechanism used to maintain confidentiality by converting readable data into a secure format that can only be accessed with a decryption key.

Integrity ensures data is not altered improperly but does not directly relate to encryption.

Availability focuses on system uptime and accessibility.

Application is not a component of the CIA triad.