***Business Driven Information Systems, 6e* (Baltzan)**

**Appendix B Networks and Telecommunications**

1) File Transfer Protocol (FTP) allows files containing text, programs, graphics, numerical data, and so on to be downloaded off or uploaded onto a network.

2) Telecommunication systems enable the transmission of data over public or private networks.

3) A network is a communications system created by linking two or more devices and establishing a standard methodology by which they can communicate.

4) A wide area network (WAN) spans a large geographic area, such as a state, province, or country. WANs often connect multiple smaller networks, such as local area networks or metropolitan area networks. The world's most popular WAN is the Internet. A metropolitan area network (MAN) is a large computer network usually spanning a city.

5) A MAN is a set of communication rules to make sure that everyone speaks the same language.

6) A WAN is a card that plugs into the back (or side) of your computers and lets them send and receive messages from other computers.

7) Cable is the medium to connect all of the computers.

8) A hub (switch or router) is the hardware to perform traffic control.

9) Topology includes peer-to-peer networks and client/server networks.

10) Protocols includes bus, star, ring, hybrid, and wireless.

11) Architecture includes Ethernet and transmission control protocol/Internet protocol (TCP/IP).

12) Media includes coaxial, twisted-pair, and fiber-optic.

13) A peer-to-peer (P2P) network is a computer network that relies on the computing power and bandwidth of the participants in the network rather than a centralized server.

14) A server is a computer designed to request information from a server. A server is a computer dedicated to providing information in response to requests.

15) A peer-to-peer network is a model for applications in which the bulk of the back-end processing, such as performing a physical search of a database, takes place on a server, while the front-end processing, which involves communicating with the users, is handled by the clients.

16) A network operating system (NOS) is the operating system that runs a network, steering information between computers and managing security and users.

17) Packet-switching occurs when the sending computer divides a message into a number of efficiently sized units of data called packets, each of which contains the address of the destination computer.

18) A router is an intelligent connecting device that examines each packet of data it receives and then decides which way to send it onward toward its destination.

19) A network topology refers to the geometric arrangement of the actual physical organization of the computers (and other network devices) in a network. Topologies vary depending on cost and functionality

20) A protocol is a standard that specifies the format of data as well as the rules to be followed during transmission.

21) A protocol is the capability of two or more computer systems to share data and resources, even though they are made by different manufacturers.

22) A WAN is a physical and data layer technology for LAN networking.

23) Transmission control protocol/Internet protocol (TCP/IP) provides the technical foundation for the public Internet as well as for large numbers of private networks.

24) The application layer serves as the window for users and application processes to access network services.

25) The application layer handles end-to-end packet transportation.

26) The transport layer formats the data into packets, adds a header containing the packet sequence and the address of the receiving device, and specifies the services required from the network.

27) The network interface layer places data packets on the network for transmission.

28) File transfer protocol (FTP) allows files containing text, programs, graphics, numerical data, and so on to be downloaded off or uploaded onto a network.

29) Simple mail transfer protocol (SMTP) is TCP/IP's own messaging system for email.

30) FTP provides terminal emulation that allows a personal computer or workstation to act as a terminal, or access device, for a server.

31) Hypertext Transfer Protocol (HTTP) allows web browsers and servers to send and receive web pages.

32) Simple Network Management Protocol (SNMP) allows networked nodes to be managed from a single point.

33) Network transmission media refers to the various types of media used to carry the signal between computers.

34) Wireless media are transmission material manufactured so that signals will be confined to a narrow path and will behave predictably.

35) Coaxial cable refers to a type of cable composed of four (or more) copper wires twisted around each other within a plastic sheath.

36) Twisted-pair cable can carry a wide range of frequencies with low signal loss. It consists of a metallic shield with a single wire placed along the center of a shield and isolated from the shield by an insulator.

37) Fiber optic (or optical fiber) refers to the technology associated with the transmission of information as light impulses along a glass wire or fiber.

38) What is a telecommunications system?

A) Enables the transmission of data over public or private networks

B) A communications, data exchange, and resource-sharing system created by linking two or more computers and establishing standards, or protocols, so that they can work together

C) Any network without a central file server and in which all computers in the network have access to the public files located on all other workstations

D) A computer that is designed to request information from a server

39) Which of the following is not one of the differentiating factors of a network?

