

# TEST BANK



## Chapter 2: Communications, Networks, the Internet, and the World Wide Web

### MULTIPLE CHOICE

1. A \_\_\_\_\_ is the path that data follows as data is transmitted.
- a. communications channel
  - b. transmission media
  - c. twisted-pair cable
  - d. all of the above

ANS: A                      PTS: 1                      REF: 62

2. \_\_\_\_\_ signals are individual electrical pulses that a computer uses to represent data.
- a. Analog
  - b. Bi-directional
  - c. Digital
  - d. Modem

ANS: C                      PTS: 1                      REF: 62

3. \_\_\_\_\_ signals are signals that are comprised of a continuous electrical wave.
- a. Analog
  - b. Bi-directional
  - c. Digital
  - d. Modem

ANS: A                      PTS: 1                      REF: 62

4. For telephone lines to carry data, a communications device called a(n) \_\_\_\_\_ is used to convert digital signals to analog signals.
- a. converter
  - b. conversion device
  - c. analog converter
  - d. modem

ANS: D                      PTS: 1                      REF: 62

5. Networked computers contain a(n) \_\_\_\_\_ to connect directly to a network.
- a. modem
  - b. conversion card
  - c. network interface card
  - d. analog/digital interface card

ANS: C                      PTS: 1                      REF: 64



Figure 2-1

6. The figure above is an example of a \_\_\_\_\_ network.
- a. wide area
  - b. interface
  - c. digital
  - d. home

ANS: D                      PTS: 1                      REF: 64

7. A \_\_\_\_\_ LAN is a LAN that uses media such as radio waves rather than wires.
- a. wireless
  - b. wirefree
  - c. wired
  - d. wire

ANS: A                      PTS: 1                      REF: 64

8. A(n) \_\_\_\_\_ covers a large geographical region.
- a. local area network
  - b. wide area network
  - c. analog network
  - d. all of the above

ANS: B                      PTS: 1                      REF: 64

9. A(n) \_\_\_\_\_ covers a limited geographical region such as a school.
- a. local area network
  - b. wide area network
  - c. analog network
  - d. all of the above

ANS: A                      PTS: 1                      REF: 64

10. The world's largest network is called the \_\_\_\_\_.
- a. LAN
  - b. WAN
  - c. Internet
  - d. World Wide Web

ANS: C                      PTS: 1                      REF: 69

11. The Internet has its roots in a networking project started by the U.S. Department of Defense's \_\_\_\_\_.
- a. Armament Readiness Preparation Association
  - b. American Resource Protection Act
  - c. Advanced Research Projects Agency
  - d. Anticipated Resistance Provisional Alert

ANS: C                      PTS: 1                      REF: 71

12. \_\_\_\_\_ is a technique of breaking a message into individual packets.
- a. Packet changing
  - b. TCP/IP
  - c. Message switching
  - d. Packet switching

ANS: D                      PTS: 1                      REF: 74

13. A \_\_\_\_\_ is a business that provides Internet access to a specific geographic area.
- a. local ISP
  - b. national ISP
  - c. regional ISP
  - d. international ISP

ANS: C                      PTS: 1                      REF: 74

14. \_\_\_\_\_ provides Internet connection from any home, school, or office using an electrical outlet.
- a. Power line communication (PLC)
  - b. Digital subscriber line (DLS)
  - c. Public access point (PAP)
  - d. Electric line communication (ELC)

ANS: A                      PTS: 1                      REF: 76

15. Most Web pages contain \_\_\_\_\_, which are built-in connections to other related Web pages.
- a. hyperlinks or links
  - b. hypertext or text
  - c. hyperbonds or bonds
  - d. hyperties or ties

ANS: A                      PTS: 1                      REF: 78

16. A collection of related Web pages that can be accessed electronically is called a \_\_\_\_\_.
- a. Web site
  - b. home page
  - c. Web server
  - d. Web browser

