

Chapter 7

_____ is the use of networking technology to provide medical information and services.

- Telemedicine

□ One type of mobile phone that might be used when mountain climbing far from any cellular towers is a _____.

- Satellite phone

□ The _____ network consists of 24 Department of Defense satellites that are used for location and navigation purposes.

- Global positioning system (GPS)

□ _____ is typically used with LANs that have a star topology and can be used in conjunction with twisted-pair, coaxial, or fiber-optic cabling.

- Ethernet

□ The accompanying figure shows a _____ network.

- star

□ _____ satellites travel at a speed and direction that keeps pace with the earth's rotation, so they appear (from earth) to remain stationary over a given spot.

- Geosynchronous

□ _____ refers to the amount of data that can be transferred (such as over a certain type of networking medium) in a given time period.

- Bandwidth

□ The _____ allows individuals to "placeshift" multimedia content from their home TVs and DVRs to their portable computer or mobile device.

- Slingbox

□ Gabrielle is the network administrator at a medium-sized company. One of her responsibilities is to purchase network devices to maintain the company network. Gabrielle is planning to connect selected devices to the network wirelessly with a wireless _____.

- Access point

□ _____ technology is commonly used to monitor the status of objects, such as shipping boxes, livestock, or expensive equipment to which these types of tags are attached.

- RFID

□ A network adapter, also called a _____ when it is in the form of an expansion card, is used to connect a computer to a network.

- Network interface card (NIC)

□ _____ are earth-based stations that can transmit microwave signals directly to each other over distances of up to about 30 miles.

- Microwave station

- In ____ transmission, data can travel in either direction, but only in one direction at a time, such as with a walkie-talkie.
 - Half-duplex
- The accompanying figure displays a _____.
 - Coaxial cable
- In a ____ network, there are a number of different connections between the devices on the network so that data can take any of several possible paths from source to destination.
 - Mesh
- Some wireless ____ are created by cities or large organizations to provide free or low-cost Internet access to residents of a particular area.
 - MANs
- ____ transmissions are used with cell phones and are sent and received via cellular (cell) towers.
 - Cellular radio
- The Wi-Fi standard ____ is no longer manufactured (but is backwards compatible with one of the other newer standards.)
 - 802.11b
- ____ is a wireless standard that is designed for very short-range (10 meters, approximately 33 feet, or less) connections.
 - Bluetooth
- A ____ is a network that covers a relatively small geographical area, such as a home, office building, or school.
 - Local area network (LAN)
- ____ is the use of networking technology to provide medical information and services.
 - Telemedicine
- Gabrielle is the network administrator at a medium-sized company. One of her responsibilities is to purchase network devices to maintain the company network. Gabrielle would like to purchase a new ____, which would be used to connect the company's LAN and the Internet.
 - router
- A means to provide a wireless connection to a peripheral devices. This is similar to, but different from, Bluetooth.
 - Wireless USB
- Monitoring systems may also use ____, which are devices that respond to a stimulus (such as heat, light, or pressure) and generate an electrical signal that can be measured or interpreted.
 - sensors
- ____ is the use of networking technology to conduct real-time, face-to-face meetings between individuals physically located in different places.

- Videoconferencing
- Robert is a medical writer for a pharmaceutical company. The company allows Robert to work from home. Robert's job is a(n) ____ job.
- Telecommuting
- A global positioning system (GPS) consists of ____ and a group of GPS satellites.
- GPS receivers
- In ____ transmission, data can move in both directions at the same time, such as with a telephone.
- Full-duplex
- ____ transmission is relatively uncommon in data transmissions since most devices that are mainly one-directional, such as a printer, can still transmit error messages and other data back to the computer.
- Simplex
- With ____, data is sent one bit at a time, one after the other along a single path.
- Serial transmission
- ____ was originally developed to carry a large number of high-speed video transmissions at one time, such as to deliver cable TV service.
- Coaxial cable
- Gabrielle is the network administrator at a medium-sized company. One of her responsibilities is to purchase network devices to maintain the company network. Gabrielle realizes that to improve network performance, she needs to buy and install a ____, which identifies the device on the network for which the data is intended and sends the data to that device only.
- Switch
- ____ transmissions are used with cell phones and are sent and received via cellular (cell) towers.
- Satellite radio
- Technically, to be called a ____, a device must convert digital signals (such as those used by a computer) to modulated analog signals (such as those used by conventional telephone lines) and vice versa.
- Modem
- Similar to Wi-Fi, ____ is designed to provide Internet access to fixed locations (sometimes called hotzones), but the coverage is significantly larger.
- WiMAX
- A ____ transmits all data received to all network devices connected to it, regardless of which device the data is being sent to.
- Hub