# Chapter 02: Technology Infrastructure: The Internet and the World Wide Web

1. Networks of computers and the Internet that connects them to each other form the basic technological structure that underlies virtually all electronic commerce.
    a. True
    b. False

| | |
|---|---|
| *ANSWER:* | True |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |
| *LEARNING OBJECTIVES:* | 02.01 |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Technology |
| *KEYWORDS:* | Bloom's: Knowledge |

2. The USENET was the earliest of the networks that eventually combined to become what we now call the Internet.
    a. True
    b. False

| | |
|---|---|
| *ANSWER:* | False |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |
| *LEARNING OBJECTIVES:* | 02.01 |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Technology |
| *KEYWORDS:* | Bloom's: Knowledge |

3. E-mail was born in 1972 when a researcher wrote a program that could send and receive messages over the Defense Department network.
    a. True
    b. False

| | |
|---|---|
| *ANSWER:* | True |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |
| *LEARNING OBJECTIVES:* | 02.01 |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Technology |
| *KEYWORDS:* | Bloom's: Comprehension |

4. The first e-mail mailing lists appeared on military and education research networks.
    a. True
    b. False

| | |
|---|---|
| *ANSWER:* | True |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |
| *LEARNING OBJECTIVES:* | 02.01 |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Technology |
| *KEYWORDS:* | Bloom's: Knowledge |

5. A network of computers that are located in the same building is called a wide area network.
    a. True
    b. False

| | |
|---|---|
| *ANSWER:* | False |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |
| *LEARNING OBJECTIVES:* | 02.02 |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Technology |
| *KEYWORDS:* | Bloom's: Knowledge |

6. The Internet provides a high degree of security in its basic structure.
    a. True
    b. False

| | |
|---|---|
| *ANSWER:* | False |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |
| *LEARNING OBJECTIVES:* | 02.02 |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Technology |
| *KEYWORDS:* | Bloom's: Knowledge |

7. Extranets were used to save money and increase efficiency by replacing traditional communication tools such as fax, telephone, and overnight express document carriers.
    a. True
    b. False

| | |
|---|---|
| *ANSWER:* | True |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |
| *LEARNING OBJECTIVES:* | 02.02 |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Technology |
| *KEYWORDS:* | Bloom's: Comprehension |

8. An intranet extends beyond the organization that created it.
    a. True
    b. False

| | |
|---|---|
| *ANSWER:* | False |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |
| *LEARNING OBJECTIVES:* | 02.02 |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Technology |
| *KEYWORDS:* | Bloom's: Knowledge |

9. The word "virtual," used as part of virtual private networks means that the network connection is permanent.
    a. True
    b. False

| | |
|---|---|
| *ANSWER:* | False |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |

*LEARNING OBJECTIVES:* 02.02

*NATIONAL STANDARDS:* United States - BUSPROG: Technology

*KEYWORDS:* Bloom's: Knowledge


10. Virtual private network software must be installed on the computers at both ends of a transmission.
    a. True
    b. False

*ANSWER:* True

*POINTS:* 1

*DIFFICULTY:* Easy

*LEARNING OBJECTIVES:* 02.02

*NATIONAL STANDARDS:* United States - BUSPROG: Technology

*KEYWORDS:* Bloom's: Knowledge


11. Public networks, private networks, and VPNs are independent of organizational boundaries.
    a. True
    b. False

*ANSWER:* True

*POINTS:* 1

*DIFFICULTY:* Easy

*LEARNING OBJECTIVES:* 02.02

*NATIONAL STANDARDS:* United States - BUSPROG: Technology

*KEYWORDS:* Bloom's: Knowledge


12. IP addresses appear as five decimal numbers separated by periods.
    a. True
    b. False

*ANSWER:* False

*POINTS:* 1

*DIFFICULTY:* Easy

*LEARNING OBJECTIVES:* 02.04

*NATIONAL STANDARDS:* United States - BUSPROG: Technology

*KEYWORDS:* Bloom's: Knowledge


13. Simple Mail Transfer Protocol (SMTP) is a common protocol used for sending and retrieving e-mail.
    a. True
    b. False