ANS: A                      PTS: 1                      REF: 78

17. A \_\_\_\_\_, which is similar to a book cover or table of contents, provides information about the purpose and content of a collection of Web pages.
- a. Web site
  - b. home page
  - c. Web server
  - d. Web browser

ANS: B                      PTS: 1                      REF: 78

18. A \_\_\_\_\_ is a computer that delivers requested Web pages.
- a. Web site
  - b. home page
  - c. Web server
  - d. Web browser

ANS: C                      PTS: 1                      REF: 79

19. Displaying pages from one Web site after another is called \_\_\_\_\_.
- a. crunching the Web
  - b. cruising the Web
  - c. surfing the Web
  - d. Web browsing

ANS: C                      PTS: 1                      REF: 79

20. Web pages can be accessed and viewed using a software program called a \_\_\_\_\_.
- a. Web site
  - b. home page
  - c. Web server
  - d. Web browser

ANS: D                      PTS: 1                      REF: 80

21. A \_\_\_\_\_ records the pages viewed while you are online.
- a. bookmark list
  - b. favorites list
  - c. address list
  - d. history list

ANS: D                      PTS: 1                      REF: 81

22. \_\_\_\_\_ was/were the first media used to enhance the text-based Internet.
- a. Graphics
  - b. Animation
  - c. Audio
  - d. Virtual reality

ANS: A                      PTS: 1                      REF: 84

23. \_\_\_\_\_ is/are the appearance of motion created by displaying a series of still images in rapid sequence.
- a. Graphics
  - b. Animation
  - c. Audio
  - d. Virtual reality

ANS: B                      PTS: 1                      REF: 85

24. Simple \_\_\_\_\_ applications consist of individual sound files that must be downloaded completely before they can be played.
- a. Web graphics
  - b. Web audio
  - c. Web text
  - d. Web video
- ANS: B                      PTS: 1                      REF: 86
25. \_\_\_\_\_ enables you to listen to the sound file as it downloads to your computer.
- a. Streaming audio
  - b. Audio marquee
  - c. Web sound
  - d. Web player
- ANS: A                      PTS: 1                      REF: 86
26. Simple \_\_\_\_\_ applications consist of individual files, such as movie or television clips, that must be downloaded completely before they can be played on a computer.
- a. Web graphics
  - b. Web audio
  - c. Web text
  - d. Web video
- ANS: D                      PTS: 1                      REF: 87
27. \_\_\_\_\_ is/are the simulation of a real or imagined environment that appears as a three-dimensional (3-D) space.
- a. Graphics
  - b. Animation
  - c. Audio
  - d. Virtual reality
- ANS: D                      PTS: 1                      REF: 87
28. \_\_\_\_\_ was/were one of the original services on the Internet, enabling scientists and researchers working on government-sponsored projects to communicate with colleagues at other locations.
- a. E-mail
  - b. Netiquette
  - c. Cookies
  - d. Search engines
- ANS: A                      PTS: 1                      REF: 88
29. Using a(n) \_\_\_\_\_ program, messages can be created, sent, received, forwarded, stored, printed, and deleted.
- a. Telnet
  - b. e-mail
  - c. FTP
  - d. newsreader
- ANS: B                      PTS: 1                      REF: 88
30. A(n) \_\_\_\_\_ is a computer that allows users to upload and download files using FTP.
- a. FTP site
  - b. FTP page
  - c. FTP server
  - d. FTP program
- ANS: D                      PTS: 1                      REF: 90
31. A(n) \_\_\_\_\_ is a collection of files including text, graphics, audio, video, and program files.
- a. FTP site
  - b. FTP page
  - c. FTP server
  - d. FTP program
- ANS: A                      PTS: 1                      REF: 90
32. A newsreader enables a user to access a newsgroup to read a previously entered message, called a(n) \_\_\_\_\_.
- a. article
  - c. submission



ANS: B

PTS: 1

REF: 94

## MULTIPLE RESPONSE

### Modified Multiple Choice

1. A basic communications system consists of \_\_\_\_\_.
  - a. two computers, one to send and one to receive data
  - b. communications devices that send and receive data
  - c. a communications channel over which data is sent
  - d. programs that manage the transmission of data between computers

