

Week 02 - Prepare

Question 1

3 / 3 pts

Match the definition with the term:

A defect in the system caused by a bug or a flaw in the design.

vulnerability ▼

The act of a black-hat compromising a system.

attack ▼

The act of disclosing confidentiality, altering data to reduce integrity, or denying availability.

threat ▼

An item of value that a black-hat desires.

asset ▼

The chance that a black-hat has both the desire and means to compromise a system.

risk ▼

The act of reducing the potential for a black-hat to compromise a system.

mitigation ▼

Question 2

1 / 1 pts

What is the difference between a threat and a vulnerability?

- ☐ A threat is a vulnerability that is likely to happen.
- ☒ A threat is what the attacker wishes to accomplish while a vulnerability is how the attacker will accomplish it.
- ☐ A vulnerability is how the attacker will launch an attack while a threat is the defect the attacker will exploit.
- ☐ A threat is an asset paired with a vulnerability.

Question 3

1 / 1 pts

What is the relationship between a risk and an attack?

- ☐ A risk is the chance that an attack will be successful.
- ☒ A risk is the potential for an attack to happen.
- ☐ A risk is the probability that an attack will happen.
- ☐ An attack is an action the attacker may carry out to compromise the system while a risk is something an attacker has actually done.

Question 4

1 / 1 pts

Match the term definition with the term.

The hope that the user's assets will remain as the user left them.

integrity ▼

The hope the user can retrieve his/her assets when needed.

availability ▼

The hope that the user's assets are shared only with those the user intends.

confidentiality ▼

Question 5

1 / 1 pts

What do you call an attack on Confidentiality? On Integrity? On Availability? Match the assurance with the attack.

Denial

Availability ▼

Disclosure

Confidentiality ▼

Alteration

Integrity ▼

Question 6

3 / 3 pts

Match the term with the definition.

When confidential data is revealed.

Information Disclosure ▼

When an untrusted person is able to do something that only trusted people are allowed to do.

Elevation of Privilege ▼

When someone impersonates another.

Spoofing ▼

When a legitimate use of the system is not allowed.

Denial of Service ▼

When a legitimate use of the system is not allowed.. You selected Denial of Service.

When knowledge of an action is erased.

Repudiation ▼

When data is altered.

Tampering ▼

Question 7**1 / 1 pts**

What does OSI stand for? Answer in lowercase with one space between each word.

open systems interconnection

Question 8**1 / 1 pts**

What was the basic objective of SC16?

- ☒ Standardize the rules of interaction between interconnected systems.
- ☐ Define the theory of networking.
- ☐ Standardize on TCP/IP for the Internet.
- ☐ Standardize network protocols so the Internet can be built.

Question 9**1 / 1 pts**

Define Layering according to the OSI article.

- ☐ Increasing reliability by introducing a succession of fallback systems.
- ☒ A structuring technique permitting the workings of lower order protocols to be insulated from higher order protocols.
- ☐ Increasing security by forcing the attacker to travel through multiple trust boundaries to compromise an asset.

Question 10**1 / 1 pts**

Select all that apply: When developing the OSI model, which was NOT a guiding principle/motivation?

- ☒ Create boundaries between layers where security checkpoints could be introduced.
- ☐ Introduce a layer when different technologies could present the same functionality.
- ☐ Make layers map to levels of abstraction.
- ☐ Enable protocols to be updated and changed without changing the functionality of the layer.

Question 11**7 / 7 pts**

Match the layer name with the layer number/order.

Layer 4	Transportation ▼
Layer 1	Physical ▼
Layer 7	Application ▼
Layer 2	Data Link ▼
Layer 5	Session ▼
Layer 3	Network ▼
Layer 6	Presentation ▼

Question 12**7 / 7 pts**

Match the protocol with the OSI layer name.

ASCII	Presentation ▼
TCP	Transportation ▼
Cookie	Session ▼
Ethernet	Data Link ▼
IPSec	Network ▼
HTML	Application ▼
Photons	Physical ▼