Chapter 8:

Networking and telecommunication

## Multiple Choice:

1. A basic computer network can be described as:
	1. a minimum of five computers linked together.
	2. computer and cables that link the network together.
	3. two or more computers that are linked together.
	4. the use of satellites linking computers together.

**Answer:** C **Reference:** Basic Network Anatomy **Difficulty:** Easy

1. The three essential components of every computer system include all EXCEPT:
	1. software.
	2. hardware.
	3. people or users.
	4. cables.

**Answer:** D **Reference:** Basic Network Anatomy **Difficulty:** Easy

1. Which statement is FALSE about wireless networks?
	1. Wireless networks are convenient.
	2. Wireless networks are slower than wired LANs.
	3. Wireless networks use radio transmitters.
	4. Wireless networks are faster than wired networks.

**Answer:** D **Reference:** Networks Near and Far **Difficulty:** Moderate

1. LAN stands for:
	1. local area nodes.
	2. logical arrangement of networks.
	3. local area network.
	4. linked-area network.

**Answer:** C **Reference:** Networks Near and Far **Difficulty:** Moderate

1. The primary difference between a LAN and a WAN is:
	1. the number of software programs available.
	2. distance.
	3. the variety of hardware devices.
	4. the number of hardware devices.

**Answer:** B **Reference:** Networks Near and Far **Difficulty:** Moderate

1. Each individual computer and component attached to a network is a:
	1. node.
	2. connection point.
	3. switch.
	4. hub.

**Answer:** A **Reference:** Networks Near and Far **Difficulty:** Moderate

1. In a traditional LAN, each node on the network is connected through:
	1. cables.
	2. satellites.
	3. microwaves.
	4. wireless transmission.

**Answer:** A **Reference:** Networks Near and Far **Difficulty:** Moderate

1. MAN stands for:
	1. metropolitan area network.
	2. marked area network.
	3. metropolitan arranged network.
	4. manufactured arrangement of networks.

**Answer:** A **Reference:** Networks Near and Far **Difficulty:** Easy

1. The common pathways on a WAN are known as:
	1. nodes.
	2. hubs.
	3. the backbone.
	4. routers.

**Answer:** C **Reference:** Networks Near and Far **Difficulty:** Challenging

1. Crossing from one LAN to another LAN or a WAN is done over:
	1. bridges and gateways.
	2. routers.
	3. backbones.
	4. MANs.

**Answer:** A **Reference:** Networks Near and Far **Difficulty:** Moderate

1. The hardware device or software program that sends messages between networks is known as a:
	1. bridge.
	2. router.
	3. backbone.
	4. gateway.

**Answer:** B **Reference:** Networks Near and Far **Difficulty:** Moderate

1. The system of satellites that circle the earth and can determine any position is known as a:
	1. GPS.
	2. LAN.
	3. receiver.
	4. MAN.

**Answer:** A **Reference:** Specialized Networks: From GPS to Financial Systems **Difficulty:** Easy

1. Remote access means that:
	1. a computer is linked directly to a network.
	2. you can access the Internet from anywhere.
	3. you connect to a network through a phone line, television cable, or satellite.
	4. your Internet connection is through a satellite rather than phone lines.

**Answer:** C **Reference:** The Network Interface **Difficulty:** Moderate

1. A port is a:
	1. socket that enables information to move through a system.
	2. hardware device that allows connection to the Internet.
	3. peripheral device attached to a computer.
	4. space located in the front of a computer to install additional drives.

**Answer:** A **Reference:** The Network Interface **Difficulty:** Moderate

1. Older printers were typically connected to computers through a:
	1. serial port.
	2. NIC card.
	3. parallel port.
	4. jack.

