

Overall Performance

Score: 65%

Passing Score: 60%

Questions

Objectives

[Expand All](#) | [Collapse All](#)**▼ Question 1:** Incorrect

You have just signed up for a broadband home Internet service that uses coaxial cable. Which connector type will you most likely use?

- ☐ ST
- ☐ RJ-11
- ☒ BNC
- ➡ ☐ F-type
- ☐ SC
- ☐ RJ-45

Explanation

Use an F-type connector for broadband cable connections that use coaxial cable.

Use a BNC connector for 10Base2 Ethernet networks. Use an RJ-11 connector for modem connections to a phone line. Use an RJ-45 connector for an Ethernet network that uses twisted pair cable. Use ST and SC connectors for fiber-optic cables.

References

LabSim for Network Pro, Section 2.2.

[netpro15_all_questions_en.exm NP05_1-4 #210]

▼ Question 2: Correct

Which of the following are advantages of using fiber optic cabling for a network, as opposed to other types of cabling? (Select two.)

- ➡ ☒ Immunity to electromagnetic interference
- ☐ Faster installation
- ☐ Lower installation cost
- ➡ ☒ Greater cable distances without a repeater

Explanation

Compared to other types of cabling, fiber optic cabling allows greater cable distances without a repeater and is immune to electromagnetic interference. However, installation costs more and takes longer.

References

LabSim for Network Pro, Section 2.3.

[netpro15_all_questions_en.exm NP05_1-5 #40]

▼ Question 3: Correct

You are building a new network for a small startup financial services company. Security is paramount, so each organization

within the company will have its own network segment separated by a router. However, funds are limited, and you have been asked to keep costs to a minimum.

You have acquired a used fiber optic switch and want to use it to create a fiber optic backbone that interconnects all of the routers. You purchased several used single mode GBIC modules on eBay that you will install in each router to allow them to connect to the switch.

Both the switch and the GBIC modules use MT-RJ connectors. You connect each module to the switch with 1 meter multimode patch cables.

Will this implementation work?

- ➡ ☒ No, you shouldn't use multimode patch cables with single mode GBIC modules.
- ☐ Yes, all of the requirements for implementing a fiber optic network have been met.
- ☐ No, standard fiber optic switches should not be used to create a backbone network for routers.
- ☐ No, you should purchase fiber optic equipment that use FC connectors.

Explanation

Some GBIC/SFP modules use multimode fiber, while others use single mode. You must use the correct type of fiber optic cable and connector required by the specific adapter. You cannot mix and match different types of cable. In this scenario, connecting a single mode GBIC to multimode fiber will introduce a catastrophic signal loss of up to 99%.

References

LabSim for Network Pro, Section 2.5.

[netpro15_all_questions_en.exm RT NP15_4.5-2]

▼ Question 4: Incorrect

Which of the following is used to terminate individual wires from a 25 pair or 100 pair cable using female RJ-45 ports?

- ☐ 66 block
- ☒ ~~110 block~~
- ➡ ☐ Patch panel
- ☐ Horizontal cross connect

Explanation

A patch panel is a device that typically connects individual stranded wires into female RJ-45 connectors. For example, you might connect 4 pairs of wires from a punchdown block to a port on the patch panel. On the patch panel, you then connect drop cables (cables with RJ-45 connectors) to the patch panel on one end and a computer on the other end.

Use 66 and 110 blocks to connect individual wires within a wiring closet. These punchdown blocks connect the individual wires together, but do not terminate in RJ-45 connectors.

A horizontal cross connect connects IDFs on the same floor.

References

LabSim for Network Pro, Section 2.4.

[netpro15_all_questions_en.exm NP09_2-8 #MCS10]

▼ Question 5: Correct

You need to replace a fiber optic cable that is connecting two switches together. You inspect the existing fiber cable and determine that it uses LC connectors. You also notice the cable's ferrule has a slight slant to it.

Which polish grade should you use to replace the existing cable?

- ☐ Flat Physical Contact polish
- ☐ Physical Contact polish
- ➡ ☒ Angled Physical Contact polish
- ☐ Ultra Physical Contact polish

Explanation

A slight slant to the fiber ferrule indicates an Angled Physical Contact (APC) polish. Using a non-angled connector will cause excessive insertion loss.

