

1) At company social events, talking to people you don't know will help expand your business network only if you know how these new acquaintances can help you.

- a. True
- b. False

Answer: b

Diff: 2

Type: TF

Page Reference: 220

Topic: Q1

Skill: RECALL

2) According to the text, networking "weak" ties is not the best strategy for increasing the number of people in your network.

- a. True
- b. False

Answer: b

Diff: 3

Type: TF

Page Reference: 221

Topic: Q1

Skill: RECALL

3) Effective collaboration results are greater than any results produced by individuals working alone.

- a. True
- b. False

Answer: a

Diff: 1

Type: TF

Page Reference: 191

Topic: Q1

Skill: RECALL

4) A Local Area Network (LAN) would be used to connect computers located in Calgary and Montreal.

- a. True
- b. False

Answer: b

Diff: 2

Type: TF

Page Reference: 193

Topic: Q2

Skill: RECALL

5) An ISP functions as a gateway to the Internet.

a. True

b. False

Answer: a

Diff: 1

Type: TF

Page Reference: 199

Topic: Q5

Skill: RECALL

6) The 802.11b standard is the dominant WLAN standard today.

a. True

b. False

Answer: b

Diff: 2

Type: TF

Page Reference: 197

Topic: Q3

Skill: APPLIED

7) The fastest WLAN standard in use today is 802.11n.

a. True

b. False

Answer: a

Diff: 2

Type: TF

Page Reference: 196

Topic: Q3

Skill: RECALL

8) An analog signal is a digital format.

- a. True
- b. False

Answer: b

Diff: 2

Type: TF

Page Reference: 201

Topic: Q5

Skill: RECALL

9) A modem converts a TCP/IP signal to a wireless format.

- a. True
- b. False

Answer: b

Diff: 2

Type: TF

Page Reference: 203

Topic: Q5

Skill: RECALL

10) DSL stands for digital signal line and operates on the same lines as voice telephones and dial-up modems.

- a. True
- b. False

Answer: b

Diff: 2

Type: TF

Page Reference: 202

Topic: Q5

Skill: RECALL

11) An Access Point converts wired LAN to wireless LAN.

- a. True
- b. False

Answer: a

Diff: 2

Type: TF

Page Reference: 203

Topic: Q5

Skill: RECALL

12) Broadband lines include dial-up and cable modems.

a. True

b. False

Answer: b

Diff: 2

Type: TF

Page Reference: 202

Topic: Q5

Skill: RECALL

13) Narrowband transmission speeds typically do not exceed 56 kbps.

a. True

b. False

Answer: a

Diff: 2

Type: TF

Page Reference: 202

Topic: Q5

Skill: RECALL

14) Coaxial cable lines offer faster transmission speeds than optical fibre lines.

a. True

b. False

Answer: b

Diff: 2

Type: TF

Page Reference: 197

Topic: Q3

Skill: RECALL

15) Twisted pair copper lines are used in DSL modems.

- a. True
- b. False

Answer: a

Diff: 2

Type: TF

Page Reference: 203

Topic: Q5

Skill: RECALL

16) Satellite transmission is often part of a Wide Area Network (WAN).

- a. True
- b. False

Answer: a

Diff: 3

Type: TF

Page Reference: 197

Topic: Q3

Skill: RECALL

17) A Virtual Private Network (VPN) is a type of WAN.

- a. True
- b. False

Answer: a

Diff: 2

Type: TF

Page Reference: 209

Topic: Q7

Skill: RECALL

18) VPN stands for "Visual Protocol Network."

- a. True
- b. False

Answer: b

Diff: 1

Type: TF

Page Reference: 208

Topic: Q7

Skill: RECALL

19) A tunnel is a virtual, private pathway over a public or shared network from the VPN client to the VPN server.

a. True

b. False

Answer: a

Diff: 2

Type: TF

Page Reference: 209

Topic: Q7

Skill: RECALL

20) VPNs enable remote access with public Internet lines.

a. True

b. False

Answer: a

Diff: 3

Type: TF

Page Reference: 209

Topic: Q7

Skill: RECALL

21) ISPs cannot commit to offer performance-level guarantees to users.

a. True

b. False

Answer: b

Diff: 2

Type: TF

Page Reference: 202

Topic: Q5

Skill: RECALL

22) A web crawler is used to find and collect URLs.

