Question 1

Correct

Mark 2.00 out of 2.00

⚐ Flag question

Which technology type includes a company receiving an unusual amount of phishing emails?

Select one:

- ◯ industry technology
- ⦿ information technology ✔
- ◯ operational technology
- ◯ consumer technology

Refer to curriculum topic: 1.1.2

IoT security includes devices and applications from information technology (IT), operational technology (OT), and consumer technology (CT).

- **IT** - includes devices in the data center, in the cloud, bring your own devices (BYODs), and thousands of sensors and actuators connected in the field
- **OT** - includes industrial control systems (ICSs), supervisory control and data acquisition (SCADA) systems, and all the devices that connect to these systems
- **CT** - includes connected devices in the home, wearable technology, smart cars, and more

The correct answer is: information technology

Question 2

Correct

Mark 2.00 out of 2.00

⚐ Flag question

A threat actor uses network scanning tools and penetration tools to discover the IP address and manufacturer of a home wireless router. The threat actor then uses internet searches to discover the default administrative access details. Successful remote access of the home router allows the threat actor to use it as a vector to attack other devices. Which element of smart home security is affected by this attack?

Select one:

- ◯ firmware
- ◯ encryption
- ◯ WPA2
- ⦿ authentication ✔

Question 3

Correct

Mark 2.00 out of 2.00

⚑ Flag question

What should be updated regularly to protect against newly discovered vulnerabilities?

Select one:

- ● device firmware ✔
- ○ wireless technology
- ○ encryption algorithm
- ○ authentication setting

Refer to curriculum topic: 1.2.1
In general, the security requirements for a Smart Home should include these:

- **WPA2** - The wireless network should use the latest Wi-Fi security, which is currently WPA2.
- **Encryption** – It protects the confidentiality and integrity of information transmitted over a network.
- **Authentication** - Strong authentication protects the device from unauthorized use or reconfiguration and prevents disclosure or modification of the data stored on the device.
- **Firmware** – The IoT device manufacturers should update the firmware for any newly discovered vulnerabilities. The home IoT device users should enable the checking of updates automatically.

The correct answer is: device firmware

Question 4

Correct

Mark 2.00 out of 2.00

⚑ Flag question

Which type of security vulnerability was targeted by the ransomware WannaCry and WannaCrypt?

Select one:

- ● unpatched, older versions of Windows ✔
- ○ distributed denial of service
- ○ phishing
- ○ denial of service

Question 5

Correct

Mark 2.00 out of 2.00

⚑ Flag question

Which statement describes the function of the Kali VM?

Select one:

🔘 Kali is a popular Linux distribution VM that contains many tools used for assessing network security. ✔

⭕ Kali is a popular VM appliance for a network-based firewall.

⭕ Kali is a popular VM appliance for network-based intrusion detection.

⭕ Kali is a popular Linux distribution for advanced graphical design projects.

Refer to curriculum topic: 1.2.3
Kali is a very popular Linux distribution that contains many tools for assessing network security. It is designed for digital forensics and penetration testing.

The correct answer is: Kali is a popular Linux distribution VM that contains many tools used for assessing network security.

Question 6

Correct

Mark 2.00 out of 2.00

⚑ Flag question

A threat actor parks close to the home of a user and uses packet capture software to intercept the home wireless traffic. The threat actor then analyzes the traffic of the temperature sensor of the home to determine if someone is in the house now. Which factor of the smart home security system is affected by this attack?

Select one:

⭕ firmware

⭕ authentication

⭕ WPA2

🔘 encryption ✔

Refer to curriculum topic: 1.2.1
In general, the security requirements for a smart home should include the following:

- **WPA2** - The wireless network should use the latest Wi-Fi security, which is currently WPA2.
- **Encryption** – It protects the confidentiality and integrity of information transmitted over a network.

Which technology type describes an SQL injection that has compromised a database?