**Answer:** C **Reference:** The Network Interface **Difficulty:** Moderate

1. A modem is typically connected to a computer through a:
	1. serial port.
	2. NIC card.
	3. parallel port.
	4. jack.

**Answer:** A **Reference:** The Network Interface **Difficulty:** Moderate

1. What port is a fast connection that is more flexible than traditional serial and parallel ports?
	1. Serial
	2. USB
	3. Parallel
	4. Ethernet

**Answer:** B **Reference:** The Network Interface **Difficulty:** Moderate

1. NIC stands for:
	1. network internal card.
	2. newer industrial computer.
	3. networking Internet connection.
	4. network interface card.

**Answer:** D **Reference:** The Network Interface **Difficulty:** Moderate

1. A NIC allows direct connection to:
	1. the Internet.
	2. a network.
	3. a printer.
	4. a modem.

**Answer:** B **Reference:** The Network Interface **Difficulty:** Easy

1. The NIC controls the flow of data between the computer’s RAM and the:
	1. network cable.
	2. Internet.
	3. hard drive.
	4. CD drive.

**Answer:** A **Reference:** The Network Interface **Difficulty:** Easy

1. Computer bits must be \_\_\_\_\_\_\_\_\_\_\_ to travel over phone lines.
	1. analog signals
	2. digital signals
	3. modem signals
	4. converted to bytes

**Answer:** A **Reference:** Communication á la Modem **Difficulty:** Moderate

1. Prior to computer bits entering a modem, the bits are:
	1. stored in the hard drive.
	2. bitmapped.
	3. digital.
	4. analog.

**Answer:** C **Reference:** Communication á la Modem **Difficulty:** Moderate

1. Modems use \_\_\_\_\_\_\_\_\_\_\_\_ cable to connect to a telephone network through a modular phone jack.
	1. phone
	2. coaxial
	3. digital
	4. analog

**Answer:** A **Reference:** Communication á la Modem **Difficulty:** Moderate

1. Modem speed is measured in:
	1. bits per second.
	2. bytes per second.
	3. bits per millisecond.
	4. bytes per minute.

**Answer:** A **Reference:** Communication á la Modem **Difficulty:** Challenging

1. What is the term for the amount of information transmitted through a communication medium in a certain amount of time?
	1. DPI
	2. BPS
	3. Bandwidth
	4. Baud rate

**Answer:** C **Reference:** Broadband Connections **Difficulty:** Moderate

1. Broadband connections include all EXCEPT:
	1. cable modems.
	2. DSL.
	3. wireless.
	4. phone modems.

**Answer:** D **Reference:** Broadband Connections **Difficulty:** Moderate

1. What type of cable uses light waves to carry information at high speed?
	1. Cable modems
	2. fiber-optic cables
	3. Wireless cables
	4. Phone lines

**Answer:** B **Reference:** Fiber-Optic Connections **Difficulty:** Moderate

1. Which type of media has the longest maximum distance?
	1. Twisted pair
	2. Wireless
	3. Coaxial cable
	4. Fiber-optic

**Answer:** B **Reference:** Basic Network Anatomy **Difficulty:** Challenging

1. Palm users often connect through:
	1. cable modems.
	2. fiber optic cables.
	3. infrared wireless.
	4. phone lines.

**Answer:** C **Reference:** Wireless Network Technology **Difficulty:** Moderate

1. The next generation of wireless technology is known as:
	1. G4.
	2. modem wireless.
	3. 3G.
	4. NIC wireless.

**Answer:** C **Reference:** Wireless Network Technology **Difficulty:** Challenging

1. The rules for exchanging data between a terminal and one or more computers is known as a(n):
	1. protocol.
	2. algorithm.
	3. procedure.
	4. set of laws.

**Answer:** A **Reference:** Communication Software **Difficulty:** Moderate

1. What is a LAN that has one or more dedicated computers and all others act as recipients?
	1. Peer-to-peer model
	2. P-to-p model
	3. Ring network
	4. Client/server model

**Answer:** D **Reference:** Communication Software **Difficulty:** Moderate

1. A \_\_\_\_\_\_\_\_\_\_\_\_ is a high-speed, high-end computer with data and other resources to be shared with client computers.
	1. server
	2. super computer
	3. client
	4. PDA

**Answer:** A **Reference:** Communication Software **Difficulty:** Moderate

1. In a client/server environment, most or all of the network operating system resides on the:
	1. client machine.
	2. CD.
	3. server computer.
	4. mainframe.