- a. True
- b. False

Answer: a

Diff: 2

Type: TF

Page Reference: 210

Topic: Q8

Skill: RECALL

23) HTTPS is a protocol for secure communication over the Internet.

- a. True
- b. False

Answer: a

Diff: 2

Type: TF

Page Reference: 208

Topic: Q7

Skill: RECALL

24) With symmetric encryption, different keys are used; one key encodes the message, and the other key decodes the message.

- a. True
- b. False

Answer: b

Diff: 2

Type: TF

Page Reference: 208

Topic: Q7

Skill: RECALL

25) In symmetric encryption, the same key is used to encode and to decode.

- a. True
- b. False

Answer: a

Diff: 1

Type: TF

Page Reference: 208

Topic: Q7

Skill: RECALL

26) The network effect is the effect that the larger the number of people using the network the more valuable the network.

a. True

b. False

Answer: a

Diff: 1

Type: TF

Page Reference: 192

Topic: Q1

Skill: RECALL

27) Networks like LinkedIn are not limited in their growth.

a. True

b. False

Answer: b

Diff: 3

Type: TF

Page Reference: 193

Topic: Q1

Skill: APPLIED

28) GPS satellites operate using radio signals.

a. True

b. False

Answer: b

Diff: 2

Type: TF

Page Reference: 193

Topic: Q1

Skill: RECALL

29) Workflow Control is required in collaborative work so that one worker's work does not interfere with another worker's work.

- a. True
- b. False

Answer: a

Diff: 2

Type: TF

Page Reference: 191

Topic: Q1

Skill: RECALL

30) Communication skills and culture are critical factors in collaboration efforts.

- a. True
- b. False

Answer: a

Diff: 1

Type: TF

Page Reference: 191

Topic: Q1

Skill: RECALL

31) Smart phones combine powerful processors with only voice applications.

- a. True
- b. False

Answer: b

Diff: 2

Type: TF

Page Reference: 198

Topic: Q4

Skill: RECALL

32) In most LANs, the DHCP server assigns

- a. printer drivers.

- b. IP addresses.
- c. security warnings.
- d. routing signals.
- e. connections to the modem.

Answer: b

Diff: 2

Type: MC

Page Reference: 200

Topic: Q5

Skill: RECALL

33) Which of the following is an example of a protocol?

- a. GPS
- b. SDSL
- c. DNS
- d. WAN
- e. IEEE 802.3

Answer: e

Diff: 2

Type: MC

Page Reference: 196

Topic: Q3

Skill: RECALL

34) 1 Mbps stands for

- a. 1 048 576 bit per second.
- b. 1 000 000 000 bit per second.
- c. 1 073 741 824 bit per second.
- d. 1 000 000 bit per second.
- e. 1 000 bit per second.

Answer: d

Diff: 2

Type: MC

Page Reference: 196

Topic: Q3

Skill: RECALL

35) A network that reside in a single geographic location on the premises of the company is called a(n)

- a. LAN.
- b. SAN.
- c. Internet.
- d. WAN.
- e. Ethernet.

Answer: a

Diff: 1

Type: MC

Page Reference: 193

Topic: Q2

Skill: RECALL

36) Which of the following connects computers at different geographic locations?

- a. PTSN
- b. WAN
- c. SAN
- d. Ethernet
- e. LAN

Answer: b

Diff: 1

Type: MC

Page Reference: 193

Topic: Q2

Skill: RECALL

37) A _____ is a set of rules that two communicating devices follow.

- a. LAN
- b. WAN

- c. language
- d. standard
- e. protocol

Answer: e

Diff: 1

Type: MC

Page Reference: 194

Topic: Q3

Skill: RECALL

38) MAC stands for

- a. Maximum Access Control.
- b. Medium Access Control.
- c. Media Access Controls.
- d. Media Address Control.
- e. Media Access Control.

Answer: e

Diff: 2

Type: MC

Page Reference: 194

Topic: Q3

Skill: RECALL

39) Joel wants to connect his 5 home PCs together. Which of the following cables would best suit the purpose?