Select one:

○ consumer technology

○ operational technology

○ industry technology

⦿ information technology ✔

Refer to curriculum topic: 1.1.2

IoT security includes devices and applications from information technology (IT), operational technology (OT), and consumer technology (CT).

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- **CT** - includes connected devices in the home, wearable technology, smart cars, and more

The correct answer is: information technology

In August of 2017, the FDA approved an update that fixed a security flaw in the software that monitored a cardiac pacemaker. What is the wireless technology that was used for monitoring the pacemaker?

Select one:

○ cellular

⦿ radio frequency ✔

○ Bluetooth

○ Wi-Fi

Refer to curriculum topic: 1.2.2

Which cloud computing application feature provides users with rich visualization to discover and communicate categorized and summarized health exercise data?

Select one:

○ location service

◉ dashboard ✔

○ heart monitoring

○ wireless connection

Refer to curriculum topic: 1.2.2

An application dashboard can analyze and display user activity data when smart personal fitness devices send exercise data to a cloud computing service for storage and analysis.

The correct answer is: dashboard

Which IoT technology type would include a compromised home temperature sensor causing a home to be uncomfortably hot?

Select one:

◉ consumer technology ✔

○ operational technology

○ information technology

○ industry technology

Refer to curriculum topic: 1.1.2

IoT security includes devices and applications from information technology (IT), operational technology (OT), and consumer technology (CT).

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Question 11

Correct

Mark 2.00 out of 2.00

⚑ Flag question

What is the default name of the file that records the configuration settings when the PL-App image is transferred to the µSD card?

Select one:

◯ myini.txt

◯ mysetting.txt

◯ rapsberry3.txt

◉ chestnut.txt ✔

Refer to curriculum topic: 1.2.3
During the process of configuring and writing the PL-App image onto the µSD card, a file called chestnut.txt is created that records the configuration information.

The correct answer is: chestnut.txt

Question 12

Correct

Mark 2.00 out of 2.00

⚑ Flag question

Which statement describes a risk to a patient due to security vulnerabilities of healthcare devices?

Select one:

◯ The patient needs to move to a different healthcare facility.

◯ The heart monitoring device needs upgrading.

◯ The patient cannot communicate with family members.

◉ Vital therapies can be manipulated or interrupted. ✔

Refer to curriculum topic: 1.2.2
Vulnerabilities in connected healthcare devices result in many risks. For example, if a threat actor can get into these devices due to weak or open authentication, vital therapies can be manipulated, interrupted, or disabled, resulting in patient injury or death.

The correct answer is: Vital therapies can be manipulated or interrupted.

According to the National Initiative for Cybersecurity Education (NICE) Cybersecurity Workforce Framework by NIST, which work category defines risk management?

Select one:

○ Protect and Defend

⦿ Securely Provision ✓

○ Investigate

○ Analyze

Refer to curriculum topic: 1.1.3

Risk management is in the Securely Provision work category of the National Initiative for Cybersecurity Education (NICE) Cybersecurity Workforce Framework by NIST. Risk management includes all the processes necessary to assure that existing and new IT systems meet the cybersecurity and risk requirements of an organization.

The correct answer is: Securely Provision

True or False?

In a smart home implementation, fog computing is a better option compared with cloud computing to process status and configuration changes for IoT devices.

Select one:

○ false

⦿ true ✓

Refer to curriculum topic: 1.2.1

Fog computing is the computing process implemented locally. It is a better choice, compared with cloud computing, because local computing and processing can reduce latency of communication and provide fast response.

The correct answer is: true

The correct answer is: true

In an IoT healthcare monitoring system design, what kind of components form a body sensor network?

Select one:

○ location and Bluetooth service

○ gateway and cloud computing

○ sensors and gateway

◉ sensors ✔

Refer to curriculum topic: 1.2.2
A body sensor network (BSN) is formed by several different sensors that a patient is wearing that collect health information about a patient. A gateway device connects the BSN to the monitoring platform across the internet.

The correct answer is: sensors

Finish review

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