# CCST Networking – Module 2 Quiz

## Questions

1. Your company has offices in different geographic regions. Which type of network could you use to interconnect those offices?

   A. PAN
   B. CAN
   C. WAN
   D. LAN

2. You've been tasked to design a WAN to interconnect seven of your company's locations. While you would like to have an optimal path from any one site to any other site, you're concerned about the number of WAN links required. If you decide to interconnect those seven offices using a full mesh topology, how many WAN links would be required?

   A. 14
   B. 21
   C. 10
   D. 28

3. Identify the network performance metric that shows a network's speed as its maximum theoretical capacity.

   A. Latency
   B. Throughput
   C. Delay
   D. Bandwidth

4. While troubleshooting a network performance issue, you decide to use the iPerf version 3 utility to measure throughput between two devices. Assuming, the iperf3 executable is in your operating system's PATH, what command would you enter on the iPerf client to send data to an iPerf server with an IP address of 10.1.2.3?

   A. iperf3 -c 10.1.2.3
   B. iperf3 -s 10.1.2.3
   C. iperf3 -c -s 10.1.2.3
   D. iperf3 -s -c 10.1.2.3

## Questions and Answers

1. Your company has offices in different geographic regions. Which type of network could you use to interconnect those offices?

   A. PAN
   B. CAN
   C. WAN
   D. LAN

**Answer: C**
Explanation: A Wide Area Network (WAN) interconnects two or more geographic regions.

A Personal Area Network (PAN) interconnects two devices in close proximity with one another.

A Campus Area Network (CAN) interconnects nearby buildings on a campus.

A Local Area Network (LAN) interconnects devices within a relatively limited area, such as within an office.

**Video Reference: Common Network Classifications**

2. You've been tasked to design a WAN to interconnect seven of your company's locations. While you would like to have an optimal path from any one site to any other site, you're concerned about the number of WAN links required. If you decide to interconnect those seven offices using a full mesh topology, how many WAN links would be required?

   A. 14
   B. 21
   C. 10
   D. 28

**Answer: B**
Explanation: The number of links required for a full mesh design can be calculated with the formula: Number_of_Links = [n * (n – 1)] / 2, where n is the number of sites.

In this example, we have seven sites. Therefore, n = 7. The number of links required for a full mesh design = [7 * (7 – 1)] / 2 = 42 / 2 = 21.

**Video Reference: Physical vs. Logical Topologies**

3. Identify the network performance metric that shows a network's speed as its maximum theoretical capacity.

A. Latency
B. Throughput
C. Delay
D. Bandwidth

**Answer: D**
Explanation: Bandwidth is the maximum amount of data that could be sent over a link or through a device.

Latency is the amount of time required for a packet to travel between two points in a network.

Throughput is the actual amount of data cent over a link or through a device in a certain time period.

Delay is a component of latency that measures the amount of time for a specific transmission or processing task to occur.

**Video Reference: Network Performance Metrics**

4. While troubleshooting a network performance issue, you decide to use the iPerf version 3 utility to measure throughput between two devices. Assuming, the iperf3 executable is in your operating system's PATH, what command would you enter on the iPerf client to send data to an iPerf server with an IP address of 10.1.2.3?

A. iperf3 -c 10.1.2.3
B. iperf3 -s 10.1.2.3
C. iperf3 -c -s 10.1.2.3
D. iperf3 -s -c 10.1.2.3

**Answer: A**
Explanation: The command issued on an iPerf version 3 client to make it send data to a server with an IP address of 10.1.2.3 is: iperf3 -c 10.1.2.3

The command issued on the corresponding iPerf version 3 server would be: iperf3 -s

**Video Reference: The iPerf Utility**