**Answer:** C **Reference:** Communication Software **Difficulty:** Easy

1. The network configuration that allows every computer to act as both a client and a server is a:
	1. client/server model.
	2. host system.
	3. server network.
	4. peer-to-peer network.

**Answer:** D **Reference:** Communication Software **Difficulty:** Easy

1. The computer that accepts, prioritizes, and processes print jobs is known as the:
	1. print client.
	2. printer file server.
	3. print server.
	4. mainframe.

**Answer:** C **Reference:** The Network Advantage **Difficulty:** Moderate

1. The \_\_\_\_\_\_\_\_\_\_\_\_ stores data and software that are to be shared by several users.
	1. file server
	2. mainframe
	3. print server
	4. client

**Answer:** A **Reference:** The Network Advantage **Difficulty:** Moderate

1. When you are using a PC and copy software or data from a server, it is known as:
	1. uploading.
	2. terminal emulation.
	3. downloading.
	4. server sharing.

**Answer:** C **Reference:** The Network Advantage **Difficulty:** Moderate

1. When a business can legally copy software to all of the computers that they own, the company has a(n):
	1. site license.
	2. upload license.
	3. file server license.
	4. groupware license.

**Answer:** A **Reference:** The Network Advantage **Difficulty:** Moderate

1. What is code embedded as one-pixel graphics files in Web pages or email messages called?
	1. Web dot
	2. Web bug
	3. A cookie
	4. A virus

**Answer:** B **Reference:** The Many Faces of Email **Difficulty:** Moderate

1. A(n) \_\_\_\_\_\_\_\_\_\_\_\_ enables a user to participate in email discussion groups on topics of particular interest to the user.
	1. subscriber list
	2. mailing list
	3. news list
	4. email list

**Answer:** B **Reference:** Mailing Lists **Difficulty:** Easy

1. A newsgroup is different from a mailing list in that:
	1. the newsgroup is email and the mailing list is not.
	2. a newsgroup is only accessible on a LAN and a mailing list can be on the Internet.
	3. a newsgroup is a public discussion and a mailing list is information sent to your email.
	4. a newsgroup is private and a mailing list is not.

**Answer:** C **Reference:** Network News **Difficulty:** Moderate

1. Asynchronous communication is when the sender and recipient:
	1. are online at the same time.
	2. do not use the same operating system.
	3. do not have to be online at the same time.
	4. use different software but are able to communicate through the Internet.

**Answer:** C **Reference:** Instant Messaging and Teleconferencing **Difficulty:** Moderate

1. An IM session stands for:
	1. internal messaging.
	2. instant messaging.
	3. instantaneous market.
	4. instantaneous messages.

**Answer:** B **Reference:** Instant Messaging and Teleconferencing **Difficulty:** Easy

1. \_\_\_\_\_\_\_\_\_\_\_ software and hardware allows a PC to function similar to a telephone.
	1. Telephony
	2. Instant messaging
	3. Video conferencing
	4. Avatars

**Answer:** A **Reference:** Computer Telephony **Difficulty:** Moderate

1. Unwanted junk email is known as:
	1. IM.
	2. telephony.
	3. spam.
	4. avatars.

**Answer:** C **Reference:** Online Issues **Difficulty:** Easy

1. Following the rules of correct behavior of the Internet is known as:
	1. netiquette.
	2. FAQs.
	3. emoticons.
	4. netmanners.

**Answer:** A **Reference:** Working Wisdom: Netiquette and Text Messaging **Difficulty:** Easy

1. FAQ stands for:
	1. frequently asked questions.
	2. frequent assistance for questions.
	3. frequently assisted query.
	4. frequently asked queries.