*ANSWER:* True

*POINTS:* 1

*DIFFICULTY:* Easy

*LEARNING OBJECTIVES:* 02.03

*NATIONAL STANDARDS:* United States - BUSPROG: Technology

*KEYWORDS:* Bloom's: Knowledge


14. Post Office Protocol (POP) allows the user to view only the header and the e-mail sender's name before deciding to

download the entire message.
    a. True
    b. False

| | |
|---|---|
| *ANSWER:* | False |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |
| *LEARNING OBJECTIVES:* | 02.03 |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Technology |
| *KEYWORDS:* | Bloom's: Knowledge |

15. The Post Office Protocol (POP) provides support for Multipurpose Internet Mail Extensions (MIME).
    a. True
    b. False

| | |
|---|---|
| *ANSWER:* | True |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |
| *LEARNING OBJECTIVES:* | 02.03 |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Technology |
| *KEYWORDS:* | Bloom's: Knowledge |

16. At a technological level, the Web is nothing more than software that runs on computers that are connected to the Internet.
    a. True
    b. False

| | |
|---|---|
| *ANSWER:* | True |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |
| *LEARNING OBJECTIVES:* | 02.05 |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Technology |
| *KEYWORDS:* | Bloom's: Knowledge |

17. The Semantic Web project envisions words on Web pages being tagged with their meanings.
    a. True
    b. False

| | |
|---|---|
| *ANSWER:* | True |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |
| *LEARNING OBJECTIVES:* | 02.08 |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Technology |
| *KEYWORDS:* | Bloom's: Knowledge |

18. An HTML document is similar to a word-processing document in that it specifies how a particular text element will appear.
    a. True
    b. False

| | |
|---|---|
| *ANSWER:* | False |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |
| *LEARNING OBJECTIVES:* | 02.05 |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Technology |
| *KEYWORDS:* | Bloom's: Comprehension |

19. The leftmost part of a domain name is called a top-level domain (TLD).
    a. True
    b. False

| | |
|---|---|
| *ANSWER:* | False |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |
| *LEARNING OBJECTIVES:* | 02.04 |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Technology |
| *KEYWORDS:* | Bloom's: Knowledge |

20. The Internet Corporation for Assigned Names and Numbers (ICANN) has the responsibility of managing domain names and coordinating them with the IP address registrars.
    a. True
    b. False

| | |
|---|---|
| *ANSWER:* | True |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |
| *LEARNING OBJECTIVES:* | 02.04 |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Analytic |
| *KEYWORDS:* | Bloom's: Knowledge |

21. The most important parts of a Web page are the graphics, photographs, and small programs that run in the Web browser.
    a. True
    b. False

| | |
|---|---|
| *ANSWER:* | False |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |
| *LEARNING OBJECTIVES:* | 02.05 |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Technology |
| *KEYWORDS:* | Bloom's: Knowledge |

22. SGML offers a system of marking up documents that is independent of any software application.
    a. True
    b. False

| | |
|---|---|
| *ANSWER:* | True |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |

Chapter 02: Technology Infrastructure: The Internet and the World Wide Web

23. The term "cascading" is used in cascading style sheets because designers can apply many style sheets to the same Web page, one on top of the other.
    a. True
    b. False

*ANSWER:*           True
*POINTS:*           1
*DIFFICULTY:*           Easy
*LEARNING OBJECTIVES:* 02.05
*NATIONAL STANDARDS:* United States - BUSPROG: Technology
*KEYWORDS:*           Bloom's: Comprehension

24. The higher the bandwidth, the faster the transmission of data through a communication medium.
    a. True
    b. False

*ANSWER:*           True
*POINTS:*           1
*DIFFICULTY:*           Easy
*LEARNING OBJECTIVES:* 02.07
*NATIONAL STANDARDS:* United States - BUSPROG: Technology
*KEYWORDS:*           Bloom's: Comprehension