A) Architecture

B) Topology

C) Protocols

D) Telecommunication system

40) What is a network?

A) Enables the transmission of data over public or private networks

B) A communications, data exchange, and resource-sharing system created by linking two or more computers and establishing standards, or protocols, so that they can work together

C) Any network without a central file server and in which all computers in the network have access to the public files located on all other workstations

D) A computer that is designed to request information from a server

41) What is designed to connect a group of computers in close proximity to each other such as in an office building, a school, or a home?

A) Local area network

B) Wide area network

C) Metropolitan area network

D) Peer-to-peer network

42) What spans a large geographic area, such as a state, province, or country?

A) Local area network

B) Wide area network

C) Metropolitan area network

D) Peer-to-peer network

43) What is a large computer network usually spanning a city?

A) Client/server network

B) Corporate network

C) Metropolitan area network

D) Peer-to-peer network

44) What is a peer-to-peer network?

A) Enables the transmission of data over public or private networks

B) A communications, data exchange, and resource-sharing system created by linking two or more computers and establishing standards, or protocols, so that they can work together

C) Any network without a central file server and in which all computers in the network have access to the public files located on all other workstations

D) A computer that is designed to request information from a server

45) What is a client?

A) Enables the transmission of data over public or private networks

B) A communications, data exchange, and resource-sharing system created by linking two or more computers and establishing standards, or protocols, so that they can work together

C) Any network without a central file server and in which all computers in the network have access to the public files located on all other workstations

D) A computer that is designed to request information from a server

46) What runs a network, steering information between computers and managing security and users?

A) Client

B) Server

C) Peer-to-peer network

D) Network operating system

47) What is a computer that is designed to request information from a server?

A) Client

B) Packet-switching

C) Peer-to-peer network

D) Network operating system

48) What occurs when the sending computer divides a message into a number of efficiently sized units called packets, each of which contains the address of the destination computer?

A) Client

B) Packet-switching

C) Peer-to-peer network

D) Network operating system

49) What is a router?

A) Occurs when the sending computer divides a message into a number of efficiently sized units called packets, each of which contains the address of the destination computer

B) An intelligent connecting device that examines each packet of data it receives and then decides which way to send it onward toward its destination

C) Refers to the geometric arrangement of the actual physical organization of the computers and other network devices) in a network

D) A model for applications in which the bulk of the back-end processing, such as performing a physical search of a database, takes place on a server, while the front-end processing, which involves communicating with the users, is handled by the clients

50) What is a client/server network?

A) Occurs when the sending computer divides a message into a number of efficiently sized units called packets, each of which contains the address of the destination computer

B) An intelligent connecting device that examines each packet of data it receives and then decides which way to send it onward toward its destination

C) Refers to the geometric arrangement of the actual physical organization of the computers and other network devices) in a network

D) A model for applications in which the bulk of the back-end processing, such as performing a physical search of a database, takes place on a server, while the front-end processing, which involves communicating with the users, is handled by the clients

51) What is packet-switching?

A) Occurs when the sending computer divides a message into a number of efficiently sized units called packets, each of which contains the address of the destination computer

B) An intelligent connecting device that examines each packet of data it receives and then decides which way to send it onward toward its destination

C) Refers to the geometric arrangement of the actual physical organization of the computers and other network devices) in a network

D) A model for applications in which the bulk of the back-end processing, such as performing a physical search of a database, takes place on a server, while the front-end processing, which involves communicating with the users, is handled by the clients

52) What is interoperability?

A) An intelligent connecting device that examines each packet of data it receives and then decides which way to send it onward toward its destination.

B) Refers to the geometric arrangement of the actual physical organization of the computers and other network devices) in a network.

C) A standard that specifies the format of data as well as the rules to be followed during transmission.

D) The capability of two or more computer systems to share data and resources, even though they are made by different manufacturers.

53) What is network topology?

A) Occurs when the sending computer divides a message into a number of efficiently sized units called packets, each of which contains the address of the destination computer

B) An intelligent connecting device that examines each packet of data it receives and then decides which way to send it onward toward its destination

C) Refers to the geometric arrangement of the actual physical organization of the computers and other network devices) in a network

D) A model for applications in which the bulk of the back-end processing, such as performing a physical search of a database, takes place on a server, while the front-end processing, which involves communicating with the users, is handled by the clients

54) Which of the following is not a network topology?