- a. Phone wires
- b. Unshielded twisted pair
- c. Shield twisted pair cable
- d. Coaxial cable
- e. Optical fibre cables

Answer: b

Diff: 2

Type: MC

Page Reference: 195

Topic: Q3

Skill: RECALL

40) Optical fibre cables carry signals with

- a. x-rays.
- b. electronic signals.
- c. light rays.
- d. magnetic waves.
- e. radio waves.

Answer: c

Diff: 1

Type: MC

Page Reference: 195

Topic: Q3

Skill: RECALL

41) The 802.11n standard allows speeds up to

- a. 216 Mbps.
- b. 248 Mbps.
- c. 256 Mbps.
- d. 54 Mbps.
- e. 108 Mbps.

Answer: b

Diff: 1

Type: MC

Page Reference: 196

Topic: Q30

Skill: RECALL

42) Which of the following is the device that allows users to connect to a wireless network?

- a. a hub
- b. a router

- c. a wireless gateway
- d. a switch
- e. an access point

Answer: e

Diff: 2

Type: MC

Page Reference: 197

Topic: Q3

Skill: RECALL

43) The difference between a SDSL connection and a ADSL connection is

- a. ADSL lines have different upload and download speeds.
- b. data transmission and voice transmission can occur at the same time with ADSL and not with SDSL.
- c. DSL lines have different upload and download speeds.
- d. ADSL and SDSL are the same.
- e. data transmission and voice transmission can occur at the same time with SDSL and not with ADSL.

Answer: a

Diff: 2

Type: MC

Page Reference: 202

Topic: Q5

Skill: RECALL

44) Narrowband connections typically have connection speeds

- a. less than 256 kbps.
- b. less than 128 kbps.
- c. great than 56 kbps.
- d. greater than 256 kbps.
- e. less than 56 kbps.

Answer: e

Diff: 1

Type: MC

Page Reference: 202

Topic: Q5

Skill: RECALL

45) Broadband connections typically have connection speeds

- a. greater than 256 kbps.
- b. less than 128 kbps.
- c. less than 56 kbps.
- d. less than 256 kbps.
- e. great than 56 kbps.

Answer: a

Diff: 2

Type: MC

Page Reference: 202

Topic: Q5

Skill: RECALL

46) Which of the following offers the same fast speed with both upload and download?

- a. Dialup
- b. Cable modem connection
- c. PSTN connection
- d. ADSL
- e. SDSL

Answer: e

Diff: 2

Type: MC

Page Reference: 202

Topic: Q5

Skill: RECALL

47) A(n) _____ uses the Internet or a private internet to create the appearance of private point-to-point connections

- a. ADSL

- b. YNPN
- c. VPN
- d. PSTN
- e. SDSL

Answer: c

Diff: 1

Type: MC

Page Reference: 208

Topic: Q7

Skill: RECALL

48) What is a web crawler?

- a. A software program that browses the web in a very methodical way.
- b. A software program that keeps track of changes on web sites.
- c. A software program that searches the web for content.
- d. A person who does research on behalf of law enforcement.
- e. A person who does research on the web on behalf of companies.

Answer: a

Diff: 2

Type: MC

Page Reference: 210

Topic: Q8

Skill: RECALL

49) Which of the following is an example of a packet switched network?

- a. SAN
- b. The Internet
- c. Ethernet
- d. LAN
- e. WLAN

Answer: b

Diff: 2

Type: MC

Page Reference: 206

Topic: Q6

Skill: RECALL

50) The Advanced Research Projects Agency Network (ARPANET) is funded by

- a. US Department of Defense.
- b. IBM.
- c. US Department of Commerce.
- d. Microsoft.
- e. NASA.

Answer: a

Diff: 1

Type: MC

Page Reference: 206

Topic: Q6

Skill: RECALL

51) A _____ must be used to convert an analog signal to a digital one, when trying to transmit data over a typical phone line.

- a. fibre optic switch
- b. modem
- c. frame relay
- d. tunnel
- e. SOHO

Answer: b

Diff: 2

Type: MC

Page Reference: 201

Topic: Q5

Skill: RECALL

52) A computer _____ is a collection of computers that communicate with one another through transmission media.