A Physical Contact (PC) polish is polished with a slight curvature. An Ultra Physical Contact (UPC) polish uses a higher grade polish and is slightly more curved than a PC polish. A Flat Physical Contact connector has little to no curvature and suffers from the most insertion loss.

References

LabSim for Network Pro, Section 2.5.

[netpro15_all_questions_en.exm *NP15_TROUBLESHOOTING_NETWORK_MEDIA_01]

▼ Question 6: Incorrect

Which pins in an RJ45 connector are used to transmit data when used on a 100BaseT Ethernet network? (Select two.)

➡ ☐ Pin 1

➡ ☐ Pin 2

☐ Pin 3

☐ Pin 4

☐ Pin 5

☐ Pin 6

☒ Pin 7

☒ Pin 8

Explanation

On a 100BaseT network cable, the RJ45 pin-outs are as follows:

- Pin 1: Tx+
- Pin 2: Tx-
- Pin 3: Rx+
- Pin 4: Unused
- Pin 5: Unused
- Pin 6: Rx-
- Pin 7: Unused
- Pin 8: Unused

For a 100BaseT cable, Pins 1 and 2 are used to transmit data; pins 3 and 6 are used to receive data.

References

LabSim for Network Pro, Section 2.4.

[netpro15_all_questions_en.exm NP05_1-5 #48]

▼ Question 7: Incorrect

Which of the following connectors are used with fiber optic cables and include both cables in a single connector? (Select two.)

☐ ST

➡ ☒ MT-RJ

➡ ☐ LC

☐ SC

☐ BNC

Explanation

Both the LC and MT-RJ connectors have both fiber optic cables in a single connector.

ST and SC connectors hold a single strand of fiber optic cable. A cable using either connector has two connectors on each end. A BNC connector is used with coaxial cable.

References

LabSim for Network Pro, Section 2.3.

[netpro15_all_questions_en.exm NP09_2-2 #2]

▼ Question 8: Correct

Which of the following connectors is used with fiber optic cables and connects using a twisting motion?

☐ BNC

☐ LC

☐ SC

☐ F-type

➡ ☒ ST

Explanation

The ST connector is used with fiber optic cable and uses a twist-type connector. **Tip:** To remember the difference between ST and SC connectors, associate the T in ST with "twist".

SC and LC connectors are used with fiber optic cables but plug in instead of twist. F-type and BNC connectors use a twist to connect, but are used with coaxial cables.

References

LabSim for Network Pro, Section 2.3.

[netpro15_all_questions_en.exm NP09_2-2 #1]

▼ Question 9: Correct

You have a network that occupies all three floors of a building. The WAN service provider has installed the line for the WAN service into the building in a wiring closet on the main floor.

You have a second wiring closet on the main floor. You need to connect the two wiring closets. Which of the following are typically used to connect the two wiring closets? (Select two.)

☐ Smart jack

☐ Vertical cross connect

➡ ☒ 25 pair

☐ Demarc extension

➡ ☒ Horizontal cross connect

Explanation

A horizontal cross connect connects wiring closets on the same floor. 25 pair or 100 pair wiring punched down into 66 or 110 blocks are often used to connect the wiring closets together.

A vertical cross connect connects the IDF to the MDF on a different floor.

The demarcation point (demarc) is the line that marks the boundary between the telco equipment and the private network or telephone system. A demarc extension extends the demarcation point from its original location to another location within the building. A smart jack is a special loopback plug installed at the demarcation point for a WAN service. Technicians at the central office can send diagnostic commands to the smart plug to test connectivity between the central office and the demarc.

References

LabSim for Network Pro, Section 2.4.

[netpro15_all_questions_en.exm NP09_2-8 #MCM1]

▼ Question 10: Correct

Which of the following forms of optical fiber would usually be used to connect two buildings across campus from each other, which are several kilometers apart?

- ☐ Multimode
- ☐ Fibre Channel mode
- ➔ ☒ Single mode
- ☐ Dual mode

Explanation

In this scenario, use single mode fiber optic cables. Fiber optic is graded as single mode or multimode. Single mode consists of a single very thin core which produces fewer reflections. This provides greater effective bandwidth over greater distances.

