Introduction to IoT Chapter 4 Quiz

Due Oct 22 at 10:59pm   **Points** 20   **Questions** 10   **Time Limit** None
Allowed Attempts Unlimited

Instructions

This quiz covers the content presented in **I2IoT Chapter 4**. This quiz is designed for practice. You will be allowed multiple attempts and the grade does not appear in the gradebook.

There are multiple task types that may be available in this quiz. In some task types, partial credit scoring is allowed to foster learning. Please note that on tasks with multiple answers, points can be deducted for selecting incorrect options.

Short answer or essay questions may appear on some of the quizzes. These questions are designed for self-assessment and reflection and are not scored. Sample answers are provided for self-evaluation.

At the completion of the quiz, some items may display feedback. The feedback will reference the source of the content. Example: "Refer to curriculum topic: 1.2.3" - indicates that the source of the material for this task is located in chapter 1, section 2, topic 3.

Form: 31558

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[**Take the Quiz Again**]

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Attempt History

	Attempt	**Time**	**Score**
LATEST	**Attempt 1**	6 minutes	18 out of 20

ⓘ Correct answers are hidden.

Score for this attempt: **18** out of 20
Submitted Oct 22 at 9:57pm
This attempt took 6 minutes.

Question 1	**2 / 2 pts**

True or False?
The IoE can improve employee productivity through empowering employees with tools to complete their work where and how they need.

○ false

◉ true

Refer to curriculum topic: 4.2.3
Prior to the IoE, employees may have experienced a static approach to work; using resources tied to specific locations. With the IoE, employees are empowered with tools to complete their work where and how they need.

Question 2   2 / 2 pts

Which scenario is an example of M2P interactions in an IoE implementation?

○ a wireless sensor obtaining an IP address dynamically

◉ a technician investigating a condition reported by a sensor

○

sensors reporting the status of equipment on a production line to a controller

○   sensors and actuators controlling equipment operation

Refer to curriculum topic: 4.1.2
It is a machine-to-people (M2P) interaction when a technician investigates a condition reported by a sensor. The other options are machine-to-machine (M2M) interactions.

Question 3   2 / 2 pts

Which two types of devices can be used to protect end devices in the IoE from attacks? (Choose two.)

☑   firewall

☑   intrusion prevention system

☐   DSL and cable modems

☐   sensor

☐   file server

Refer to curriculum topic: 4.3.2
Firewalls and intrusion prevention systems (IPS) can be implemented as host-based or network-based solutions. They can be used to protect end devices from attacks. Sensors are end devices and DSL/cable modems provide connectivity for end devices. File servers provide file sharing service. File servers, and DSL/cable modems do not provide protection from attacks to end devices.

Incorrect

Question 4   0 / 2 pts

Fill in the blank.

In order to participate in a universal Internet of Everything, networks using proprietary protocols need to be converted to the non-proprietary protocol used over the Internet. This protocol is called [interoperability] .

Answer 1:

   interoperability

Refer to curriculum topic: 4.2.4
The global scope and interoperability requirements of the IoE means that standard non-proprietary protocols based on TCP/IP need to be applied instead of the protocols of closed vendor-based systems.

Question 5   2 / 2 pts

Which layer of the Cisco IoE architectural approach includes the proper mix of hardware and software within the corporate environment, Cloud, and service provider network?

- ◉ infrastructure

- ○ platform

- ○ network

- ○ application

Refer to curriculum topic: 4.2.2
The three layers of the IoE architectural approach are as follows:

- application - has application-centric flexibility to respond to changing corporate traffic and usage needs.
- platform - ensures applications and users receive the resources they need due to the orchestration, management, and policy adjustments to ensure quality service delivery.
- infrastructure - includes power, security, and core network devices that use both physical and virtual resources.

The new IoE architectural approach is important so that all aspects of a business can work together to provide a cost effective, efficient, and productive corporate environment.

Question 6   2 / 2 pts

In the Cisco Streamlines Old Mining Operations video, what type of device would monitor the truck drivers for alertness?

- ○ GPS

○ wireless router

○ satellite

○ actuator

◉ sensor

Refer to curriculum topic: 4.2.1
Mining trucks have cab sensors that instantly notify the driver and a
remote operations center in the event the driver becomes tired.

Question 7   2 / 2 pts

What effect is the Internet of Things expected to have on the amount of data
generated on the Internet?

○ stay about the same

◉ exponential growth

○ dramatic decrease

Refer to curriculum topic: 4.2.4
As the number of things connected to the Internet increases, the
amount of data generated is expected to grow exponentially.

Question 8   2 / 2 pts

What process in a basic wireless security implementation is used to encode information so that only authorized individuals can read it?

- ◉ encryption

- ○ authentication

- ○ polarization

- ○ authorization

Refer to curriculum topic: 4.3.2
Encryption is the process of encoding information or data so that only authorized individuals can read it.

Question 9   2 / 2 pts

Today, over __% of things in the physical world are still not connected to the Internet. Select the answer that will complete the statement.

○ 85

◉ 99

○ 90

○ 75

Refer to curriculum topic: 4.2.3
Today, more than 99% of things in the physical world are still not connected to the Internet.

Question 10   2 / 2 pts

Connecting things in the IoT requires the convergence of information technology and _____ technology within an organization.

○ statistical

○ financial

◉ operational

○ analytical

○ infrastructure

Refer to curriculum topic: 4.1.1
Operational technology relates to the industrial control and automation infrastructure of an organization. This includes the hardware (such as sensors and end devices) and the software that is used to control and monitor the manufacturing equipment and processes.

Information technology systems refer to the network infrastructure, telecommunications, and software applications that are used to process information and exchange it among humans.

Manufacturing devices and software need to work in conjunction with and be tied into information technology systems. This convergence of OT and IT achieves better products, cost and risk reductions, and improves performance, flexibility, and efficiency.

Quiz Score: **18** out of 20