- a. server

- b. system
- c. application
- d. database
- e. network

Answer: e

Diff: 1

Type: MC

Page Reference: 193

Topic: Q2

Skill: RECALL

53) A(n) _____ uses the Internet or other networks to create the appearance of private point-to-point connections.

- a. SMTP
- b. ATM
- c. VPN
- d. Ethernet
- e. URL

Answer: c

Diff: 2

Type: MC

Page Reference: 209

Topic: Q7

Skill: RECALL

54) _____ is the most popular LAN standard.

- a. 802.11g
- b. UML
- c. Ethernet
- d. TCP/IP
- e. OSI

Answer: c

Diff: 1

Type: MC

Page Reference: 196

Topic: Q3

Skill: RECALL

55) _____ lines are most useful when an organization has large amounts of traffic between two sites.

- a. Twisted pair
- b. optic fibre
- c. Private
- d. Leased
- e. WAN

Answer: d

Diff: 3

Type: MC

Page Reference: 203

Topic: Q5

Skill: RECALL

56) _____ consist of connected computers at a single organizational site.

- a. Tunnels
- b. WLANs
- c. LANs
- d. VPNs
- e. WANs

Answer: c

Diff: 2

Type: MC

Page Reference: 193

Topic: Q2

Skill: RECALL

57) Mobile banking and mobile ticket purchases are examples of

- a. packet processing.

- b. advanced SDSL.
- c. optical fibre cables.
- d. the network effect.
- e. m-commerce.

Answer: e

Diff: 2

Type: MC

Page Reference: 198

Topic: Q4

Skill: RECALL

58) A(n) _____ connects computers at different geographic locations.

- a. WIAN
- b. LAN
- c. GPS SYSTEM
- d. WAN
- e. root server

Answer: d

Diff: 2

Type: MC

Page Reference: 193

Topic: Q2

Skill: RECALL

59) The _____ is a network of networks.

- a. Internet
- b. intranet
- c. WAN
- d. LAN
- e. transmission network

Answer: a

Diff: 2

Type: MC

Page Reference: 194

Topic: Q2

Skill: RECALL

60) The computers on _____ are usually within a kilometre of each other.

- a. a WAN
- b. a root server
- c. the Internet
- d. a LAN
- e. a system

Answer: d

Diff: 1

Type: MC

Page Reference: 194

Topic: Q2

Skill: RECALL

61) DSL connection is implemented in _____ media.

- a. optical fibre cable
- b. UTP
- c. wireless
- d. Ethernet
- e. transmission

Answer: b

Diff: 3

Type: MC

Page Reference: 195

Topic: Q3

Skill: RECALL

62) Computers and printers on a LAN are connected to a _____ to communicate and transmit messages on the LAN.

- a. routing table
- b. switch

- c. root server
- d. http server
- e. TLD

Answer: b

Diff: 3

Type: MC

Page Reference: 194

Topic: Q3

Skill: RECALL

63) IEEE 802.3 is the most popular LAN _____ in use today.

- a. switch
- b. architecture
- c. protocol
- d. encryption
- e. TLD

Answer: c

Diff: 1

Type: MC

Page Reference: 196

Topic: Q3

Skill: RECALL

64) _____ transmits signals using light rays.

- a. Coaxial cable
- b. Radiowaves
- c. Microwaves
- d. Optical fibre cable
- e. UTP

Answer: d

Diff: 2

Type: MC

Page Reference: 195

Topic: Q3

Skill: RECALL

65) In order for a printer or laptop to connect to a wireless LAN they must have a

- a. PPP.
- b. NIC.
- c. WNIC.
- d. browser.
- e. switch.

Answer: c

Diff: 3

Type: MC

Page Reference: 196

Topic: Q3

Skill: RECALL

66) The use of _____ allows us to be connected with anything, anywhere, and at any time.

- a. NICs.
- b. switch.
- c. routing tables.
- d. smartphones.
- e. access point.

Answer: d

Diff: 2

Type: MC

Page Reference: 198

Topic: Q4

Skill: RECALL

67) A(n) _____ provides you with a legitimate Internet address and serves as your gateway to the Internet.