Multimode is less costly than single mode fiber. Multimode transmits multiple light rays concurrently. Multimode is used to transmit over shorter distances as the rays tend to disperse as the transmission distance increases. Fibre channel is a network topology used in storage area networks.

References

LabSim for Network Pro, Section 2.3.

[netpro15_all_questions_en.exm NP05_1-5 #24]

▼ Question 11: Correct

F-type connectors are typically used with cables using which of the following standards? (Select two.)

- ☐ RG-58
- ☐ Cat 5
- ➔ ☒ RG-6
- ☐ Cat 5e
- ➔ ☒ RG-59
- ☐ Cat 6e

Explanation

F-type connectors are used with coaxial cable, and are typically used for cable TV and satellite installations using RG-6 or RG-59 cables.

RG-58 cables typically use BNC connectors and cables are used for 10Base2 Ethernet. Cat 5, 5e, and 6e cables use RJ-45 connectors.

References

LabSim for Network Pro, Section 2.2.

[netpro15_all_questions_en.exm NP09_2-2 #6]

▼ Question 12: Correct

Of the following cables, which offer the best protection against EMI?

- ☐ Cat 5
- ☐ Cat 6e
- ☐ Cat 5e
- ➔ ☒ RG-6

Explanation

Coaxial cable offers better protection against EMI than twisted pair cables. Coaxial cable has a mesh conductor which provides a ground and protects against EMI.

In general, the higher the twisted pair cable standard, the better protection against some forms of EMI (typically crosstalk). For twisted pair, use shielded twisted pair instead of unshielded twisted pair. Use fiber optic for the best protection against EMI.

References

LabSim for Network Pro, Section 2.2.

[netpro15_all_questions_en.exm NP09_2-1 #7]

▼ Question 13: Incorrect

Which of the following are characteristics of an MT-RJ fiber optic connector? (Select two.)

- ☒ ~~They use a keyed bayonet.~~
- ☐ They must never be used with single-mode fiber-optic cables.
- ☐ They are used with multifiber fiber optic ribbon cables.
- ➡ ☐ They use metal guide pins to ensure accurate alignment.
- ☐ They use a nickel-plated housing.
- ➡ ☒ They can be used with multimode fiber optic cables.

Explanation

MT-RJ connectors can be used with either multimode or single mode fiber optic cabling. The connector is made from plastic and uses metal guide pins to ensure it is properly aligned in the jack.

References

LabSim for Network Pro, Section 2.3.

[netpro15_all_questions_en.exm NP05_1-4 #145]

▼ Question 14: Incorrect

You are installing networking wiring for a new Ethernet network at your company's main office building. The project specifications call for Category 5 UTP network cabling and RJ-45 wall jacks. Near the end of the project, you run out of wire before the last few runs are complete. You have a spool of Category 3 network cable in storage. Upon investigation, it appears very similar to Category 5 wiring.

Should you substitute Category 3 cabling for Category 5 cabling to finish the project?

- ☐ Yes, you can substitute Category 5 wiring with Category 3 wiring, as they are electrically identical.
- ☒ ~~No, Category 3 cabling doesn't support RJ-45 connectors.~~
- ➡ ☐ No, Category 5 cabling has more twists per inch than Category 3 cabling to reduce cross-talk and support higher data rates.
- ☐ No, the sheath surrounding Category 5 cable is much thicker; creating an extra layer of shielding to reduce cross-talk and support higher data rates.
- ☐ No, Category 5 cabling uses a thicker copper wire than Category 3 cable; enabling higher data transmission rates.

Explanation

While Category 3 and Category 5 cabling may appear similar physically, they are electrically different. Category 5 cabling is twisted much tighter than Category 3 cabling. This reduces cross talk and enables Category 5 wiring to support much faster data transmission rates.

References

LabSim for Network Pro, Section 2.1.

[netpro15_all_questions_en.exm NP05_1-5 #60]

▼ Question 15: Incorrect

What tool should you use to extend network services beyond the demarc?

