**Connecting to the Internet**

1.Question 1

**A modulator/demodulator is better known as a \_\_\_\_\_.**telephoneradiomodemcomputer

**Ans:3**

**Correct**

Correct! Modem stands for modulator/demodulator.

2.Question 2

**A T3 consists of \_\_\_\_\_ T1 lines.**12428100

**Ans:3**

**Correct**

Wohoo! A T3 is just 28 multiplexed T1 lines.

3.Question 3

**A section of the radio spectrum that’s been agreed upon to be used for certain communications is known as a \_\_\_\_\_\_\_.**frequency bandchannelcollision domainwireless LAN

**Ans:1**

**Correct**

Right on! Different locales might have different frequency bands defined.

4.Question 4

**The original and flawed wireless security protocol is known as \_\_\_\_\_.**WEPWPAMAC filteringVPN

**Ans:1**

**Correct**

Correct! WEP is not very secure and has been mostly phased out.

5.Question 5

**WPA stands for \_\_\_\_\_\_\_.**WiFi Protected AccessWireless Protection AugmentationWiFi Proxy AccessWired Protected Access

**Ans:1**

**Correct**

You got it! WPA is an update to WEP that's much more secure.

6.Question 6

**What connection type is known as "always on"?**EthernetBroadbandInternetPlain Old Telephone System (POTS)

**Ans:2**

**Correct**

Great work! Broadband is known as an "always on" technology. This is because a connection does not have to first be initiated.

7.Question 7

**Digital Subscriber Line (DSL) is the only Internet connection option available for a small office in the middle of nowhere. Which type will provide speeds above 1.544 megabits per second?**Digital Subscriber Line Access Multiplexer (DSLAM)High Bit-rate Digital Subscriber Line (HDSL)Symmetric Digital Subscriber Line (SDSL)Asymmetric Digital Subscriber Line (ADSL)

**Ans:2**

**Correct**

You nailed it!

8.Question 8

**A point-to-point virtual private network (VPN) utilizes this type of device at each point.**PPPoEMultiplexerModemFirewall

**Ans:4**

**Correct**

Right on! Firewalls are devices that can act as a VPN endpoint.

9.Question 9

**In which wireless configuration type do nodes communicate directly with each other, rather than with an access point?**2.4Ghz802.11bMesh networkAd-hoc

**0 / 1 point**

**Incorrect**

Not quite. Please review the videos in the "Wireless Networking" module for a refresher.

10.Question 10

**Similar to Wireless networks, cellular networks use band configuration to avoid what problem?**SpeedDistanceOverlapSecurity

**Ans:3**

**Correct**

Great work! Cell towers are configured to use bands that don't overlap, just like WiFi uses different channels.

11.Question 11

**How many simultaneous phone conversations can a T1 line carry?**23282024

**Ans:4**

**Correct**

Woohoo! A T1 is a dedicated communication line that can carry both data and voice.

12.Question 12

**Which of the following is NOT a Wide Area Network (WAN) connection type?**Digital Subscriber Line (DSL)Asynchronous Transfer Mode (ATM)Frame RelayHigh-Level Data Link Control (HDLC)

Ans:1

**Correct**

Well done! DSL is a broadband technology that is used for Internet connectivity.

13.Question 13

**What are two characteristics of a 5Ghz band wireless network? Check all that apply.**

Slow speeds

Long range

Short range

**Correct**

Woohoo! A wireless network that operates with a 5Ghz frequency has a much shorter range than that of a 2.4Ghz network.

Fast speeds

**Correct**

Well done! A wireless network that operates with a 5Ghz frequency offers greater speeds than that of a 2.4Ghz network.

**Ans:3,4**

**Correct**

Great, you got all the right answers.

14.Question 14

**An IT suspects that an unauthorized device is connected to a wireless network. This is a result of passkey sharing on a device brought from home. What is put in place to stop such activity?**Collision domainChannel overlapMedia Access Control (MAC) FilteringWiFi Protected Access 2 (WPA2)

**Ans:3**

**Correct**

Awesome! MAC filtering allows or disallows a device to connect to a network, based on a hardware address.

15.Question 15

**Cat5 and Cat6 cabling refer to which reference model layer?**TransportData linkPresentationPhysical

**Ans:3**

**Correct**

Woohoo! Physical media, like cables, provide connectivity and are associated with the physical layer.

16.Question 16

**What two benefits are a result of configuring a wireless mesh network? Check all that apply.**

WiFi protected setup

Range

**Correct**

Awesome! Range increases when access points are configured in a mesh where all points are connected to each other.

Performance

**Correct**

Nice job! Performance increases when access points are configured in a mesh where all points are connected to each other.

Ad-hoc configuration

**Ans:2,3**

**Correct**

Great, you got all the right answers.

.Question 1

**The rate at which a dial-up connection can send data across a telephone wire is known as a \_\_\_\_\_ rate.**bauddatatransfervoice

**Ans:1**

**Correct**

Great job! A baud rate is equivalent to bits per second.

