## Chapter 1

1. Why were TCP/IP protocols developed?
a.To insure that error correction of each packet takes place.

* b. To allow cooperating computers to share resources across a network.
c.To allocate resources that are needed for operating a computer on a LAN.
d.To determine the "best path" decision making when forwarding packets of data.

2. Which of the following are functions of a web browser without the addition of plug-ins? (Choose three.)
a.updates IRQ's

* b.receives information
* c.requests information
d.contacts web servers
* e.displays flash animation
f.displays Quicktime movies

3. what is the numeric base of hexadecimal numbers?
a.Base 2
b. Base 8
c. Base 10

* d.base 16
e.base 32

4. In an 8 bit binary number, what is the total number of combinations of the eight bits?
a. 128
b. 254
c. 255

* d. 256
e. 512
f. 1024

5. Convert the decimal number 231 into its binary equivalent. Select the correct answer from the list below.
a. 11110010
b. 11011011
c. 11110110
*. d. 11100111
e. 11100101
f. 11101110
6. Convert the hexadecimal number $C D$ into its base 10 equivalent. Select the correct answer from the list below.
a. 197
b. 199
c. 201
d. 203

* e. 205
f. 207

7. Convert the hexadecimal number 19 into its base 10 equivalent. Select the correct answer from the list below.
a. 19
b. 91
c. 52

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\begin{aligned}
& \text { * d. } 25 \\
& \text { e. } 36 \\
& \text { f. } 63
\end{aligned}
$$

8. Which of the following are popular web browsers? (Choose two.)
a. Acrobat

* b.Internet Explorer
c.Macromedia Flash
* d.Netscape Navigator
d. Quicktime
e. World wide Web

9. Which of the following are valid hexadecimal numbers? (Choose three.)

* a.DEF3
b. 1G45
* c.1F35
d. DH3F
* e. 453
f. X35F

10. What are the requirements for an Internet connection? (Choose three.)
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a.remote host
* b.physical connection
* c.logical connection
d.firewal1
* e.application
```

11. Which of the following interprets the data and displays the information in an understandable form for the user to see?
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* a.application
b.protocol stack
c. remote devices
d.logical connection
e.physical connection
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12. which of the following are considered to be "always on" services? (Choose two.)

* a.DSL
b.ISDN
c. 56 kbps
* d.cable modem

13. Which of the following will test the internal loopback of a node?
a.ping 10.10.10.1
b.ping 192.168.1.1

* c.ping 127.0.0.1
d.ping 223.223.223.223
e.ping 255.255.255.255

14. If you perform a Boolean AND on the IP address 172.16.20.23 using the subnet mask of 255.255 .248 .0 , which of the following is the subnetwork address?
a.172.16.0.0

* b.172.16.16.0
c.172.16.20.0
d.172.16.20.16
e.172.16.24.0

15. Which specialized equipment is used to make a physical connection from a PC to a network? (Choose two.)
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a.router
* b.modem
c.CD Rom
* d.network interface card
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16. When purchasing a NIC for a computer, which of the following factors need to be considered? (Choose three.)

* a.protocols
* b.system bus
c.brand of PC
d.web browser
* e.type of media used on the network

17. Which of the following describes a network interface card?
a.large circuit board that contains sockets for expansion cards
b.interface card capable of transferring more than one bit simultaneously and is used to connect external devices

* c.interface card inserted into a computer so that the computer can be connected to a network
d.interface card that can be used for parallel communication in which only 1 bit is transmitted at a time

18. which statements best describe a physical connection? (Choose two.)
a.internet standard is TCP/IP

* b.could utilize modem or NIC
c.interprets data and displays information
* d.used to transfer data between PC and local network

19. Which device connects a computer with a telephone line by providing modulation and demodulation of incoming and outgoing data?
a.NIC
b. CSU/DSU
c. router

* d.modem
e.telco switch

20. Which phrases describe a byte? (Choose two.)
a. a single binary digit
*b. a grouping of eight binary digits
c. +5 volts of electricity
*d. a single addressable storage location
e. the value range from 0 to 127
21. Convert the Base 10 number 116 into its eight bit binary equivalent. Choose the correct answer from the following list:
a. 01111010
b. 01110010
*. c. 01110100
d. 01110110
e. 01110111
f. 01010110
