

1. What is the name of the method used in Ethernet that explains how Ethernet works?
 - A. TCP/IP
 - B. CSMA/CD
 - C. CMDA/CS
 - D. CSMA/CA

2. What is the maximum distance for thick Ethernet without using a repeater?
 - A. 185m (606.95 ft.)
 - B. 250m (820.2 ft.)
 - C. 500m (1640.4 ft.)
 - D. 800m (2624.64 ft.)

3. 10-Mbps Ethernet operates within the timing limits offered by a series of no more than segments separated by no more than repeaters.
 - A. Three, two
 - B. Four, three
 - C. Five, four
 - D. Six, five

4. Fast Ethernet supports up to what transfer rate?
 - A. 5 Mbps
 - B. 10 Mbps
 - C. 100 Mbps
 - D. 1000 Mbps

5. Identify two Gigabit Ethernet cable specifications.
 - A. 1000BASE-TX
 - B. 1000BASE-FX
 - C. 1000BASE-SX
 - D. 1000BASE-LX
 - E. 1000BASE-X

6. What is the transmission medium for 1000BASE-SX?
 - A. Long-wave laser over single-mode and multimode fiber
 - B. Category 5 UTP copper wiring
 - C. Balanced, shielded, 150-ohm, two-pair STP copper cable
 - D. Short-wave laser over multimode fiber

7. 4D-PAM5 encoding method is used in which of the following Gigabit Ethernet?
 - A. 1000BASE-LX
 - B. 1000BASE-SX
 - C. 1000BASE-T
 - D. 1000BASE-CX

8. What is the IEEE standard for 10-Gb Ethernet?
 - A. 802.3z
 - B. 802.3u
 - C. 802.3ae
 - D. 803.3

9. Which of the following is not a feature of microsegmentation?
- A. It enables dedicated access.
 - B. It supports multiple conversations at any given time.
 - C. It increases the capacity for each workstation connected to the network.
 - D. It increases collisions.
10. Which of the following is used by LAN switches for making the forwarding decision?
- A. IP address
 - B. MAC address
 - C. Network address
 - D. Host address
11. Which of the following is a feature of full-duplex transmission?
- A. It offers two 10- to 1-Gbps data-transmission paths.
 - B. It doubles bandwidth between nodes.
 - C. It provides collision-free transmission.
 - D. All of the above.
12. The three common types of switching methods are _____, _____, and _____.
13. The Spanning-Tree Protocol allows which of the following?
- A. Bridges to communicate Layer 3 information
 - B. A redundant network path without suffering the effects of loops in the network
 - C. Static network paths for loop prevention
 - D. None of the above
14. Which of the following is not one of the STP port states?
- A. Blocking
 - B. Learning
 - C. Listening
 - D. Transmitting
15. Which of the following is true concerning a bridge and its forwarding decisions?
- A. Bridges operate at OSI Layer 2 and use IP addresses to make decisions.
 - B. Bridges operate at OSI Layer 3 and use IP addresses to make decisions.
 - C. Bridges operate at OSI Layer 2 and use MAC addresses to make decisions.
 - D. Bridges operate at OSI Layer 3 and use MAC addresses to make decisions.
16. Which of the following is not a feature of bridges?
- A. They operate at Layer 2 of the OSI model.
 - B. They are more intelligent than hubs.
 - C. They do not make any forwarding decisions.
 - D. They build and maintain address tables.

17. Which of the following statements is true of microsegmentation?
- A. Each workstation gets its own dedicated segment through the network.
 - B. All the workstations are grouped as one segment.
 - C. Microsegmentation increases the number of collisions on a network.
 - D. None of the above.
18. Which of the following is true for LAN switches?
- A. They repair network fragments known as microsegments.
 - B. They are very high-speed multiport bridges.
 - C. Lower bandwidth makes up for higher latency.
 - D. They require new network interface cards on attached hosts.

Answers

1. What is the name of the method used in Ethernet that explains how Ethernet works?
- B. CSMA/CD
2. What is the maximum distance for thick Ethernet without using a repeater?
- C. 500m (1640.4 ft.)
3. 10-Mbps Ethernet operates within the timing limits offered by a series of no more than segments separated by no more than repeaters.
- C. Five, four
4. Fast Ethernet supports up to what transfer rate?
- C. 100 Mbps
5. Identify two Gigabit Ethernet cable specifications.
- C. 1000BASE-SX
 - D. 1000BASE-LX
6. What is the transmission medium for 1000BASE-SX?
- D. Short-wave laser over multimode fiber
7. 4D-PAM5 encoding method is used in which of the following Gigabit Ethernet?
- C. 1000BASE-T
8. What is the IEEE standard for 10-Gb Ethernet?
- C. 802.3ae
9. Which of the following is not a feature of microsegmentation?
- D. It increases collisions.
10. Which of the following is used by LAN switches for making the forwarding decision?
- B. MAC address
11. Which of the following is a feature of full-duplex transmission?
- D. All of the above.

12. The three common types of switching methods are _____
, _____, and _____.

Answer: Store and forward, cut-through and fragment-free

13. The Spanning-Tree Protocol allows which of the following?

B. A redundant network path without suffering the effects of loops in the network

14. Which of the following is not one of the STP port states?

D. Transmitting

15. Which of the following is true concerning a bridge and its forwarding decisions?

C. Bridges operate at OSI Layer 2 and use MAC addresses to make decisions.

16. Which of the following is not a feature of bridges?

C. They do not make any forwarding decisions.

17. Which of the following statements is true of microsegmentation?

A. Each workstation gets its own dedicated segment through the network.

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B. They are very high-speed multiport bridges.