A) Bus

B) Ring

C) Ethernet

D) Star

55) Which of the following represents the bus topology?

A) All devices are connected to a central cable or backbone.

B) All devices are connected to a central device, called a hub.

C) All devices are connected to one another in the shape of a closed loop, so that each device is connected directly to two other devices, one on either side of it.

D) Groups of star-configured workstations are connected to a linear bus backbone cable.

56) Which of the following represents the ring topology?

A) All devices are connected to a central cable or backbone.

B) All devices are connected to a central device, called a hub.

C) All devices are connected to one another in the shape of a closed loop, so that each device is connected directly to two other devices, one on either side of it.

D) Groups of star-configured workstations are connected to a linear bus backbone cable.

57) What is a protocol?

A) An intelligent connecting device that examines each packet of data it receives and then decides which way to send it onward toward its destination.

B) Refers to the geometric arrangement of the actual physical organization of the computers and other network devices) in a network.

C) A standard that specifies the format of data as well as the rules to be followed during transmission.

D) The capability of two or more computer systems to share data and resources, even though they are made by different manufacturers.

58) What allows files containing text, programs, graphics, numerical data, and so on to be downloaded off or uploaded onto a network?

A) File transfer protocol (FTP)

B) Simple mail transfer protocol (SMTP)

C) Hypertext transfer protocol (HTTP)

D) Simple network management protocol (SNMP)

59) What allows the management of networked nodes to be managed from a single point?

A) File transfer protocol (FTP)

B) Simple mail transfer protocol (SMTP)

C) Hypertext transfer protocol (HTTP)

D) Simple network management protocol (SNMP)

60) What is TCP/IP's own messaging system for email?

A) File transfer protocol (FTP)

B) Simple mail transfer protocol (SMTP)

C) Hypertext transfer protocol (HTTP)

D) Simple network management protocol (SNMP)

61) What allows Web browsers and servers to send and receive Web pages?

A) File transfer protocol (FTP)

B) Simple mail transfer protocol (SMTP)

C) Hypertext transfer protocol (HTTP)

D) Simple network management protocol (SNMP)

62) What refers to a type of cable composed of four (or more) copper wires twisted around each other within a plastic sheath?

A) Twisted-pair cable

B) Coaxial cable

C) Fiber-optic cable

D) Transmission control protocol/internet protocol

63) Which of the following represents the TCP/IP four-layer reference model?

A) Application, Internet, transport, network interfaces

B) Application, Internet, network interfaces, transport

C) Application, transport, Internet, network interfaces

D) Application, network interfaces, Internet, transport

64) How many layers does the OSI model contain?

A) Four

B) Seven

C) Ten

D) Eleven

65) Which of the following is not a commonly used type of guided media?

A) Twisted-pair wiring

B) Coaxial cable

C) Fiber-optic cable

D) Transmission control protocol/internet protocol

66) What refers to the various types of media used to carry the signal between computers?

A) Twisted-pair wiring

B) Network transmission media

C) Fiber-optic cable

D) Transmission control protocol/internet protocol

67) What is transmission material manufactured so that signals will be confined to a narrow path and will behave predictably?

A) Wire media

B) Network transmission media

C) Fiber-optic cable

D) Transmission control protocol/internet protocol

68) What refers to a type of cable composed of four copper wires twisted around each other within a plastic sheath?

A) Twisted-pair wiring

B) Network transmission media

C) Fiber-optic cable

D) Transmission control protocol/internet protocol

69) What is cable that can carry a wide range of frequencies with low signal loss?

A) Twisted-pair wiring

B) Coaxial cable

C) Fiber-optic cable

D) Transmission control protocol/internet protocol

70) What refers to the technology associated with the transmission of information as light impulses along a glass wire or fiber?

A) Twisted-pair wiring

B) Coaxial cable

C) Fiber-optic cable

D) Transmission control protocol/internet protocol

71) What refers to the technology associated with the transmission of information as light impulses along a glass wire or fiber?

A) Twisted-pair wiring

B) Coaxial cable

C) Fiber-optic cable

D) Wireless media

72) Compare LANs, WANs, and MANs.

73) List and describe the four components that differentiate networks.

74) Compare the two types of network architectures.

75) Explain topology and the different types found in networks.

76) Describe TCP/IP along with its primary purpose.

77) Identify the different media types found in networks