**Answer:** A **Reference:** Working Wisdom: Netiquette and Text Messaging **Difficulty:** Easy

1. Text-based graphical substitutes for body language over the Internet is known as:
	1. netiquette.
	2. FAQs.
	3. emoticons.
	4. netmanners.

**Answer:** C **Reference:** Working Wisdom: Netiquette and Text Messaging **Difficulty:** Easy

1. What helps block unauthorized access and data transfer?
	1. A bridge
	2. A VPN
	3. A WEP
	4. A firewall

**Answer:** D **Reference:** Wireless Issues: Access, Security, and Privacy **Difficulty:** Moderate

## Fill in the Blank:

1. A(n) \_\_\_\_\_\_\_\_\_\_\_\_ is a network of networked computers that are physically located far apart from one another.

**Answer:** WAN or wide area network **Reference:** Networks Near and Far **Difficulty:** Easy

1. The most common cabling for a LAN is \_\_\_\_\_\_\_\_\_\_\_\_.

**Answer:** twisted pair **Reference:** Networks Near and Far **Difficulty:** Challenging

1. A(n) \_\_\_\_\_\_\_\_\_\_\_\_ is a computer or peripheral device attached to a network.

**Answer:** node **Reference:** Networks Near and Far **Difficulty:** Moderate

1. A(n)\_\_\_\_\_\_\_\_\_\_\_\_ network connects computers through radio transmitters connected to the network port.

**Answer:** wireless **Reference:** Networks Near and Far **Difficulty:** Moderate

1. A(n)\_\_\_\_\_\_\_\_\_\_\_\_ includes 24 satellites that circle the Earth.

**Answer:** GPS **Reference:** SpecializedNetworks: From GPS to Financial Systems
**Difficulty:** Moderate

1. A(n) \_\_\_\_\_\_\_\_\_\_\_\_ connection to a network means that cabling from the computer is cabled to the network.

**Answer:** direct **Reference:** TheNetwork Interface **Difficulty:** Moderate

1. A computer communicates with a network through a(n) \_\_\_\_\_\_\_\_\_\_\_\_.

**Answer:** port **Reference:** The Network Interface **Difficulty:** Moderate

1. A port that bits pass through one at a time is a(n) \_\_\_\_\_\_\_\_\_\_\_\_ port.

**Answer:** serial **Reference:** The Network Interface **Difficulty:** Moderate

1. A port that bits pass through in groups of 8, 16, or 32 is a(n) \_\_\_\_\_\_\_\_\_\_\_\_ port.

**Answer:** parallel **Reference:** The Network Interface **Difficulty:** Moderate

1. Modern Macs and PCs have \_\_\_\_\_\_\_\_\_\_\_\_ ports that are faster and more flexible than traditional ports.

**Answer:** USB or FireWire **Reference:** The Network Interface **Difficulty:** Challenging

1. A(n) \_\_\_\_\_\_\_\_\_\_\_\_ is designed specifically for a direct network connection.

**Answer:** NIC, network interface card **Reference:** The Network Interface **Difficulty:** Challenging

1. If a computer has a(n) \_\_\_\_\_\_\_\_\_\_\_\_ port, it does not need a NIC.

**Answer:** Ethernet **Reference:** The Network Interface **Difficulty:** Challenging

1. A continual wave of bits transmitted through a device is known as a(n) \_\_\_\_\_\_\_\_\_\_\_\_ signal.

**Answer:** analog **Reference:** Communication á la Modem **Difficulty:** Moderate

1. The transferring of transmission from a computer over phone lines is done through a(n) \_\_\_\_\_\_\_\_\_\_\_\_.

**Answer:** modem **Reference:** Communication á la Modem **Difficulty:** Moderate

1. Bps stands for \_\_\_\_\_\_\_\_\_\_\_\_.

**Answer:** bits per second **Reference:** Communication á la Modem **Difficulty:** Easy

1. When using multimedia or downloading huge files from the Internet, the bigger the \_\_\_\_\_\_\_\_\_\_\_\_, the better.

