 The Data link layer is divided into how many sub layers? Select one: a. 3 b. 4 c. 1
<u>d. 2</u>
2. Which device reduces the broadcast domain?
Select one:
A. Hub
B. Switch
C. Bridge
D. Router
3. How many bits does an IPv4 address have? Select one: A.128
B. 8
C. 16
<u>D. 32</u>
 4. How many Hexa digits does a MAC address contain? Select one: A. 48 B. 6 C. 32 D. 12
5. In computer networks, which of the following protocols has a mechanism to resend lost packets? Select one:
A. TCP
B. TCP/IP
C. ICMP
<u>D. UDP</u>
 6. Which sublayer of the Data link layer communicates with layer 3 and handles software-related problem? Select one: a. Ethernet b. MAC c. WiFi d. LLC
7. What does IP stand for?
Select one:
A. Intranet Protocol
B. Inside Protocol
C. Internal Protocol
D. Internet Protocol

8. Given the following IP address 172.16.196.10/20, which of the following is the Broadcast address of this network?

Select one:

- A. 172.16.223.255
- B. 172.16.207.255
- C. 172.16.111.255
- D. 172.16.191.255
- 9. What protocol does the browser use to communicate with the web server?

Select one:

- A. FTP
- B. DNS
- C. HTTPS
- D. DHCP
- 10. Which layer is responsible for packaging data into datagrams/packets?

Select one:

- a. Network
- b. Application
- c. Data Link
- d. Transport
- 11. Which protocol is used in box number (4) in the diagram below?

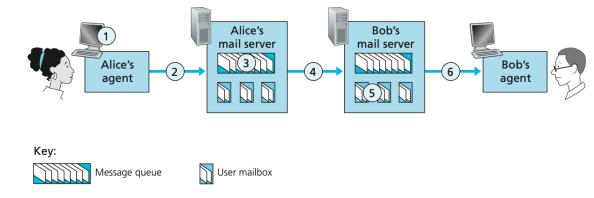


Figure 2.15 → Alice sends a message to Bob

Select one:

- A. SMTP
- B. IMAP
- C. DNS
- D. DHCP
- **12.** In computer networks, which of the following services is used to resolve domain names into IP addresses and vice versa?

Select one:

- A. Dynamic Name Service
- B. Domain Name Service
- C. Dynamic Name System
- D. Domain Name System

13. What information does the Switch device rely on to transfer frames between ports?

Select one:

- A. List of TCP ports
- B. List of UDP ports
- C. List of IPs
- D. MAC address and port mapping table
- **14.** Which of the following statements correctly describes half-duplex transmission mode? Select one:
- A. Data can only be transmitted in one direction
- B. Data is transmitted across the network from one direction to many different destinations simultaneously
- C. Data is transmitted across the network in one direction at a time
- D. Data is transmitted over the network in both directions at a time
- 15. Which of the following IPv6 addresses is valid?

Select one:

a. FE80 :: 2B0:DOFF:FOE9:4143

b. FE80 :: 2B0:DOFF :: FEE9:4143

c. 0:0:0:0:0:0:FFFF:192.168.1.1

d. FE80 :: 2B0:0:DOFF:0:FEE9:0:4143

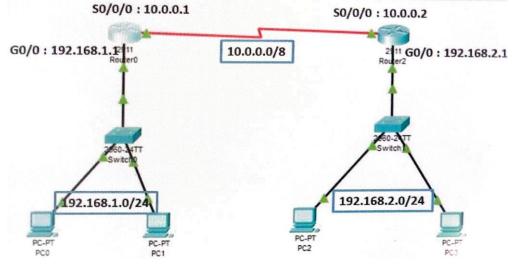
16. In computer networks, why is TCP called a reliable protocol?

Select one:

- A. ensures that data is not damaged, lost, duplicated
- B. Data is encrypted
- C. Conection oriented
- D. Large header size
- 17. Where does multiplexing take place?

Select one:

- A. Senders
- B. Receivers
- C. Server
- D. Client
- 18. To configure static routing on Router2, which of the following commands should be used?



Select one:

A. ip route 192.168.1.0 255.0.0.0 10.0.0.1

B. ip route 192.168.1.0 255.255.255.0 10.0.0.1

C. ip route 192.168.2.0 255.255.255.0 10.0.0.2

D. ip route 192.168.2.0 255.255.255.0 10.0.0.1