- ☒ ~~Media certifier~~
- ➡ ☐ Punchdown tool
- ☐ Tone generator
- ☐

☐ Crimper

Explanation

A demarc is the location where the local network ends and the telephone company's network begins. This location is usually at a punch down block in a wiring closet. You use a punchdown tool to attach wires to the punch down block.

References

LabSim for Network Pro, Section 2.4.

[netpro15_all_questions_en.exm NP05_3-3 #23]

▼ Question 16: Correct

Which of the following methods would you use to create a crossover cable?

- ☐ Use the T568A standard.
- ☐ Use the T568B standard.
- ☐ Use the T568A standard on one connector, and the BLOG convention on the other connector.
- ☐ Use the T568B standard on one connector, and the BLOG convention on the other connector.
- ➡ ☒ Use the T568A standard on one connector, and the T568B standard on the other connector.

Explanation

The easiest way to create a crossover cable is to arrange the wires in the first connector using the T568A standard and arrange the wires in the second connector using the T568B standard. A crossover cable connects the transmit pins on one connector to the receive pins on the other connector (pin 1 to pin 3 and pin 2 to pin 6).

References

LabSim for Network Pro, Section 2.4.

[netpro15_all_questions_en.exm NP09_2-4 #3]

▼ Question 17: Incorrect

Which of the following are characteristics of coaxial network cable? (Choose three.)

- ☐ It is composed of four pairs of 22-gauge copper wire.
- ➡ ☒ The ends of the cable must be terminated.
- ➡ ☒ It uses two concentric metallic conductors.
- ☐ It uses RJ-45 connectors
- ➡ ☐ It has a conductor made from copper in the center of the cable.
- ☐ The conductors within the cable are twisted around each other to eliminate cross-talk.
- ☐ It uses two concentric conductors made from plastic or glass which conduct light signals.

Explanation

Coaxial cable is composed of a central copper conductor surrounded by an insulator which is then surrounded by a second metallic mesh conductor. The name coaxial is derived from the fact that both of these conductors share a common axis. When using coaxial cable, both ends of the cable must be terminated.

References

LabSim for Network Pro, Section 2.2.

[netpro15_all_questions_en.exm NP05_1-5 #69]

▼ Question 18: Incorrect

You are working with an older 10Base2 Ethernet network.

Which of the following connector types will you most likely encounter?

- ➡ ☐ BNC

- ☐ AUI
- ☒ ~~RJ11~~
- ☐ F-Type

Explanation

A 10Base2 Ethernet network (also called a Thinnet) is an older type of network that uses coaxial cables with BNC connectors for communication.

F-Type connectors are used for cable and satellite TV connections, as well as broadband cable connections. AUI connectors are used for 10Base5 Ethernet networks. RJ11 connectors are typically used for dial-up connections.

References

LabSim for Network Pro, Section 2.2.

[netpro15_all_questions_en.exm *NP15_COAXIAL_01]

▼ Question 19: Correct

In which of the following situations might you use an RJ-11 connector?

- ☐ You want to connect the 10BaseT network card in your computer to a switch.
- ➡ ☒ You want to connect your computer to the Internet with a dial-up connection.
- ☐ You want to upgrade your 10BaseT network to 100BaseT.
- ☐ You want to test a network cable to see if there is a break in the line.

Explanation

RJ-11 connectors are typically used for telephones and modems.

References

LabSim for Network Pro, Section 2.1.

[netpro15_all_questions_en.exm NP05_1-4 #88]

▼ Question 20: Correct

Which of the following uses metal clips placed over plastic slots for connecting individual copper wires?

- ☐ 100 pair
- ☐ 66 block
- ➡ ☒ 110 block
- ☐ 25 pair

Explanation

A 110 block is a punchdown block that uses metal clips fitted over plastic pins. When connecting wires using a 110 block, place the wires in the plastic slots, attach the metal clip, then punch down the connecting cable on the top of the clip.

A 66 block uses metal pins for connecting wires. Wires are placed in the pins, and pins within a row are electrically connected.

25 pair and 100 pair are cable bundles that include multiple pairs of copper wires (either 25 pairs of wires or 100 pairs of wires).

References

LabSim for Network Pro, Section 2.4.