**Answer:** bandwidth **Reference:** Broadband Connections **Difficulty:** Moderate

1. Bandwidth is measured in kilobits or \_\_\_\_\_\_\_\_\_\_\_\_.

**Answer:** megabits **Reference:** Broadband Connections **Difficulty:** Moderate

1. \_\_\_\_\_\_\_\_\_\_\_\_ cables are faster than DSL or cable modems.

**Answer:** Fiber-optic **Reference:** Fiber-Optic Connections **Difficulty:** Moderate

1. Many laptops and handheld computer have \_\_\_\_\_\_\_\_\_\_\_\_ ports that can send and receive digital information short distances. Line-of-sight is a limitation.

**Answer:** infrared **Reference:** Wireless Network Technology **Difficulty:** Moderate

1. To communicate with each other, two machines must follow the same \_\_\_\_\_\_\_\_\_\_\_\_ which are the rules for the exchange of data.

**Answer:** protocols **Reference:** Communication Software **Difficulty:** Moderate

1. \_\_\_\_\_\_\_\_\_\_\_\_ software sends requests from the user to the server.

**Answer:** Client **Reference:** Communication Software **Difficulty:** Moderate

1. When many computers are able to print to one printer, the computers are probably connected to a(n) \_\_\_\_\_\_\_\_\_\_\_\_.

**Answer:** print server **Reference:** The Network Advantage **Difficulty:** Moderate

1. Copying software or data files from a client computer to a server is known as \_\_\_\_\_\_\_\_\_\_\_\_.

**Answer:** uploading **Reference:** The Network Advantage **Difficulty:** Easy

1. Microsoft \_\_\_\_\_\_\_\_\_\_\_\_ is the most popular groupware software.

**Answer:** Exchange **Reference:** The Network Advantage **Difficulty:** Challenging

1. Software designed to allow several networked users to work on the same document at the same time is known as \_\_\_\_\_\_\_\_\_\_\_\_.

**Answer:** groupware **Reference:** The Network Advantage **Difficulty:** Moderate

1. When a Word document or picture file is included along with an email message, it is known as a(n) \_\_\_\_\_\_\_\_\_\_\_\_.

**Answer:** attachment **Reference:** The Many Faces of Email **Difficulty:** Easy

1. A(n) \_\_\_\_\_\_\_\_\_\_\_\_ is a public discussion on a particular subject.

**Answer:** newsgroup **Reference:** Network News **Difficulty:** Easy

1. Publicly accessible wireless access points are known as \_\_\_\_\_\_\_\_\_\_\_.

**Answer:** hot spots **Reference:** Wireless Issues **Difficulty:** Easy

## Matching:

1. Match the following terms to their meanings:

I. twisted pair A. medium cost, LANs, 600-2,500 feet

II. coaxial cable B. high cost, network backbones and WANS, up to 25 miles

III. fiber-optic C. high cost, connects things that move, variable distances possible

IV. wireless/infrared D. low cost, LAN use, up to 300 feet

V. wireless/radio E. medium cost, LANs, line-of-sight up to 1,000 feet

**Answers:** D, A, B, E, C **Reference:** Basic Network Anatomy **Difficulty:** Moderate

1. Match the following terms to their meanings:

I. modem A. continuous wave of bits

II. bandwidth B. modulator/demodulator

III. Bps C. stream of bits

IV. broadband D. measured in kilobits or megabits per second

V. analog signal E. how modems measure the transmission speed of a modem

VI. digital signal connection F. DSL, cable modem, high-speed wireless, satellite

VII. NIC G. a card inserted into a slot that is designed for direct connection to a network

## Answers: B, D, E, F, A, C, G Reference: Multiple locations Difficulty: Moderate