MULTIPLE CHOICE

19. The process of users identifying themselves to the server with a special name and password before they can use the computer network is called
    a. attaching
    b. connecting
    c. logging in
    d. serving

20. The person in charge of the server-based LAN who must monitor the server, set up users and passwords, oversee the network, install hardware on the network, and take care of the software on the server is called the
    a. server manager
    b. LAN manager
    c. response technician
    d. network webmaster

21. All of the following are advantages of a server-based LAN except
    a. can support many users
    b. is expensive
    c. easier to manage and control
    d. uses more powerful equipment

22. The type of LAN that splits the processing between the server and the computers on the network is
    a. peer-to-peer
    b. server-based
    c. client-server
    d. minicomputer

23. All of the following are advantages of client-server LANs except
    a. process large amounts of data
    b. provides same features of server-based LANs
    c. can replace large mainframe computers
    d. requires special hardware and software

24. The items that can be shared on a network are all of the following except
    a. hardware
    b. personnel
    c. application software
    d. documents

25. One advantage of a peer-to-peer LAN is
    a. easy to set up
    b. requires less powerful server than client-server LAN
    c. supports a limited number of users
    d. does not have to be managed

Chapter 2—Network Building Blocks

TRUE/FALSE

1. Data that is to be transmitted across a network is divided into smaller blocks of data called packets.
2. It is accurate to use either the term frame or packet to describe a block of data.
3. Packets are divided into three basic parts: header, data, and trailer.
4. The information contained in a packet may be different based on the type of computer network being used.
5. The data portion of a packet can be anywhere from 512 bytes to 40,000,000 bytes long, depending on the type of network
6. A number, called a checksum, is calculated by the sending computer based on the contents of the header.
7. Topology is the physical layout of the computer network.
8. In a point-to-point topology, each device is directly connected to all other devices.
9. A port is a connection device on a computer that allows it to connect to another device.
10. The two types of topologies are multipoint and ring.
11. Multipoint topology is similar to the telephone system.
12. The three different types of point-to-point topologies are bus, ring and star.
13. A bus topology has one starting point and one ending point.
14. In a bus topology, a cable runs the length of the computer network, and at each end of the cable is a terminator.
15. A ring topology has only one ending point.
16. A star topology has a central controlling unit to which all devices are attached.
17. Channel access methods are ways of sharing across multipoint topologies.
18. The bus, ring and star topologies are all multipoint topologies, which means they use one port and cable to connect to the network

MULTIPLE CHOICE

19. Packets are made up of all of the following parts except
    a. data
    b. trailer
    c. header
    d. footer
20. All of the following are channel access methods except
    a. contention
    b. bus
    c. polling
    d. token-passing

21. The contention channel access method is like
    a. raising your hand to get permission to talk
    b. talking whenever you want to talk
    c. waiting to be asked if you want to talk
    d. waiting for a microphone before you talk

22. The method that says that before a computer starts to send a message it should first "listen" on the cable to see if any other computer is sending a message is called
    a. token-passing
    b. demand priority
    c. CSMA/CD
    d. star

23. With the channel access method that is similar to waiting for a microphone before you can talk, a special packet called a _____ is passed from one computer to the next on the network.
    a. header
    b. star
    c. polling
    d. token

24. If a computer wants to send a message, it first transmits to the central device a(n)
    a. token
    b. demand signal
    c. bus
    d. CSMA/CD

