

1 The TCP/IP protocol suite consists of _____ layers.

- A) two
- B) three
- C) five
- D) six

2 A router is involved in _____ layers of the TCP/IP protocol suite.

- A) two
- B) three
- C) four
- D) five

3 A link-layer switch is involved in _____ layers of the TCP/IP protocol suite.

- A) two
- B) three
- C) four
- D) five

4 In the TCP/IP protocol suite, which of the following is an application layer protocol?

- A) The User Datagram Protocol (UDP)
- B) The Internet Protocol (IP)
- C) The File Transfer Protocol (FTP)
- D) The Transmission Control Protocol (TCP)

5 In the TCP/IP protocol suite, which of the following is a transport-layer protocol?

- A) The Internet Control Message Protocol (ICMP)
- B) The Internet Protocol (IP)
- C) The Address Resolution Protocol (ARP)
- D) The Transmission Control Protocol (TCP)

6 In the TCP/IP protocol suite, which of the following is a network layer protocol?

- A) The Stream Control Transmission Protocol (SCTP)
- B) The Secure Shell (SSH)
- C) The Internet Protocol (IP)
- D) User Datagram Protocol (UDP)

7 The transport-layer packet in the TCP/IP protocol suite is called _____.

- A) a message
- B) a datagram
- C) a segment or a user datagram
- D) a frame

8 In the TCP/IP protocol suite, the _____ layer is responsible for moving frames from one hop (node) to the next.

- A) physical
- B) data-link
- C) transport
- D) network

9 In the TCP/IP protocol suite, the physical layer is concerned with the movement of _____ over the physical medium.

- A) programs
- B) dialogs
- C) protocols
- D) bits

10 In the TCP/IP protocol suite, a *port number* is the identifier at the _____.

- A) application layer
- B) transport layer
- C) network layer
- D) physical layer

11 In the TCP/IP protocol suite, a *logical address* is the identifier at the _____.

- A) network layer
- B) transport layer
- C) data-link layer
- D) application layer

12 The _____ layer is responsible for the delivery of a message from one process to another.

- A) physical
- B) transport
- C) network
- D) application

13 The Internet Protocol (IP) is _____ protocol.

- A) a reliable
- B) a connection-oriented
- C) a reliable and connection-oriented
- D) an unreliable

14 The application layer in the TCP/IP protocol suite is usually considered to be the combination of _____ layers in the OSI model.

- A) application, presentation, and session
- B) application, transport, and network
- C) application, data-link, and physical
- D) network, data-link, and physical

15 In TCP/IP, a message at the application layer is encapsulated in a packet at the _____ layer.

- A) network
- B) transport
- C) data-link
- D) physical

16 In TCP/IP, a message at the transport layer is encapsulated in a packet at the _____ layer.

- A) network
- B) transport
- C) data-link
- D) physical

17 In TCP/IP, a message belonging to the network layer is decapsulated from a packet at the _____ layer.

- A) network
- B) transport
- C) data-link
- D) physical

18 In TCP/IP, a message belonging to the transport layer is decapsulated from a packet at the _____ layer.

- A) network
- B) transport
- C) data-link
- D) physical

19 In TCP/IP, a logical connection between an entity at the network layer can be made with another entity at the _____ layer.

- A) network
- B) transport
- C) data-link
- D) physical

20 In TCP/IP, a logical connection between an entity at the data-link layer can be made with another entity at the _____ layer.

- A) network
- B) transport
- C) data-link
- D) physical

21 In TCP/IP, a packet at the third layer carries data belonging to the _____ layer and the header belonging to the _____ layer.

- A) third; third
- B) third; fourth
- C) fourth; third
- D) fourth; fourth