Exam Report: 1.2.3 Practice Questions

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Overall Performance

Your Score: 83%

Passing Score: 80%

View results by: Objective Analysis Individual Responses

Individual Responses

Question 1: Correct

You have a small network that uses a switch to connect multiple devices. Which physical topology are you using?

- Ring
- Mesh
- Bus
- Star

Explanation

A hub creates a network with a physical star topology. The physical star topology uses a logical bus topology and sends messages to all the devices connected to the hub.

A mesh topology is a series of point-to-point links between devices. A ring topology uses a central device called an MSAU.

References

LabSim for Network Pro, Section 1.2.
[netpro18v5_all_questions_en.exm NP09_2-3 #2]

Question 2: Incorrect

Your manager has asked you to implement a wired network infrastructure that will accommodate failed connections. You don't have a large budget, so you decide to provide redundancy for only a handful of critical devices.

Which of the following network topologies should you implement?

- Star
- Bus
- Partial mesh
- ~~Full mesh~~

Explanation

In a partial mesh topology, only some redundant paths exist. A partial mesh topology is more practical and less expensive than a full mesh topology.

In a full mesh topology, every device has a point-to-point connection with every other device. This provides full redundancy, but it is expensive and impractical. A star topology connects network devices to the network with a single patch cable; a patch cable failure makes the connected device unavailable. A bus topology has a single point of failure. If there is a break in the network media, the network becomes unavailable.

References

LabSim for Network Pro, Section 1.2.
[netpro18v5_all_questions_en.exm *NP15_NETWORK_TOPOLOGIES_01]

Question 3: Correct

You have a network that uses a logical ring topology. How do messages travel through the network?

- Messages are sent to all devices connected to the network.
- Messages travel from one device to the next until they reach the destination device.
- Messages are sent to a central device that forwards them to the destination devices.
- Messages are sent directly to the destination device only.

Explanation

In a logical ring topology, messages travel to each device in turn. If the message is not intended for that device, the message is forwarded to the next device on the network.

References

LabSim for Network Pro, Section 1.2.
[netpro18v5_all_questions_en.exm NP05_1-1 #7]

Question 4: Correct

You have a network that uses a logical bus topology. How do messages travel through the network?

- Messages travel from one device to the next until they reach the destination device.
- Messages are sent directly to the correct destination device.
- Messages are broadcast to all devices connected to the network.
- Messages are sent to a central device that forwards them to the destination devices.

Explanation

Messages sent using a physical bus topology are broadcast to all devices in the network. The device in the middle of the star, which is typically a hub, receives the message and forwards it on to all other devices.

References

LabSim for Network Pro, Section 1.2.
[netpro18v5_all_questions_en.exm NP05_1-1 #15]

Question 5: Correct

Which of the following topologies connects all devices to a trunk cable?

- Bus
- Ring
- Star
- Tree

Explanation

The bus topology connects all devices to a trunk cable.

References

LabSim for Network Pro, Section 1.2.
[netpro18v5_all_questions_en.exm NP05_1-1 #67]

Question 6: Correct

Which of the following topologies connects each device to a neighboring device?

Bus

Star

Tree

➡ Ring

Explanation

In ring topologies, each device connects to a neighboring device so that a ring is formed.

References

LabSim for Network Pro, Section 1.2.
[netpro18v5_all_questions_en.exm NP05_1-1 #75]

Question 7: Correct

In which of the following topologies does each device on the network act as a repeater, sending the signal to the next device?

Tree

➡ Ring

Star

Bus

Explanation

In ring topologies, each device on the network acts as a repeater for sending the signal to the next device.

References

LabSim for Network Pro, Section 1.2.
[netpro18v5_all_questions_en.exm NP05_1-1 #83]

Question 8: Correct

Which of the following topologies connects each network device to a central hub?

Mesh

Ring

Bus

➡ Star

Explanation

Star topologies connect each device on the network to a central hub.

References

LabSim for Network Pro, Section 1.2.
[netpro18v5_all_questions_en.exm NP05_1-1 #91]

Question 9: Correct

You have implemented an ad hoc wireless network that doesn't employ a wireless access point. Every wireless network card can communicate directly with any other wireless network card on the network.

What type of physical network topology has been implemented in this type of network?

➡ Mesh

Bus

Tree

- Ring
- Star

Explanation

This type of network uses a physical mesh topology. A mesh topology has two key characteristics:

- There is no central connecting point.
- Any host can communicate directly with any other host on the network.

A mesh network is usually impractical on a wired network. Each host would require a separate dedicated network interface and cable connected to each host on the network. But you can implement a mesh topology with relative ease on a wireless network because wires aren't an issue.

References

LabSim for Network Pro, Section 1.2.
[netpro18v5_all_questions_en.exm NP05_1-1 #118]

Question 10: Correct

Your manager has asked you to implement a network infrastructure that will accommodate failed connections.

Which of the following network topologies provides redundancy for a failed link?

- Bus
- Ring
- Star
- Mesh

Explanation

In a mesh topology, each network device is interconnected to all other network nodes. This creates multiple data paths. If a link fails, the data has an alternate route to its destination.

The star topology connects network devices to the network with a single patch cable. A patch cable failure makes the connected device unavailable. The bus topology has a single point of failure. If there is a break in the network media, the network becomes unavailable. A single break in a physical ring topology disables the network.

References

LabSim for Network Pro, Section 1.2.
[netpro18v5_all_questions_en.exm NP05_4-7 #43]

Question 11: Incorrect

You want to implement a fault tolerant topology as you connect routers on your wide area network. Which of the following topologies meets your needs?

- Mesh
- ~~Bus~~
- Star
- Ring

Explanation

A mesh topology has multiple connections at each node, increasing connectivity fault tolerance. None of the other topologies have native fault tolerance built in.

References

LabSim for Network Pro, Section 1.2.
[netpro18v5_all_questions_en.exm NP05_3-11 #32]

Question 12: Correct

What device is used to create a physical star topology?

- Switch
- Bridge
- Router
- Firewall

Explanation

A physical star topology uses a switch or a hub.

Routers are used to connect multiple subnets together. A firewall is a router that filters packets or other network communications.

References

LabSim for Network Pro, Section 1.2.
[netpro18v5_all_questions_en.exm NP09_2-3 #1]