ANS: A, B, C, D

PTS: 1

REF: 62

2. The Internet is used to \_\_\_\_\_.
  - a. Access information, news, research and educational material
  - b. Send or receive messages from other connected users
  - c. Meet and converse with people around the world
  - d. Explore virtual worlds

ANS: A, B, C, D

PTS: 1

REF: 69

3. Virtual Reality is used for which of the following practical applications? \_\_\_\_\_.
  - a. transmitting messages, graphics, and other attachments via a computer network
  - b. creating models of molecules, organisms, and other structures for students to examine
  - c. showcasing company products or creating advertisements
  - d. creating architectural models to show clients how a completed project will look

ANS: B, C, D

PTS: 1

REF: 87

4. A(n) \_\_\_\_\_ is a real-time typed conversation that takes place on a computer.
  - a. Instant message
  - b. portal
  - c. thread
  - d. chat

ANS: A, D

PTS: 1

REF: 92

5. \_\_\_\_\_ is the code of acceptable behaviors users should follow while on the Internet.
  - a. Emily Post
  - b. Internet etiquette
  - c. Netiquette
  - d. Internet Protocol

ANS: B, C

PTS: 1

REF: 94

## TRUE/FALSE

1. Communications refers to the transmission of data and information between two or more computers using a communications channel such as standard telephone lines.

ANS: T

PTS: 1

REF: 61

2. Networks and media that use broadband technologies transmit signals at much slower speeds than traditional network configurations.

ANS: F

PTS: 1

REF: 68

3. Internet2 (I2) is an extremely high-speed network that develops and tests advanced Internet technologies for research, teaching, and learning.

ANS: T                      PTS: 1                      REF: 73

4. If data packets arrive out of sequence, the destination computer is unable to reassemble the original message.

ANS: F                      PTS: 1                      REF: 73

5. Data sent over the Internet travels via networks and communications lines owned and operated by a single company.

ANS: F                      PTS: 1                      REF: 74

6. Fees for using an online service usually are slightly lower than fees for an ISP.

ANS: F                      PTS: 1                      REF: 74

7. DSL can provide Internet access from 25 to 150 times faster than dial-up access.

ANS: T                      PTS: 1                      REF: 76

8. Each computer's location on the Internet has a specific numeric address consisting of five groups of numbers.

ANS: F                      PTS: 1                      REF: 77

9. The text version of a computer address is called a domain name.

ANS: T                      PTS: 1                      REF: 77

10. Although few people use the terms World Wide Web and Internet interchangeably, the World Wide Web is the only service available on the Internet.

ANS: F                      PTS: 1                      REF: 78

11. While the World Wide Web was developed in the late 1960s, the Internet came into existence less than a decade ago — in the early 1990s.

ANS: F                      PTS: 1                      REF: 78

12. Branching off and investigating related topics as you encounter them is a nonlinear way of learning known as Web surfing.

ANS: F                      PTS: 1                      REF: 79

13. To develop a Web page, it is necessary to be a computer programmer — and to learn advanced HTML.

ANS: F                      PTS: 1                      REF: 80

14. Web pages that use multimedia elements often include links to Web sites that contain the required plug-in or helper.



ANS: T                   PTS: 1                   REF: 83

15. One Accepted standard for transmitting video data on the Internet is RealAudio, which is supported by most current Web browsers.

