

Networking Essentials, 5e (Beasley)

Chapter 1 Introduction to Computer Networks

1) Which OSI layer is responsible for adding a header that includes information used in routing?

- A) Data Link
- B) Application
- C) Physical
- D) Network

Answer: D

2) Which OSI layer is considered the media access control layer?

- A) Data Link
- B) Transport
- C) Presentation
- D) Application
- E) None of these answers are correct.

Answer: A

3) Which OSI layer combines messages or segments into packets?

- A) Physical
- B) Transport
- C) Network
- D) Data Link
- E) None of these answers are correct.

Answer: C

4) Which OSI layer is responsible for the mechanical connection to the network?

- A) Network
- B) Transport
- C) Data Link
- D) None of these answers are correct.

Answer: D

5) The OSI layer responsible for data compression and encryption is which of these?

- A) Transport
- B) Presentation
- C) Application
- D) network
- E) None of these answers are correct.

Answer: B

6) The preamble on the Ethernet packet is used to provide synchronization and negotiation of a data link. True or False?

Answer: FALSE

Used only for synchronization but not for data link negotiation.

7) The acronym TCP/IP stands for Transmission Controller Protocol/Intercommunication Protocol. True or False?

Answer: FALSE

8) There are 34 bits and 4 octets in an IPv4 address. True or False?

Answer: FALSE

9) MAC is the acronym for multimedia access controller. True or False?

Answer: FALSE

10) What is the purpose of a wireless router?

A) This device is used to connect only wireless devices to a broadband Internet connection.

B) This device is used to interconnect both wireless and wired devices and establish the broadband connection to the Internet.

C) This device is used only in intranets.

D) This device is used in token-ring networks to manage the passing of the token.

Answer: B

11) What is the purpose of a range extender?

A) It relays the wireless signals from an access point or wireless router into areas with a weak signal or no signal at all.

B) It is used to extend the tuning range of the wireless router so both TCP and UDP data traffic can be received.

C) It is used with fiber optics to extend the distance.

D) None of these answers are correct.

Answer: A

12) What is the Wi-Fi Alliance?

A) An organization that tests and certifies wireless equipment for compliance with the 805.3 standards

B) An organization that tests and certifies wireless equipment for compliance with the RS-232C standards

C) An organization that tests and certifies wireless equipment for compliance with the 802.11x standards

D) An organization that tests and certifies wireless equipment for compliance with the 858.n standards

Answer: C

13) What is PAT?

- A) Port address translation; it is used to store the home network's IP address and port numbers in a NAT lookup table.
- B) Port address translation; it is used to store the home network's MAC address and port numbers in a NAT lookup table.
- C) Port address translation; it is used to store the home network's public IP address and port numbers in a NAT lookup table.
- D) Port address transfer; it is used to store the home network's MAC address and port numbers in a NAT lookup table.

Answer: A

14) In regards to NAT, what is overloading?

- A) Where NAT assigns the home network's IP address to a non-routable public IP address
- B) Where NAT assigns the home network's IP address to a single public IP address
- C) Where NAT assigns the home network's IP addresses to a single public IP address
- D) Where NAT assigns the home network's PAT IP address to a public NAT IP address

Answer: C

15) Excessive amounts of broadcasts on a network are called a broadcast storm. True or False?

Answer: TRUE

16) What frequency band is used by 802.11ac?

- A) 5GHz
- B) 2.4GHz
- C) 6GHz
- D) 2GHz

Answer: A

17) What is a possible transfer rate in a 802.11ac wireless network?

- A) 100Mbps
- B) 10Mbps
- C) 500Mbps
- D) 1Gbps

Answer: D

18) You need to troubleshoot the wireless settings for your adapter in a Windows 8 environment. What section of Control Panel do you use?

- A) Computers and Networking
- B) Network Connections
- C) Wireless Command Center
- D) Network and Sharing Center

Answer: D

19) What is the goal of WPS in wireless networking today?

- A) To allow a home user to connect many more devices to the wireless network
- B) To permit the configuration of multiple access points in the home network
- C) To allow printing over the wireless network
- D) To allow the configuration of security without the user inputting a long complex string of characters

Answer: D

20) Your Windows 8 system Control Panel has been left in the default configuration. What major grouping would you enter in order to manipulate the Network Interface Card settings?

- A) Network and Internet
- B) LAN and Computers
- C) Computers and Users
- D) Systems

Answer: A