[netpro15_all_questions_en.exm NP09_2-8 #MCS2]

▼ Question 21: Correct

You have a network that occupies all three floors of a building. The WAN service provider has installed the line for the WAN service into the building in a wiring closet on the main floor. You have a wiring closet on the two remaining floors directly above the wiring closet on the main floor.

What would you use to connect the wiring closets together?

☐

- ☐ Demarc extension
- ☒ Vertical cross connect
- ☐ Horizontal cross connect
- ☐ Smart jack

Explanation

A vertical cross connect connects the main distribution frame (MDF) on the main floor to intermediate distribution frames (IDFs) on upper floors. Cabling runs vertically (up and down) between the MDF and the IDFs.

A horizontal cross connect connects IDFs on the same floor. Cabling runs horizontally (sideways) between the IDFs. A smart jack is a special loopback plug installed at the demarcation point for a WAN service. Technicians at the central office can send diagnostic commands to the smart plug to test connectivity between the central office and the demarc.

A demarc extension extends the demarcation point from its original location to another location within the building. The demarc extension typically consists of a single wire bundle that attaches to the existing demarc and supplies a termination point to a different location. You might need a demarc extension if your network occupies an upper floor of a building. The LEC will typically install the demarc into the MDF on the bottom floor, and you will need to install an extension to place the demarc into the IDF on your floor.

References

LabSim for Network Pro, Section 2.4.

[netpro15_all_questions_en.exm NP09_2-8 #MCS4]

▼ Question 22: Incorrect



To answer this question, complete the lab using information below.

You have completed this lab and may go on to the next question.

[Launch Lab](#)

You did not complete the lab correctly.

[View Lab Report](#)

You are a network technician for a small corporate network. Today you moved an unused workstation to the IT Administration office, and now you need to connect the computer to the Ethernet local area network and the Internet.

Your task in this lab is to connect the workstation to the wired network as follows:

- Within the Networking Closet, use the appropriate twisted pair cable to make a connection between the patch panel and switch.
 - Use port **IT Adm** on the patch panel.
 - Use port **5** on the switch.
- Within the IT Administration office:
 - Connect the workstation (named **ITAdmin**) to the local area network using the appropriate twisted pair cable.
 - Configure **ITAdmin** to obtain IP and DNS addresses automatically from the server on the local network.
 - Use the Network and Sharing Center to confirm that the workstation is properly connected to the local area network and the Internet.

▼ Question 23: Correct

Which of the following cable classifications are typically used for cable and satellite networking with coaxial cables? (Select two.)

- ☒ RG-6
- ☐ RG-8
- ☐

☐ RG-58

➡ ☒ RG-59

Explanation

Both RG-6 and RG-59 can be used for cable and satellite networking applications, although RG-6 has less signal loss than RG-59, and is a better choice for networking applications, especially where longer distances (over a few feet) are involved. Both RG-6 and RG-59 have an impedance rating of 75 ohms.

RG-8 and RG-58 have an impedance rating of 50 ohms and were used with 10 Mbps Ethernet.

References

LabSim for Network Pro, Section 2.2.

[netpro15_all_questions_en.exm NP09_2-1 #3]

▼ Question 24: Correct

You are adding new wires in your building for some new offices. The building has a false ceiling that holds the lights. You would like to run your Ethernet cables in this area.

Which type of cable must you use?

☐ PVC

➡ ☒ Plenum

☐ STP

☐ Cat 5e or Cat 6e

☐ Fiber optic

Explanation

Plenum cable is fire resistant and non-toxic; it must be used when wiring above ceiling tiles. PVC cable cannot be used to wire above ceilings because it is toxic when burned.

Cat 5e cables provide better EMI protection than Cat 5 cables, and Cat 6e cables are an improvement over Cat 6 specifications, but neither are a requirement for using in a ceiling area. If the area has a lot of EMI, you might consider using STP or fiber optic cables, but this would not be a requirement just because wires were in a ceiling area. Typically, you can avoid EMI sources by re-routing cables.

References

LabSim for Network Pro, Section 2.1.

[netpro15_all_questions_en.exm NP09_2-1 #5]

▼ Question 25: Incorrect

Which of the following are characteristics of an LC fiber optic connector? (Choose two.)

