

Exam Report: 6.8.7 Practice Questions

Date: 3/24/2020 10:34:41 am

Candidate: Garsteck, Matthew

Time Spent: 4:13

Login: mGarsteck

Overall Performance

Your Score: 64%

View results by: ☐ Objective Analysis ☒ Individual Responses

Individual Responses

▼ Question 1:

Incorrect

You are configuring an ADSL connection. Which of the following will be part of the configuration? (Select TWO.)

- ➡ ☐ Filters or splitters
- ☐ F-type connectors
- ☐ An RG6 cable
- ☒ ~~Analog modem~~
- ➡ ☒ RJ11 connectors

Explanation

To connect to the internet through a DSL connection:

- Install an internal DSL card in a single computer or connect a DSL router to the phone line.
- Use a phone cable with an RJ11 connector to connect the DSL card or router to the phone line. For ADSL, place filters (splitters) on the line everywhere that an analog phone is used.
- Do not install a filter on the line connected to the DSL router.

Analog modems are used for dial-up internet access. F-type connectors and RG-6 cable are used for cable internet access.

References

TestOut PC Pro - 6.8 Internet Connectivity

[e_conn_pp6.exam.xml Q_INTERNET_ADSL_02]

▼ Question 2:

Incorrect

Which actions allow you to access the internet on your laptop via a cellular network?

- ☐ Connect your wireless access point to the cellular network with a USB dongle and then connect the laptop to the access point using an 802.11b/g/n connection.
- ➡ ☐ Install a cellular USB adapter in an open port on the laptop.
- ☒ ~~Connect the laptop to the RJ11 jack in your office.~~
- ☐ Connect the cell phone to the PHONE port on the dial-up modem in your office and connect the laptop to the LINE port on the modem.

Explanation

To access content on your computer (laptop):

- Install a cellular adapter in a PCMCIA, ExpressCard, or USB slot.
- Install and configure the software to use the card.

An RJ11 connection is typically for analog phones and is used for DSL, ISDN, and dial-up internet connections. Dial-up internet connections use two ports on the modem:

- The LINE port connects the modem to the wall
- The PHONE port connects the modem to the analog phone.

Typically, you cannot connect a USB device, such as a cellular adapter, to a wireless access point.

References

TestOut PC Pro - 6.8 Internet Connectivity

[e_conn_pp6.exam.xml Q_INTERNET_CELLULAR_01]

▼ Question 3: Incorrect

Which of the following are options for connecting a computing device, such as a notebook computer or a tablet, to a cellular network? (Select FOUR.)

- ➡ ☐ Use a USB cable to connect the device to the network through a smartphone.
- ☐ Use a USB cable to connect the device to the cellular network through a cable modem.
- ☒ ~~Use the device's Wi-Fi to connect to the cellular network through a cable modem's Wi-Fi antenna.~~
- ☒ ~~Use an integrated transmitter to connect the device directly to the cellular network through a satellite.~~
- ➡ ☐ Use a USB cellular antennae to connect the device directly to the cellular network.
- ➡ ☐ Use an integrated cellular antennae to connect the device directly to the cellular network.
- ➡ ☒ Use the device's Wi-Fi to connect to the network through a cellular Wi-Fi hot spot.
- ☒ ~~Use a USB transmitter to connect the device directly to the cellular network through a satellite.~~

Explanation

You can connect a computing device, such as a notebook computer or a tablet, to a cellular network by using any of these four options:

- Use a USB cable to connect the device to the network through a smartphone.
- Use the device's Wi-Fi to connect to the network through a cellular Wi-Fi hotspot.
- Use a USB cellular antennae to connect the device directly to the cellular network.
- Use an integrated cellular antennae to connect the device directly to the cellular network.

A transmitter antennae, or a dish, will connect you to a satellite network, not a cellular network. Connecting to the cable service does not connect you to a cellular network (cable is a separate type of networking service).

References

TestOut PC Pro - 6.8 Internet Connectivity

[e_conn_pp6.exam.xml Q_INTERNET_CELLULAR_02]

▼ Question 4: Correct

Which of the following types of internet connection services can allow you to be truly mobile while maintaining your internet connection?

- ☐ Wi-Fi
- ➡ ☒ Cellular

- ☐ Satellite
- ☐ ISDN BRI
- ☐ Mobile hotspot

Explanation

Cellular networking uses the cellular phone infrastructure for internet access. The computing device, such as a notebook or tablet, must have a cellular antennae to connect directly to the cellular network. You can travel anywhere and stay connected to the network, as long you are within the coverage area of the cellular service provider. You can also connect a computing device to a cellular network by tethering it to a smartphone or by using a smartphone as a Wi-Fi hotspot.