2.Question 2

**A T3 consists of \_\_\_\_\_ T1 lines.**12428100

**Ans;3**

**Correct**

Wohoo! A T3 is just 28 multiplexed T1 lines.

3.Question 3

**ONT stands for \_\_\_\_\_\_.**Optical Network TelephoneOptional Network TrafficOptical Network TetherOptical Network Terminator

**Ans:4**

**Correct**

Correct! An ONT sits between a fiber network and a more traditional copper one.

4.Question 4

**The first field in an 802.11 header is known as a \_\_\_\_\_\_\_\_.**Duration FieldSequence Control FieldFrame Control FieldPreamble

**Ans:3**

**Correct**

Great job! The Frame Control Field specifies things like what version of 802.11 is in use.

5.Question 5

**Another name for cellular networking is \_\_\_\_\_\_ networking.**wide areaorganiccomputermobile

**Ans:4**

**Correct**

Awesome job! Depending on where you're from, one term or the other may be more common.

6.Question 6

**Devices that connect to the Internet are often categorized into silos. Which silo controls network traffic?**Phones/tabletsServers/data centersSwitches/routersComputers/laptops

**Ans:3**

**Correct**

Well done! Switches and routers are two of many devices that control network connectivity and traffic.

7.Question 7

**Digital Subscriber Line (DSL) is the only Internet connection option available for a small office in the middle of nowhere. Which type will provide speeds above 1.544 megabits per second?**High Bit-rate Digital Subscriber Line (HDSL)Asymmetric Digital Subscriber Line (ADSL)Digital Subscriber Line Access Multiplexer (DSLAM)Symmetric Digital Subscriber Line (SDSL)

**Ans:1**

**Correct**

You nailed it!

8.Question 8

**Fiber optic cable from a service provider can be delivered directly to the end user. Which implementation delivers data to a cabinet for distribution?**FTTHFTTNFTTXFTTB

**Ans:2**

**Correct**

Awesome! Fiber To The Neighborhood (FTTN) defines fiber technology used to deliver data to a single physical cabinet that serves a population.

9.Question 9

**A wireless network does not benefit like a wired network does, when it comes to collision reduction. Which device reduces collisions on a wired network?**HubGatewaySwitchRouter

**Ans:3**

**Correct**

You nailed it! Switches remember which computers are on which physical interfaces, so traffic is only sent to the intended node.

10.Question 10

**Which configuration is considered to be a common way to increase security in a wireless network?**5Ghz ChannelWiFi Protected Access (WPA)Wired Equivalent Privacy (WEP)Media Access Control (MAC) filtering

**0 / 1 point**

**Incorrect**

Not quite. Please review the videos in the "Wireless Networking" module for a refresher.

11.Question 11

**Which form of Digital Subscriber Line (DSL) features differing upload and download speeds?**HDSLDSLAMSDSLADSL

**Ans:4**

**Correct**

Nice job! Asymmetric Digital Subscriber Line (ADSL) connections feature different speeds for outbound and incoming data.

12.Question 12

**Which Fiber implementation is often referred to as Fiber To The Premises (FTTP)? Check all that apply.**

Fiber To The Neighborhood (FTTN)

**This should not be selected**

Not quite. Please review the videos in the "Broadband Connections" module for a refresher.

Fiber To The Building (FTTB)

**Correct**

Awesome! FTTB is a setup where fiber technologies are used for data delivery to an individual building.

Fiber To The Home (FTTH)

Fiber To The X (FTTX)

**This should not be selected**

Not quite. Please review the videos in the "Broadband Connections" module for a refresher.

**Ans:2,3**

13.Question 13

**What does a wireless LAN (WLAN) act as to a wired network?**SwitchRouterGatewayBridge

**0 / 1 point**

**Incorrect**

Not quite. Please review the videos in the "Wireless Networking" module for a refresher.

14.Question 14

**When it comes to wireless channels, which channels never overlap? Check all that apply.**

4

3

11

**Correct**

Nice job! Some channels are close together and may cause an overlap. Channels 1,6, and 11 are far enough apart to never overlap.

1

**Correct**

You got it! Some channels are close together and may cause an overlap. Channels 1,6, and 11 are far enough apart to never overlap.

**Ans:3,4**

**Correct**

Great, you got all the right answers.

15.Question 15

**Television broadcasts were originally delivered by using which technology?**WirelessEthernetBroadbandCoaxial cable

**0 / 1 point**

**Incorrect**

Not quite. Please review the videos in the "Broadband Connections" module for a refresher.

16.Question 16

**Which value once represented a very popular modem baud rate that was used with dial-up connections?**1990197011014400

**Ans:4**

**Correct**

Nice job! While not commonly used today, dial-up still exists. 14400 (14.4k) baud was a popular baud (speed) rate.