➡ ☐ They use a housing and latch system similar to an RJ-45 UTP connector.

☐ They use a stainless steel housing.

☒ They use a one-piece bayonet connecting system.

☒ They are threaded.

➡ ☐ They are half the size of standard connectors.

☐ They can be used with either fiber optic or copper cabling.

Explanation

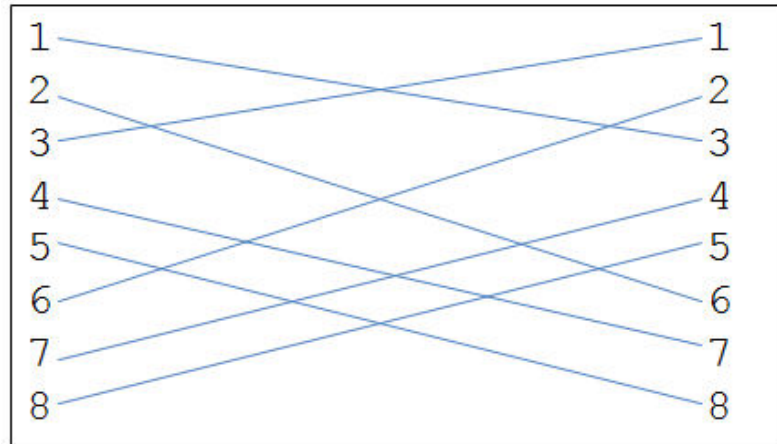
LC fiber optic connectors are small; about half the size of other fiber optic connectors. Their appearance is similar to a typical RJ-45 connector used with UTP wiring. Like an RJ-45 connector, it uses a small latch to lock the connector in a jack.

References

LabSim for Network Pro, Section 2.3.

▼ **Question 26:** Correct

You've connected a cable certifier to an RJ45 wall jack, and the output shown below is displayed on the device. What does this output indicate? (Select two.)



- ☐ There are multiple short on this cable.
- ☐ This is a straight-through cable.
- ➡ ☒ The cable is functioning correctly.
- ➡ ☒ This is a crossover cable.
- ☐ There are multiple open pins on this cable.

Explanation

In this example, the cable being tested is a correctly wired crossover cable.

Output with "x" characters between pins indicates that they are shorted. Straight-through connections are displayed using "-" characters in the output of the cable certifier. Open connections are displayed with no characters or lines between the pin numbers.

References

LabSim for Network Pro, Section 2.5.

[netpro15_all_questions_en.exm MCM2]

▼ **Question 27:** Correct

Which of the following connector types would you most likely use to connect to a T1 WAN service?

- ☐ RJ45
- ➡ ☒ RJ48c
- ☐ DB60
- ☐ RJ11

Explanation

The RJ48c connector is similar to an RJ45 connector, but has different pin-outs. RJ48c connectors are commonly used for T1 WAN connections.

Both DB-60 and Smart Serial connectors are used for serial connections without an integrated CSU/DSU. RJ45 connectors are used for Ethernet, ISDN, and some DSL connections. RJ11 connectors are used for dial-up (modem) and some DSL connections.

References

LabSim for Network Pro, Section 2.1.

[netpro15_all_questions_en.exm *NP15_TWISTED_PAIR_01]

▼ **Question 28:** Correct

Which of the following connectors usually require polishing as part of the assembly process? (Select two.)

- ☐ BNC
- ➡ ☒ ST
- ➡ ☒ SC
- ☐ AUI
- ☐ IDC

Explanation

The fiber optic cable assembly process is more complex than other assemblies. It is necessary to polish the exposed fiber tip to ensure that light is passed on from one cable to the next with no dispersion.

References

LabSim for Network Pro, Section 2.3.

[netpro15_all_questions_en.exm NP05_1-4 #7]

▼ Question 29: Incorrect

You want to use the T568B standard for adding connectors to your Cat5 cable. Starting with pin 1, which order should you use for the wires within the connector?