25. A hierarchical hyperlink structure resembles conventional paper documents in that the reader begins on the first page and clicks the Next button to move to the next page in a serial fashion.
    a. True
    b. False

*ANSWER:*           False
*POINTS:*           1
*DIFFICULTY:*           Easy
*LEARNING OBJECTIVES:* 02.06
*NATIONAL STANDARDS:* United States - BUSPROG: Technology
*KEYWORDS:*           Bloom's: Knowledge

26. The combination of telephone lines and the closed switches that connect them to each other is called a _____.
    a. LAN     b. WAN
    c. circuit     d. pathway

*ANSWER:*           c
*POINTS:*           1
*DIFFICULTY:*           Easy
*LEARNING OBJECTIVES:* 02.02
*NATIONAL STANDARDS:* United States - BUSPROG: Technology
*KEYWORDS:*           Bloom's: Knowledge

27. Files and e-mail messages sent over the Internet are broken down into small pieces called _____.
    a. messages      b. switches
    c. circuits          d. packets

*ANSWER:*                    d
*POINTS:*                    1
*DIFFICULTY:*                Moderate
*LEARNING OBJECTIVES:*  02.02
*NATIONAL STANDARDS:*  United States - BUSPROG: Technology
*KEYWORDS:*                Bloom's: Comprehension

28. The computers that decide how best to forward each packet from one network to another are called _____.
    a. switches      b. bridges
    c. routers          d. repeaters

*ANSWER:*                    c
*POINTS:*                    1
*DIFFICULTY:*                Easy
*LEARNING OBJECTIVES:*  02.02
*NATIONAL STANDARDS:*  United States - BUSPROG: Technology
*KEYWORDS:*                Bloom's: Knowledge

29. The programs on gateway computers that determine the best path on which to send each packet contain rules called _____.
    a. program profilers      b. empirical algorithms
    c. software profilers      d. routing algorithms

*ANSWER:*                    d
*POINTS:*                    1
*DIFFICULTY:*                Easy
*LEARNING OBJECTIVES:*  02.02
*NATIONAL STANDARDS:*  United States - BUSPROG: Technology
*KEYWORDS:*                Bloom's: Knowledge

30. A _____ is a permanent telephone connection between two points.
    a. dedicated line      b. party line
    c. leased line          d. local line

*ANSWER:*                    c
*POINTS:*                    1
*DIFFICULTY:*                Easy
*LEARNING OBJECTIVES:*  02.02
*NATIONAL STANDARDS:*  United States - BUSPROG: Technology
*KEYWORDS:*                Bloom's: Knowledge

31. _____ creates a private passageway through the public Internet that provides secure transmission from one computer to another.
    a. IP tunneling          b. Circuit switching

c. Encapsulation      d. Subnetting

*ANSWER:*                  a

*POINTS:*                1

*DIFFICULTY:*         Easy

*LEARNING OBJECTIVES:* 02.02

*NATIONAL STANDARDS:*  United States - BUSPROG: Technology

*KEYWORDS:*           Bloom's: Knowledge

32. _____ is a connection that uses public networks and their protocols to send data using a technology called IP tunneling.

    a. A personal area network      b. The Internet

    c. A virtual private network     d. The World Wide Web

*ANSWER:*                  c

*POINTS:*                1

*DIFFICULTY:*         Easy

*LEARNING OBJECTIVES:* 02.02

*NATIONAL STANDARDS:*  United States - BUSPROG: Technology

*KEYWORDS:*           Bloom's: Knowledge

33. A _____ is a collection of rules for formatting, ordering, and error checking data sent across a network.

    a. style sheet     b. semantic

    c. protocol      d. packet

*ANSWER:*                  c

*POINTS:*                1

*DIFFICULTY:*         Easy

*LEARNING OBJECTIVES:* 02.03

*NATIONAL STANDARDS:*  United States - BUSPROG: Technology

*KEYWORDS:*           Bloom's: Knowledge

34. _____ determine how a sending device indicates that it has finished sending a message and how the receiving device indicates that it has received the message.