ANS: F                   PTS: 1                   REF: 87

16. Streaming video does not have much potential for school use.

ANS: F                   PTS: 1                   REF: 87

17. A VR world is an entire 3-D site containing infinite space and depth.

ANS: T                   PTS: 1                   REF: 87

18. E-mail has become a primary communications method for both personal and business use.

ANS: T                   PTS: 1                   REF: 88

19. Many FTP sites allow anonymous FTP, whereby anyone can transfer some, if not all, available files.

ANS: T                   PTS: 1                   REF: 90

20. Many universities, corporations, ISPs, online services, and other large organizations have a news server.

ANS: T                   PTS: 1                   REF: 91

21. There is no difference between a newsgroup and a mailing list.

ANS: F                   PTS: 1                   REF: 91

22. Voice over IP allows users to speak to other users over the Internet using their computer or mobile device.

ANS: T                   PTS: 1                   REF: 93

23. Once a chat client has been installed, conversations can be created or joined on a chat server.

ANS: T                   PTS: 1                   REF: 93

24. An Acceptable Use Policy (AUP) is an outline of user standards that reminds teachers, students, and parents that they are guests on the Internet.

ANS: T                   PTS: 1                   REF: 94

25. Someday a single, integrated network may exist to carry telephone, television, radio and the Internet.

ANS: T                   PTS: 1                   REF: 96

#### **MODIFIED TRUE/FALSE**

1. Twisted-pair cable consists of pairs of plastic-coated fiber-optic wires twisted together. \_\_\_\_\_

ANS: F, copper

PTS: 1 REF: 62

2. Telephone equipment originally was designed to carry only voice transmission, which is comprised of a continuous electrical wave called a digital signal. \_\_\_\_\_

ANS: F, an analog

PTS: 1 REF: 62

3. A local area network (LAN) covers a large geographical region, such as a city or school district.  
\_\_\_\_\_

ANS: F, limited

PTS: 1 REF: 64

4. The original ARPANET was a local area network consisting of four main computers. \_\_\_\_\_

ANS: F, wide

PTS: 1 REF: 72

5. When using Internet telephony, the spoken words are converted to analog signals. \_\_\_\_\_

ANS: F, digital

PTS: 1 REF: 93

## COMPLETION

1. A(n) communications \_\_\_\_\_ is a collection of computers and devices organized to share data, information, hardware, and software.

ANS: network

PTS: 1 REF: 62

2. A(n) \_\_\_\_\_ covers a large geographical region, such as a city or school district.

ANS:  
wide area network  
WAN

PTS: 1 REF: 64

3. A(n) \_\_\_\_\_ manages the resources on a network and provides a centralized storage area for software programs and data.

ANS: server

PTS: 1                    REF: 64

4. In a network, a(n) \_\_\_\_\_ is the main computer in a network of computers connected by communications links.

ANS: host

PTS: 1                    REF: 72

5. A(n) \_\_\_\_\_ is a high-speed network that connects regional and local networks to the Internet.

ANS: backbone

PTS: 1                    REF: 72

6. The technique of breaking a message into packets, sending the packets along the best route available, and then reassembling the data is called \_\_\_\_\_.

ANS: packet switching

PTS: 1                    REF: 74

7. The protocol used to define packet switching on the Internet is a communications protocol known as \_\_\_\_\_.

ANS:  
TCP/IP  
transmission control protocol/Internet protocol

PTS: 1                    REF: 74

8. A(n) \_\_\_\_\_ is an organization that has a permanent Internet connection and provides temporary connections to individuals and companies for a fee.

ANS: Internet service provider (ISP)

PTS: 1                    REF: 74

9. Each Web page on a Web site has a unique address, called a(n) \_\_\_\_\_.

ANS: Uniform Resource Locator (URL)

PTS: 1                    REF: 78

10. A(n) \_\_\_\_\_ hyperlink links to another document on a different Internet computer that could be across the country or across the world..

ANS: absolute

PTS: 1                    REF: 79

11. HTML codes, called \_\_\_\_\_, specify how Web page text and other elements display in a browser and where the links lead.

ANS: tags

PTS: 1 REF: 80

12. A(n) \_\_\_\_\_ is a program that interprets HTML and displays Web pages and enables users to link to other Web pages and Web sites.

ANS:  
Web browser  
browser

PTS: 1 REF: 80

13. Bookmark lists, also called \_\_\_\_\_, are stored on your computer and may be used in future Web sessions.

ANS: favorites

PTS: 1 REF: 81

14. Text that is animated to scroll across the Web page screen, called a(n) \_\_\_\_\_, can serve as a ticker to display stock updates, news, sports scores, or weather.