- ☒ ~~White/green, green, white/orange, blue, white/blue, orange, white/brown, brown~~
- ➡ ☐ White/orange, orange, white/green, blue, white/blue, green, white/brown, brown
- ☐ White/blue, blue, white/orange, orange, white/green, green, white/brown, brown
- ☐ White/orange, orange, white/green, green, white/blue, blue, white/brown, brown

Explanation

The T568B standard uses the following order of wires in the connector: White/orange, orange, white/green, blue, white/blue, green, white/brown, brown.

The T568A standard switches the green and orange wires (along with their corresponding white wires). Use the order Blue-Orange-Green-Brown (BLOG), with the white wire first, for connecting wires on a 110 punchdown block.

References

LabSim for Network Pro, Section 2.4.

[netpro15_all_questions_en.exm NP09_2-4 #2]

▼ Question 30: Correct

You have a small home network connected to the Internet using an RG-6 cable. You need to move the router connecting the network to the Internet, but can't find any RG-6 cable.

Which cable types could you use instead?

- ➡ ☒ RG-59
- ☐ RG-8 or RG-58
- ☐ RG-8
- ☐ RG-8, RG-58, or RG-59
- ☐ RG-58 or RG-59
- ☐ RG-58

Explanation

RG-6 has an impedance rating of 75 ohms. When using coaxial cables, it is important to use cables with the same impedance rating. Only RG-59 is rated for 75 ohms.

RG-8 and RG-58 are rated for 50 ohms.

References

LabSim for Network Pro, Section 2.2.

[netpro15_all_questions_en.exm NP09_2-1 #4]

▼ Question 31: Correct

Which of the following cable types often includes a solid plastic core?

- ☐ Cat 3
- ☐ Cat 5
- ➡ ☒ Cat 6
- ☐ Cat 5e

Explanation

Cat 6 cables include a solid plastic core that keeps the twisted pairs separated and prevents the cable from being bent too tightly.

References

LabSim for Network Pro, Section 2.1.

[netpro15_all_questions_en.exm NP09_2-1 #2]

▼ Question 32: Correct

Which of the following describes the point where the service provider's responsibility ends and the customer's responsibility begins for installing and maintaining wiring and equipment?

- ➡ ☒ Demarc
- ☐ Punchdown block
- ☐ Smart jack
- ☐ Vertical cross connect
- ☐ IDF

Explanation

When you contract with a local exchange carrier (LEC) for data or telephone services, they install a physical cable and a termination jack onto your premises. The demarcation point (demarc) is the line that marks the boundary between the telco equipment and the private network or telephone system. Typically, the LEC is responsible for all equipment on one side of the demarc, and the customer is responsible for all equipment on the other side of the demarc.

A smart jack is a special loopback plug installed at the demarcation point for a WAN service. Technicians at the central office can send diagnostic commands to the smart plug to test connectivity between the central office and the demarc. A punchdown block is a block used to connect individual copper wires together. While the demarc might terminate in a punchdown block, punchdown blocks are used within other locations at the customer site.

An intermediate distribution frame (IDF) is a smaller wiring distribution point within a building. IDFs are typically located on each floor directly above the main distribution frame (MDF), although additional IDFs can be added on each floor as necessary. A vertical cross connect connects the IDF to the MDF on a different floor.

References

LabSim for Network Pro, Section 2.4.

[netpro15_all_questions_en.exm NP09_2-8 #MCS3]

▼ Question 33: Correct

You want to use the T568A standard for adding connectors to your Cat5 cable. Starting with pin 1, which order should you use for the wires within the connector?

- ☐ White/orange, orange, white/green, blue, white/blue, green, white/brown, brown
- ➡ ☒ White/green, green, white/orange, blue, white/blue, orange, white/brown, brown
- ☐ White/blue, blue, white/orange, orange, white/green, green, white/brown, brown

- ☐ White/orange, orange, white/green, green, white/blue, blue, white/brown, brown

Explanation

The T568A standard uses the following order of wires in the connector: White/green, green, white/orange, blue, white/blue, orange, white/brown, brown.

The T568B standard switches the orange and green wires (along with their corresponding white wires). Use the order Blue-Orange-Green-Brown (BLOG), with the white wire first, for connecting wires on a 110 punchdown block.

References

LabSim for Network Pro, Section 2.4.

[netpro15_all_questions_en.exm NP09_2-4 #1]