- a. SMTP
- b. VPN

- c. switch
- d. TCP/IP
- e. ISP

Answer: e

Diff: 1

Type: MC

Page Reference: 199

Topic: Q5

Skill: RECALL

68) _____ is the fastest WLAN standard today.

- a. 802.11b
- b. 802.3
- c. 802.11a
- d. 802.11n
- e. 802.11g

Answer: d

Diff: 3

Type: MC

Page Reference: 196

Topic: Q3

Skill: RECALL

69) _____ is good for homes and small businesses because they receive more data than they transmit.

- a. DSL
- b. UTP
- c. Optical fibre
- d. SDSL
- e. ADSL

Answer: e

Diff: 3

Type: MC

Page Reference: 202

Topic: Q5

Skill: RECALL

70) WWANs

- a. are no bigger than a kilometer across.
- b. are bigger than WLANs but slower.
- c. are run on optical fibre.
- d. use the 10/100/1000 standard.
- e. are bigger than WLANs and use cellular networks.

Answer: e

Diff: 2

Type: MC

Page Reference: 202

Topic: Q5

Skill: RECALL

71) _____ provide the fastest data transmission speeds.

- a. Optical fibre cables
- b. Microwaves
- c. UTP
- d. Twisted pair lines
- e. Coaxial cables

Answer: a

Diff: 2

Type: MC

Page Reference: 197

Topic: Q3

Skill: RECALL

72) In the TCP/IP system, Layer 4 is used to

- a. describe the communications equipment.
- b. pass data between programs and the transport layer.

- c. control packet organization.
- d. control the wireless devices in the network.
- e. open the connections and maintain them.

Answer: b

Diff: 3

Type: MC

Page Reference: 204

Topic: Q6

Skill: RECALL

73) _____ make(s) the internet efficient and resilient.

- a. Network Address Translation Protocol.
- b. VPNs
- c. File Transfer Protocols.
- d. Web browsers
- e. Packet switching

Answer: e

Diff: 2

Type: MC

Page Reference: 206

Topic: Q6

Skill: RECALL

74) A DSL modem that is always connected is _____ than a dial-up modem.

- a. more latent
- b. more robust
- c. more practical
- d. faster
- e. more secure

Answer: d

Diff: 2

Type: MC

Page Reference: 202

Topic: Q5

Skill: RECALL

75) Which of the following applies to asymmetric encryption?

- a. One key encodes the message, one key decodes the message.
- b. It is used in IM.
- c. It is simpler than symmetric encryption.
- d. It is faster than symmetric encryption.
- e. Only one key is used.

Answer: a

Diff: 2

Type: MC

Page Reference: 208

Topic: Q7

Skill: RECALL

76) HTTPS and SSL/TLS utilize which of the following?

- a. a combination of public key/private key and symmetric encryption
- b. a combination of public key/private key and asymmetric encryption
- c. private keys only
- d. asymmetric encryption
- e. public keys only

Answer: a

Diff: 3

Type: MC

Page Reference: 208

Topic: Q7

Skill: RECALL

77) According to the text, "weak ties" can

- a. connect us to the same number of people as strong links.
- b. hinder our networking abilities.
- c. be a hindrance for connecting to everyone in six degrees.

- d. be crucial to connecting you to everyone in six degrees.
- e. be impossible in social settings.

Answer: d

Diff: 2

Type: MC

Page Reference: 222

Topic: Q1

Skill: APPLIED

78) The Internet is a

- a. LAN.
- b. WAN.
- c. ISP.
- d. HTTP.
- e. DSL.

Answer: b

Diff: 1

Type: MC

Page Reference: 200

Topic: Q5

Skill: RECALL

79) When using Google Docs in a collaborative group project, workflow control ensures

- a. all members know how to use the applications.
- b. all members have access to the applications.
- c. the network is up and functioning.
- d. one member's work does not interfere with another member's work.
- e. the project work gets completed.

Answer: d

Diff: 3

Type: MC

Page Reference: 192

Topic: Q1

Skill: APPLIED

80) Many organization use collaboration because

- a. it takes advantages of business graduates excellent communication skills.
- b. the infrastructure to use collaboration exist in the organization.
- c. it makes for more effective business processes.
- d. workflow control software exists.
- e. the results can be greater than the results produced by a single individual.