25. Token passing eliminates
    a. packets
    b. rings
    c. collisions
    d. contention

Chapter 3—Network Cabling and Hardware

TRUE/FALSE

1. The cabling system of a computer network is called a cable plan.
2. Baseband transmission treats the entire cable as if it were multiple channels.
3. A digital signal is made up of short impulses of off and on.
4. Broadband transmission divides the cable into only one channel.
5. Analog is a continuous mode of delivery.
6. Computer networks use baseband instead of broadband transmission.
7. The amount of data that can be transported across a cable is called its bandwidth
8. Bandwidth is measured in megahertz.
9. A megabit is one million bits per second.
10. Loss of signal power is attenuation.
11. Electromagnetic interference (EMI) is caused when a motor or another source of intense electrical activity interferes with a data signal on a cable.
12. Radio frequency interference (RFI) occurs when a broadcast signal from a computer causes the interference on a radio or television.
13. Near end crosstalk (NEXT) happens when the stronger transmitting signal of one wire bleeds over onto another wire that is receiving a weaker signal
14. Coaxial cable is one copper wire surrounded by another copper wire.
15. Thick coaxial has a single copper wire at its center which is, in turn, surrounded by a layer of insulation made of braided metal shielding.
16. Unshielded twisted pair cable looks very much like the cable that carries a cable TV signal.
17. Twisted pair cable has become the standard copper cabling used in computer networks today, replacing coaxial cable.
18. UTP is the same as telephone wire.

MULTIPLE CHOICE

19. The highest rated cable category is
    a. Category 1
    b. Category 5
    c. Category 25
    d. Category 100
20. The connector at the end of a twisted pair wire is
    a. RJ-45
    b. RJ-11
    c. BNC
    d. AB-15
21. The type of cable that transmits light instead of electrical impulses is
    a. coaxial cable
    b. UTP
    c. STP
    d. fiber optic

22. Surrounding the core on a fiber optic cable is a glass tube called the
    a. foil
    b. cladding
    c. glass shield
    d. braid

23. A _____ is 1/25,000 of an inch.
    a. millicron
    b. core
    c. metercon
    d. micron

24. Fiber optic cables that are used when the data must be transmitted over long distances are called
    a. micromode
    b. distance
    c. multiple mode
    d. single mode

25. A NIC card performs each of the following functions except
    a. change parallel to serial
    b. creates packets
    c. knows when to send
    d. updates the PCI slot

Chapter 4—Network Models and Standards

TRUE/FALSE

1. The IEEE committee created the OSI model.
2. The Open Systems Interconnection (OSI) model is a design of computer networking.
3. The OSI model is based on 8 layers.
4. In the OSI model, each layer performs specific functions in terms of networking.
5. In the OSI model, the flow between layers goes up when sending and down when receiving.
6. The Institute of Electrical and Electronic Engineers (IEEE) worked on computer network standards to be sure that network interfaces and cabling from different manufacturers would work together.
7. 10Base-5 uses thick coaxial cable.
8. 10Base-5 can have 10 500-meter segments connected together.
9. A segment is a smaller section of the network.
10. A vampire tap is used in a 10Base-T network.
11. 10Base-2 uses a ring multipoint topology.
12. 10Base-2 uses a BNC T-connector to connect to the NIC.
13. BNC T-connectors are used to connect network devices to a 10Base-T Ethernet network.
14. An advantage of a 10Base-2 network is that it is easy to move computers.
15. 10Base-T uses UTP wiring.
16. 10Base-T is a star-wired ring.
17. A hub receives packets from the computers on a 10Base-5 network and distributes the packets to all network devices.
18. A distribution panel connects the modular jacks to the hub.

MULTIPLE CHOICE

19. The fastest of these networks is
    a. 10Base-2
    b. 10Base-5
    c. 10Base-T
    d. Fast Ethernet
20. The ability to easily move computers is an advantage of each of these types of networks except
    a. 10Base-T
    b. 100Base-T
    c. 10Base-5
    d. 10Base-2

21. With 10Base-T, the number of computers that can be on a segment is
    a. 1
    b. 5
    c. 100
    d. 1,024
22. The network device that knows which segment has which network device is called a(n)
    a. dumb hub
    b. switching hub
    c. NIC
    d. AUI
23. The type of hub that only amplifies the transmission and sends it back out is called a(n)
    a. Layer 1 hub
    b. Layer 2 hub
    c. Layer 3 hub
    d. Layer 4 hub
24. The speed of Fast Ethernet is
    a. 10 Mbps
    b. 16 Mbps
    c. 100 Mbps
    d. 1 Gbps
25. The channel access methods that Fast Ethernet uses is
    a. contention
    b. polling
    c. token passing
    d. Demand priority