Mobile hotspots are devices that can be used to connect to a cellular network. Wi-Fi is a technology that provides wireless access to a computer network but is limited to the range of the wireless access point. Satellite networking requires a satellite dish, which is not truly mobile. ISDN is a land-line-based technology.

References

TestOut PC Pro - 6.8 Internet Connectivity
[e_conn_pp6.exam.xml Q_INTERNET_CELLULAR_03]

▼ Question 5: Incorrect

You are talking with a customer support technician on the telephone. The technician recommends downloading a particular driver from the internet. When you try to connect to the internet using your dial-up modem, you can't. What is the problem?

- ☐ You need to disable call waiting.
- ☐ You need to install and configure TCP/IP.
- ☒ ~~The ISP access number is incorrect.~~

➡ ☐ You need to hang up.

Explanation

You cannot talk on the telephone over the same line that the modem needs to use. When you try to connect with the modem, the line will be in use, and the connection will fail because the modem can't dial the destination device. When troubleshooting a modem connection, first, verify that the modem gets a dial tone. Verify that the modem dials the correct number. Verify that the receiving device answers the call. Verify network connection parameters (such as TCP/IP settings or connection settings). Verify any authentication or logon parameters.

References

TestOut PC Pro - 6.8 Internet Connectivity
[e_conn_pp6.exam.xml Q_INTERNET_DIALUP_01]

▼ Question 6: Correct

Which type of network medium is used by an Integrated Services Digital Network (ISDN) adapter?

- ☐ Wireless radio waves
- ➡ ☒ Copper telephone wire
- ☐ Fiber-optic cable
- ☐ Cable TV coaxial cable
- ☐ Infrared light waves

Explanation

ISDN is a set of standards that allow digital data to be sent and received over copper wiring.

References

TestOut PC Pro - 6.8 Internet Connectivity
[e_conn_pp6.exam.xml Q_INTERNET_ISDN_01]

▼ Question 7: Correct

Which of the following network technologies is packaged as part of a BRI plan?

- ➡ ☒ ISDN
- ☐ DSL
- ☐ Dial-up
- ☐ Cable modem

Explanation

ISDN is a digital service that operates over standard telephone company copper wiring offered in a variety of configurations. ISDN consists of multiple 64 Kbps channels. Basic Rate Interface (BRI) is a standard ISDN offering for household service.

References

TestOut PC Pro - 6.8 Internet Connectivity
[e_conn_pp6.exam.xml Q_INTERNET_ISDN_02]

▼ Question 8: Incorrect

Which of the following are features of Basic Rate ISDN (BRI)? (Select THREE.)

- ☐ Always-on connection
- ➡ ☒ Two data Channels
- ➡ ☐ One control channel
- ➡ ☐ Dial-up connection
- ☒ Up to 24 data channels
- ☐ Three control channels

Explanation

Basic Rate ISDN service is a dial-up service consisting of two 64 Kbps data (bearer) channels and a single control (delta) channel. The two data channels can be used independently of each other or bonded together to provide a total bandwidth of 128 Kbps. Primary Rate ISDN (PRI) shares many of the features of BRI, but includes up to 24 data channels.

References

TestOut PC Pro - 6.8 Internet Connectivity
[e_conn_pp6.exam.xml Q_INTERNET_ISDN_BRI_01]

▼ Question 9: Correct

To access the internet through the Publicly Switched Telephone Network (PSTN), what kind of connectivity device must you use?

- ☐ DTE
- ☐ CSU/DSU
- ☐ Switch
- ☐ TDM

➡ ☒ Modem

Explanation

To establish a connection to the internet through the PSTN/POTS, you must use a modem (modulator/demodulator), which converts digital PC data into analog signals that can be transmitted through standard telephone lines. A CSU/DSU (channel service unit/data service unit) is a digital interface device used to connect a router to a digital circuit such as a T1 or T3 line. Data terminal equipment (DTE) is an end instrument that converts user information into signals for transmission or reconverts received signals into user information. Time-division multiplexing (TDM) is a type of digital or, less often, analog multiplexing in which two or more signals or bit streams appear to transfer simultaneously as sub-channels in one communication channel, but actually take turns on the channel. A switch is a device for changing the course (or flow) of a circuit.

References

TestOut PC Pro - 6.8 Internet Connectivity
[e_conn_pp6.exam.xml Q_INTERNET_MODEM_01]

▼ Question 10: Correct

A homeowner's connection to the internet is through an always-on modem that connects to existing telephone wiring and has a download speed of over 3 Mbps. The homeowner is able to make analog phone calls over the same wiring at the same time.

Which of the following internet connection types is being used?