Answer: e

Diff: 2

Type: MC

Page Reference: 191

Topic: Q1

Skill: RECALL

81) By expanding your personal professional network on LinkedIn

- a. you are creating a local network.
- b. you are taking advantage of network externalities.
- c. you are taking advantages of your professional contacts.
- d. you are taking advantages of technology.
- e. you have joined the trend of collaboration.

Answer: b

Diff: 3

Type: MC

Page Reference: 192

Topic: Q1

Skill: APPLIED

82) Smartphones

- a. are cellular phones.
- b. are enabling new applications, such as T-commerce.
- c. are enabling Internet connections through only Wi-Fi.
- d. are small computers with a restricted variety of services.

e. have not seen any real agreement as to what they exactly are.

Answer: e

Diff: 3

Type: MC

Page Reference: 198

Topic: Q4

Skill: RECALL

83) Any text sent via https is encrypted and therefore is relatively safe.

Diff: 2

Type: FIB

Page Reference: 208

Topic: Q7

Skill: RECALL

84) A(n) VPN uses the Internet or other network to create the appearance of private, point-to-point connections.

Diff: 2

Type: FIB

Page Reference: 209

Topic: Q7

Skill: RECALL

85) Network devices have two addresses; a physical MAC address and a logical IP address.

Diff: 3

Type: FIB

Page Reference: 200; 194

Topic: Q5

Skill: APPLIED

86) A collection of computers that communicate with one another via transmission media is called a(n) network.

Diff: 1

Type: FIB

Page Reference: 193

Topic: Q2

Skill: RECALL

87) A(n) modem is a device that converts digital signals to analog signals.

Diff: 1
Type: FIB
Page Reference: 201
Topic: Q5
Skill: RECALL

88) A(n) LAN connects computers that reside in a single geographic location.

Diff: 1
Type: FIB
Page Reference: 193
Topic: Q2
Skill: RECALL

89) On of the four critical factors in the effectiveness of collaboration is content management.

Diff: 3
Type: FIB
Page Reference: 191
Topic: Q1
Skill: RECALL

90) Computers at different geographic locations are connected with a(n) WAN.

Diff: 1
Type: FIB
Page Reference: 193
Topic: Q2
Skill: RECALL

91) A network of networks is known as a(n) internet.

Diff: 1
Type: FIB
Page Reference: 194
Topic: Q2
Skill: RECALL

92) The MAC address is a unique identifier built into the NIC when it is manufactured.

Diff: 3
Type: FIB
Page Reference: 194

Topic: Q3
Skill: RECALL

93) A(n) switch connects printers, and computers to a LAN and has a unique identifier.

Diff: 3
Type: FIB
Page Reference: 194
Topic: Q3
Skill: RECALL

94) At least one access point is required for a(n) wireless network.

Diff: 3
Type: FIB
Page Reference: 197
Topic: Q3
Skill: RECALL

95) A WAN alternative that uses the Internet or a private internet to create the appearance of private point-to-point connections is called a(n) VPN.

Diff: 3
Type: FIB
Page Reference: 197
Topic: Q3
Skill: RECALL

96) A(n) tunnel is a virtual private pathway over a public or shared network from the VPN client to the VPN server.

Diff: 3
Type: FIB
Page Reference: 209
Topic: Q7
Skill: RECALL

97) To ensure security, VPN client software encrypts the original message so that its contents are hidden.

Diff: 2
Type: FIB
Page Reference: 209
Topic: Q7
Skill: APPLIED

98) A(n) key is a tool used to encrypt data.

Diff: 2

Type: FIB

Page Reference: 208

Topic: Q7

Skill: RECALL

99) In general, the people you know the least, contribute the most to your social network.

Diff: 1

Type: FIB

Page Reference: 221-222

Topic: Q1

Skill: APPLIED

100) In social network theory, weak ties often contribute the most to your social network.

Diff: 2

Type: FIB

Page Reference: 222

Topic: Q1

Skill: RECALL

101) Every business, every organization, needs to be thinking about the ubiquitous and cheap connectivity that is growing exponentially.