Chapter 5—Protocols and Software

TRUE/FALSE

1. Network rules are also called protocols.
2. The standard protocol for LANS is TCP/IPX.
3. The protocol Internet Control Message Protocol (ICMP) sends control messages about errors and confirmations.
4. Address Resolution Protocol (ARP) associates addresses with actual network equipment.
5. IP ensures that the packets arrive correctly and are reassembled in the correct order.
6. The Domain Name System (DNS) associates addresses with computer names.
7. File Transfer Protocol (FTP) is used when transferring files from one computer to another.
8. Telnet allows a user to see what's on another computer or run programs on that remote computer.
9. Each NIC has a MAC address that is different from any other NIC ever made, and this is known as the logical address.
10. TCP/IP works on the principle that each computer on the network has a unique IP address.
11. An IP address is 4 bytes (32 bits) long, and each byte is represented as a decimal number and is separated by a period.
12. The IP address 198.146.118.20 is a valid IP address.
13. The IP address 198.146.118.20 is a valid Class A IP address.
14. A host is a computer on a TCP/IP network.
15. A private network consists of IP addresses that can be used for a LAN.
16. With subnet masking, you take a single IP address and subdivide the client number into a subnetwork number and a new host number.
17. The current IP protocol is known as IPv5.
18. IPv6 will allow many more IP addresses than the current version of IP.

MULTIPLE CHOICE

19. The IP address 9.146.118.20 is a(n) _____ address.
    a. Class A
    b. Class B
    c. Class C
    d. invalid
20. The IP address 299.146.118.20 is a(n) _____ address.
    a. Class A
    b. Class B
    c. Class C
    d. invalid

21. The protocol that associates addresses with actual network equipment is
    a. ARP
    b. TCP
    c. IMPC
    d. MASK
22. Each computer on a TCP/IP network is called a
    a. device
    b. server
    c. host
    d. backplane
23. Each Class C network can have _____ hosts.
    a. 2
    b. 254
    c. 65,536
    d. 2 million
24. The protocol that is decreasing in popularity today is
    a. IPX/SPX
    b. IP
    c. TCP
    d. ARP
25. The IPX/SPX protocol that sends messages back and forth is
    a. IP
    b. FTP
    c. TCP
    d. NCP

Chapter 6—Windows 2000

TRUE/FALSE

1. The user interface is the part of the software that the computer user sees and uses to give instructions to the computer.
2. A scalable operating system is an operating system that can take advantage of a server that has multiple RAMs installed.
3. Symmetric multiprocessing (SMP) is used by Windows 2000 to distribute the processing load among different CPUs in a server.
4. A NOS that can run on different servers with different types of CPUs is called a scalable NOS.
5. Software that sits in between the CPUs and the Windows 2000 NOS is called TCP/IP.
6. Active Directory is the name of Windows 2000's directory service.
7. Windows 2000 will be the successor to Windows NT 4.
8. A domain is a collection of users and network hardware on the Internet.
9. SAM can reside on only the PDC and not on a BDC.
10. A one-way trust allows two domains to equally share their resources between each other.
11. A group is a collection of user accounts.
12. The Windows 2000 tool that gives LAN managers the ability to create and modify user accounts and groups is called Network Administrator.
13. A file can contain a program but not data for a program.
14. A shared folder can be made available to other users on the network.
15. Windows 2000 is Microsoft's primary NOS for LANs.
16. Windows 2000 can support up to 256 CPUs with SMP.
17. Windows 2000 uses the TCP/IP protocol.
18. The hardware abstraction layer (HAL) software sits in between the CPUs and the Windows 2000 NOS.

MULTIPLE CHOICE

19. The first version of Microsoft's LAN NOS was called
    a. Windows NT 3.1
    b. NetWare
    c. Windows 2
    d. Windows NT 5
20. The different privileges over files and folders is known as assigning
    a. tasks
    b. duties
    c. permissions
    d. domains