ANS: marquee

PTS: 1 REF: 85

15. \_\_\_\_\_ enables a user to listen to the sound file from a Web page as it downloads to a computer.

ANS: Streaming audio

PTS: 1 REF: 86

16. \_\_\_\_\_ is the simulation of a real or imagined environment that appears as a three-dimensional space.

ANS: Virtual reality (VR)

PTS: 1 REF: 87

17. An original newsgroup article and all subsequent related replies are called a(n) \_\_\_\_\_.

ANS:  
thread  
threaded discussion

PTS: 1 REF: 91

18. \_\_\_\_\_ means that chat users and the people with whom they are conversing must be online at the same time.

ANS: Real time

PTS: 1

REF: 92



**Figure 2-2**

19. The Figure above illustrates a user's equipment configuration for \_\_\_\_\_, which enables users to speak to other users over the Internet using their desktop computer, mobile computer, or mobile device.

ANS:

Internet Telephony

VOIP

Voice over IP

PTS: 1

REF: 93

20. A(n) \_\_\_\_\_ is a general term that refers to both hardware and software used to restrict access to data on a network.

ANS: firewall

PTS: 1

REF: 94

## MATCHING

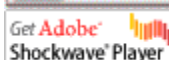
Match the plug-in with its description below.

a. 

b. 

c. 

d. 

e. 

1. View animation, music, audio, video, and VR panoramas and objects directly in a Web page.
2. Listen to live and on-demand near-CD-quality audio and newscast-quality video.
3. Experience dynamic interactive multimedia, 3-D graphics, and streaming audio.
4. View, navigate, and print Portable Document Format (PDF) files.
5. View dazzling graphics and animation, hear outstanding sound and music, display Web pages across an entire screen.

- |           |        |         |
|-----------|--------|---------|
| 1. ANS: C | PTS: 1 | REF: 84 |
| 2. ANS: B | PTS: 1 | REF: 84 |
| 3. ANS: E | PTS: 1 | REF: 84 |
| 4. ANS: D | PTS: 1 | REF: 84 |
| 5. ANS: A | PTS: 1 | REF: 84 |

Match the web site category with its description below.

- |             |                       |
|-------------|-----------------------|
| a. Portal   | d. Content Aggregator |
| b. Blog     | e. Wiki               |
| c. Advocacy |                       |

6. A Web site that offers a variety of Internet services from a single, convenient location.
7. A Web site that contains content that describes a cause, opinion, or idea.
8. A business that gathers and organizes Web content and then distributes, or feeds, the content to subscribers for free or a fee.
9. A collaborative Web site that allows users to create, add to, modify, or delete the Web site content via their Web browser.
10. An informal Web site consisting of time-stamped articles, or posts, in a diary or journal format, usually listed in reverse chronological order.

- |            |        |         |
|------------|--------|---------|
| 6. ANS: A  | PTS: 1 | REF: 82 |
| 7. ANS: C  | PTS: 1 | REF: 82 |
| 8. ANS: D  | PTS: 1 | REF: 82 |
| 9. ANS: E  | PTS: 1 | REF: 82 |
| 10. ANS: B | PTS: 1 | REF: 82 |

## ESSAY

1. Today, more than one billion users around the world connect to the Internet for a variety of reasons. List and describe some of the possible uses of the Internet.