- ➡ ☒ DSL
- ☐ Dial-up
- ☐ ISDN
- ☐ Cable

Explanation

Digital Subscriber Line (DSL) uses a modem that connects to copper telephone lines, allows the use of the internet and phone calls at the same time, and has average download speeds of 3 Mbps to 7 Mbps.

Dial-up internet is an older technology that converts digital signals to analog signals that are sent and received over telephone wiring. Consequently, the modem and a phone cannot be used at the same time.

ISDN is an older technology that uses telephone lines. Its maximum bandwidth is 128 Kbps.

Cable internet connections use a modem that connects to coaxial cables traditionally used to provide cable television.

References

TestOut PC Pro - 6.8 Internet Connectivity
[e_conn_pp6.exam.xml Q_INTERNET_NETWORK_TYPES_01]

▼ Question 11: Correct

A SOHO's connection to the internet is through an antenna that sends and receives a microwave signal to the ISP's antenna. There can be no obstacles on the direct path between the two antennae.

Which of the following internet connection types is being used?

- ☐ Fiber
- ☐ DSL
- ☐ Satellite
- ➡ ☒ Line-of-sight wireless

Explanation

Line-of-sight wireless uses microwave or radio frequency signals between two antennae. The direct patch between the antennae must not be blocked.

A fiber internet connection uses fiber cabling. Transmitted light pulses are carried by the fiber.

Digital Subscriber Line (DSL) uses a modem that connects to copper telephone lines, allows the use of the internet and phone calls at the same time, and has average download speeds of 3 Mbps to 7 Mbps.

Satellite internet connections are made through satellites orbiting the earth in a geosynchronous orbit. Typically, a roof-mounted satellite dish is aimed at the target satellite, and a transceiver sends and receives data.

References

TestOut PC Pro - 6.8 Internet Connectivity

[e_conn_pp6.exam.xml Q_INTERNET_NETWORK_TYPES_02]

▼ Question 12: Correct

A group of workers attend a team-building retreat at a remote cabin. They can place calls on their mobile smartphones, but the cabin has no wired phone, television, or wired internet connectivity. The workers need to access an internet webpage using their laptop computers.

Which of the following internet connection types might be available to the workers?

☐ Cable

➡ ☒ Cellular

☐ DSL

☐ Dial-up

Explanation

A cellular internet connection might be available. A worker may have an embedded cellular adapter or a USB broadband modem (air card). A laptop could be tethered to a mobile phone with a USB cable or Bluetooth, or the mobile phone might be able to create a mobile hotspot.

A cable internet connection is not possible because there are no television cables in the cabin.

A dial-up internet connection is not possible because there are not wired phone lines in the cabin.

A DSL internet connection is not possible because there are no wired phone lines in the cabin.

References

TestOut PC Pro - 6.8 Internet Connectivity

[e_conn_pp6.exam.xml Q_INTERNET_NETWORK_TYPES_03]

▼ Question 13: Correct

A healthcare organization provides mobile clinics throughout the world and needs to transfer patients' statistical data to a central database via the internet. Which network technology should you select to ensure network connectivity for any clinic located anywhere in the world, even remote areas?

☐ Dial-up

☐ DSL

☐ Cable modem

➡ ☒ Satellite

☐ ISDN

Explanation

Satellite capability is available even in areas that do not have a local network infrastructure. Satellite requires a local portable transmitter with an antenna directed skyward, to a satellite. Satellite service providers offer nearly 100% global network coverage by maintaining a series of satellites that circle the

earth in geosynchronous orbit. Dial-up, ISDN, and cable modem require a local network infrastructure provided by either a telephone company or cable television company.

References

TestOut PC Pro - 6.8 Internet Connectivity

[e_conn_pp6.exam.xml Q_INTERNET_SATELLITE_01]

▼ Question 14: Correct

You are installing a satellite connection so your home office can connect to the internet. Which of the following statements is true?

- ➡ ☒ The satellite dish must be pointed in the correct direction for communicating with the satellite.
- ☐ The connection between the satellite modem and dish uses a USB cable and connector.
- ☐ The connection to your computer from the satellite modem may be RJ11 or F-type.
- ☐ You must have at the least one available phone line for data uploads.

Explanation

During installation, the satellite dish must be pointed in the correct direction to communicate with the satellite. With a single-line satellite installation, the satellite connection is used for downloads, and a phone line with a modem is used for uploads. Connect a satellite modem/router to the satellite disk using coaxial cable (RG-6) and an F-type connector. Connect the modem/router to your computer using a USB or Ethernet connection.

References

TestOut PC Pro - 6.8 Internet Connectivity

[e_conn_pp6.exam.xml Q_INTERNET_SATELLITE_CONN_01]