Diff: 3

Type: FIB

Page Reference: 216

Topic: Q1

Skill: RECALL

102) Knowing the basic terminology of computer networks and how they work makes you a more informed user of computer networks.

Diff: 2

Type: FIB

Page Reference: 191

Topic: Q1

Skill: APPLIED

103) Collaboration involves coordination and communication and often makes use of computer networks.

Diff: 3

Type: FIB

Page Reference: 191

Topic: Q1

Skill: RECALL

104) Copper wire, optical fibre, and radio frequencies can be referred to as transmission media.

Diff: 2

Type: FIB

Page Reference: 193

Topic: Q2

Skill: RECALL

105) When deciding if a search engine will be efficient in getting search results, consider breadth of coverage and the ordering of results.

Diff: 3

Type: FIB

Page Reference: 211

Topic: Q8

Skill: RECALL

106) Since most search engines are operated by private for-profit companies, one must also consider the effect of advertisers on their positioning in search results.

Diff: 3

Type: FIB

Page Reference: 211

Topic: Q8

Skill: RECALL

107) M-Commerce applications allow mobile phones to conduct certain types of transactions.

Diff: 1

Type: FIB

Page Reference: 198

Topic: Q4

Skill: RECALL

108) What is the difference between a *network* and a *human network* and why is the second very important?

Answer:

A computer network is a collection of computers that communicate with one another over transmission lines. The three basic types of networks are LANs, WANs, and internets. A

human network is a collection of social connections. Most successful professionals build their own human networks because they know that there are many people that can help them in various situations and who may likewise need their help. These professionals attend social events, collect and pass out cards, and engage in pleasant conversation to expand their networks. Helping each other serves to strengthen the personal bonds of your network when you know you can rely on someone in certain situations (e.g., finding information, getting a job).

Diff: 2

Type: ES

Page Reference: 219

Topic: Q1

Skill: APPLIED

109) What is the difference between a LAN and a WAN? Give an example of how each one could be used in business.

Answer:

A local area network (LAN) connects computers that reside in a single geographic location on the premises of the company that operates the LAN. Wide area networks (WANs) connect computers at different geographic locations. The computers in two separate company sites can be connected using a WAN. With a LAN the number of connected computers can range from two to several hundred, but they are still in a single location (usually within a building or floor of a building). Most small businesses have a LAN in place in their office that connects them. A university campus uses a backbone (usually fibre optic) and connects all the different buildings on the campus and possibly multiple campuses on the university's WAN.

Diff: 2

Type: ES

Page Reference: 193

Topic: Q2

Skill: APPLIED

110) What is a NIC and a WNIC? Why are they important in a LAN?

Answer:

A NIC is a Network Interface Card and a WNIC is a Wireless Network Interface Card. Each device that is connected to a LAN must have a NIC so that the device can send and receive messages with its unique address. In a wireless LAN the devices connect via a WNIC instead of a regular NIC.

Diff: 2

Type: ES

Page Reference: 194

Topic: Q3

Skill: RECALL

111) What is a VPN and how does it work? Give an example of how it is used in business.

Answer:

VPN stands for a "virtual private network." This is one alternative to a WAN. A VPN takes advantage of the Internet or leased lines to create the appearance of private, point-to-point connections. Being "virtual" simply means that it appears to exist to the users, but does not actually exist. In business, if a manufacturer needs to maintain a steady connection to their suppliers, they might set up a VPN with them. This is because they are more stable and offer much better security, yet they are relatively inexpensive and quite flexible and easy to set up.

Diff: 2

Type: ES

Page Reference: 208-209

Topic: Q7

Skill: APPLIED

112) Describe two different WAN alternatives.

Answer:

By definition a WAN connects computers that are at physically separate sites. Connecting to the Internet, either through a dial-up, DSL, or cable modem is an example of one WAN topology. If higher speeds, greater bandwidth and higher security are needed, many large corporations will use a PSDN, or public switched data network. This is a combination of computers and leased lines set up by a vendor who sells time on them to corporations.

Diff: 3

Type: ES

Page Reference: 197

Topic: Q3

Skill: RECALL

113) Public key/private key is a special version of asymmetric encryption that is very popular on the Internet. Describe what is meant by both public key and private key. How are they used on the Internet to provide security?