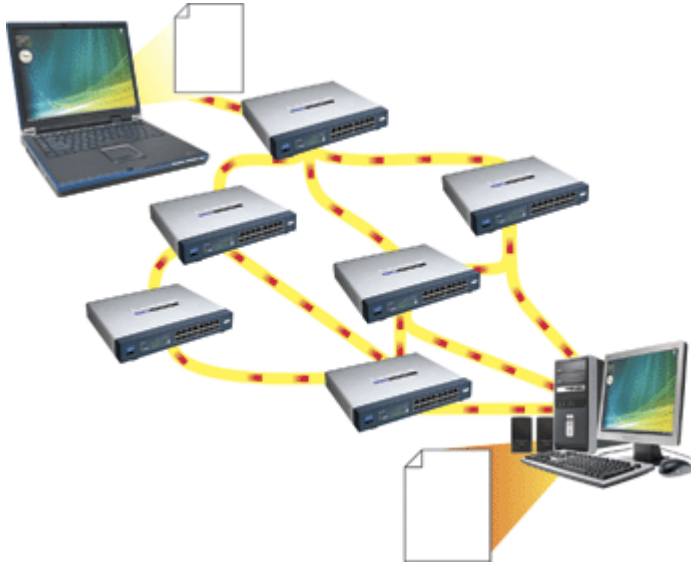
ANS:

- *Access a wealth of information, news, research, and educational material.*
- *Conduct business or complete banking and investing transactions.*
- *Access sources of entertainment and leisure, such as online games, magazines, and vacation-planning guides.*
- *Shop for goods and services.*
- *Explore virtual worlds.*
- *Meet and converse with people around the world through discussion groups, instant messaging, blogs, wikis, or chat rooms.*
- *Access other computers and exchange or share files.*
- *Send messages to or receive messages from other connected users.*
- *Download and listen to music or download and watch movies.*
- *Take a course or access educational materials.*

PTS: 1

REF: 69

TOP: Critical Thinking



**Figure 2-3**

2. Use the accompanying figure to summarize the three steps describing how data travels over the Internet.

ANS:

- *Step 1: Data is divided into small pieces, called packets.*
- *Step 2: Packets travel over the Internet via routers.*
- *Step 3: At the destination, the packets are reassembled into the original message.*
- *If the most direct path to the destination is overloaded or not operating, routers send the packets along alternate paths.*
- *Although each packet may arrive out of sequence, the destination computer uses the sequence information contained in each packet to reassemble the original message, file, document, or request.*

PTS: 1

REF: 73

TOP: Critical Thinking

3. Using the following URL, describe each of the four listed components  
**[http://www.us-parks.com/grand\\_canyon/scenic\\_vistas.html](http://www.us-parks.com/grand_canyon/scenic_vistas.html)**

ANS:

- ***http://*** is the Protocol. *http* Stands for Hypertext Transfer Protocol, which is the communications protocol used to transfer pages on the Web.
- ***www.us-parks.com/*** is the domain name. A domain name is the text version of a computer address. So, *us-parks.com* is the starting point for the information
- ***grand\_canyon/*** is the path. The location of the document or page that is displayed.
- ***scenic\_vistas.html*** is the Web page name. The name of the specific page being displayed.

PTS: 1

REF: 79

TOP: Critical Thinking

## CASE

## Critical Thinking

### Case 1

You are working on plans for your class and are trying to determine the best category of Web site to have your students use.

1. Which of the following web site categories would you recommend for your students who are doing research papers on one of the 50 States?

a. Portal	b. Informational
c. Education	d. Advocacy

ANS:

b

PTS: 1

REF: 82

TOP: Critical Thinking

2. Which of the following web site categories would you recommend for your students who want to share stories they have written with their friends?

a. Business	b. Entertainment
c. Online social network	d. Wiki

ANS:

c

PTS: 1

REF: 82

TOP: Critical Thinking

## Critical Thinking

### Case 2

You are trying to determine what form of Multimedia would best meet the needs of your students.

3. Which of the following multimedia formats would be the best to use for students who missed a class but have access to an iPod?

a. Animation	b. Virtual Reality
c. Graphics	d. Audio

ANS:

d

PTS: 1

REF: 86

TOP: Critical Thinking

4. Which of the following multimedia formats would be the best to use for students who missed a lab on frog dissection?

a. Virtual Reality	b. Animation
c. Audio	d. Graphics

ANS:

a

PTS: 1

REF: 87

TOP: Critical Thinking