Answer:

In cryptography, a public key is a value provided by some designated authority as an encryption key. When the public key is combined with a private key, it can be used to effectively encrypt messages and digital signatures. The use of combined public and private keys is known as asymmetric cryptography. A system for using public keys is called a public key infrastructure (PKI).

In cryptography, a private or secret key is an encryption/decryption key known only to the party or parties that exchange encrypted messages. In traditional secret key cryptography, a key would be shared by the communicators so that each could encrypt and decrypt messages. The risk in this system is if either party loses the key or it is stolen, the system is broken. A more recent alternative is to use a combination of public and private keys.

Diff: 3

Type: ES

Page Reference: 208

Topic: Q7

Skill: APPLIED

114) The Internet has probably decreased the number of degrees that separate us from everyone else. Why is this so? Could it also increase our separation? Why or why not?

Answer:

This is a question with many right answers. The student should simply demonstrate an understanding and consideration of the material. Certainly the Internet has caused an unprecedented increase in the connections among people for personal as well as professional reasons. Depending on the size of your mailing list, one stroke of a key can send an e-mail to thousands of people. A Web page can generate even more connections with little effort. This means an increase in efficiency in terms of time spent per connection made. The quality of the connection however, may be lacking. Students could argue that meeting people in person may often be much more effective than e-mail, depending on the situation. Even phone conversations can be more effective in certain relationships. Maybe our time spent on the Internet actually limits our direct connection to people.

Diff: 3

Type: ES

Page Reference: 221-222

Topic: Q1

Skill: APPLIED

115) What is the Domain Name System?

Answer:

The purpose of a DNS is to convert human-friendly URLs into computer-friendly IP addresses.

Diff: 1

Type: ES

Page Reference: 201

Topic: Q5

Skill: RECALL

116) What is a packet-filtering firewall?

Answer:

A packet-filtering firewall examine each part of a message and determine whether or let that part pass. To make this decision, it examines the source address, the destination address(es), and other data. Packet-filtering firewalls can prohibit outsiders from starting a session with any user behind the firewall. They can disallow traffic from particular sites, such as known hacker addresses.

Diff: 2

Type: ES

Page Reference: 207

Topic: Q7

Skill: RECALL

117) Explain the difference between a narrowband and a broadband connection.

Answer:

Narrowband lines typically have transmission speeds less than 56 kbps; broadband line have speeds in excess of 256 kbps.

Diff: 1

Type: ES

Page Reference: 203

Topic: Q5

Skill: RECALL

118) What is the difference between a private IP and a public IP?

Answer:

Public IP addresses are used on the Internet. Private IP addresses are used only by the company that operates the private network or intranet.

Diff: 1

Type: ES

Page Reference: 201

Topic: Q5

Skill: RECALL

119) What is the purpose of a DHCP server?

Answer:

A DHCP server assigns an IP number for a computer to use.

Diff: 2

Type: ES

Page Reference: 201

Topic: Q5

Skill: RECALL

120) What are the typical options for a home user to connect to the Internet?

Answer:

1) Dial-up connection 2) ADSL connection 3) Cable modem connection 4) wireless network

Diff: 1

Type: ES

Page Reference: 201-202

Topic: Q5

Skill: RECALL

121) What are the components of a LAN?

Answer:

A LAN is a group of computers connected together on a single company site, usually located within a kilometer or so. A LAN usually has computers and printers connected

via a **switch**, which receives and transmits messages on the LAN. Each device on a LAN has a **network interface card** (NIC) that connects the device's circuitry to the network cable. Newer machines have **onboard NICs**, which is a NIC built into the computer. Each NIC has a unique identifier, which is called the **MAC (media access control) address**. The computers, printers, switches, and other devices on a LAN are connected using one of two media. Most connections are made using **unshielded twisted pair (UTP) cable**. Other connections that required higher speed use **optical fibre cables**.

Diff: 2

Type: ES

Page Reference: 194

Topic: Q3

Skill: RECALL

122) Describe how a VPN works.

Answer:

A VPN uses the Internet or a private internet to create the appearance of private point-to-point connections.

Diff: 2

Type: ES

Page Reference: 208

Topic: Q7

Skill: RECALL