    a. Routers     b. Semantics

    c. Protocols    d. Switches

*ANSWER:*                  c

*POINTS:*                1

*DIFFICULTY:*         Easy

*LEARNING OBJECTIVES:* 02.03

*NATIONAL STANDARDS:*  United States - BUSPROG: Technology

*KEYWORDS:*           Bloom's: Knowledge

35. The 32-bit number used to identify computers connected to the Internet is known as the _____.

    a. IP address      b. NSAP address

    c. MAC address    d. OUI address

*ANSWER:*                  a

*POINTS:*                1

| | |
|---|---|
| *DIFFICULTY:* | Easy |
| *LEARNING OBJECTIVES:* | 02.04 |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Technology |
| *KEYWORDS:* | Bloom's: Knowledge |

36. _____ specifies the format of a mail message and describes how mail is to be administered on the e-mail server and transmitted on the Internet.

    a. Multipurpose Internet Mail Extensions (MIME)    b. Simple Mail Transfer Protocol (SMTP)

    c. Interactive Mail Access Protocol (IMAP)    d. Post Office Protocol (POP)

| | |
|---|---|
| *ANSWER:* | b |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |
| *LEARNING OBJECTIVES:* | 02.03 |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Technology |
| *KEYWORDS:* | Bloom's: Knowledge |

37. In subnetting, a computer called a _____ device converts private IP addresses into normal IP addresses when it forwards packets from those computers to the Internet.

    a. Network Address Translation (NAT)    b. Network Interface Controller (NIC)

    c. Generic Routing Encapsulation (GRE)    d. Data Circuit-Terminating (DCE)

| | |
|---|---|
| *ANSWER:* | a |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |
| *LEARNING OBJECTIVES:* | 02.04 |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Technology |
| *KEYWORDS:* | Bloom's: Knowledge |

38. The combination of a protocol name and a domain name is called a(n) _____.

    a. Uniform Resource Locator (URL)    b. Internationalized Resource Identifier (IRI)

    c. Extensible Resource Descriptor Sequence (XRDS)    d. Extensible Resource Identifier (XRI)

| | |
|---|---|
| *ANSWER:* | a |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |
| *LEARNING OBJECTIVES:* | 02.04 |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Technology |
| *KEYWORDS:* | Bloom's: Knowledge |

39. IPv6 uses a _____ number for addresses.

    a. 32-bit    b. 56-bit

    c. 128-bit    d. 48-bit

| | |
|---|---|
| *ANSWER:* | c |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |
| *LEARNING OBJECTIVES:* | 02.04 |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Technology |

*KEYWORDS:*          Bloom's: Knowledge

40. The purpose of a(n) _____ is to respond to requests for Web pages from Web clients.
    a. DNS server      b. e-mail server
    c. Web server      d. database server

| | |
|---|---|
| *ANSWER:* | c |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |
| *LEARNING OBJECTIVES:* | 02.03 |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Technology |
| *KEYWORDS:* | Bloom's: Knowledge |

41. _____ is a set of rules for handling binary files, such as word-processing documents, spreadsheets, photos, or sound clips that are attached to e-mail messages.
    a. SMTP      b. TCP/IP
    c. MIME      d. POP

| | |
|---|---|
| *ANSWER:* | c |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |
| *LEARNING OBJECTIVES:* | 02.03 |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Technology |
| *KEYWORDS:* | Bloom's: Knowledge |

42. A newer e-mail protocol that performs the same basic functions as POP, but includes additional features, is known as _____.
    a. IMAP      b. SMTP
    c. POP3      d. TCP

| | |
|---|---|
| *ANSWER:* | a |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |
| *LEARNING OBJECTIVES:* | 02.03 |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Technology |
| *KEYWORDS:* | Bloom's: Knowledge |

43. _____ lets users create and manipulate e-mail folders and individual e-mail messages while the messages are still on the e-mail server.
    a. POP      b. SMTP
    c. IMAP      d. MIME

| | |
|---|---|
| *ANSWER:* | c |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |
| *LEARNING OBJECTIVES:* | 02.03 |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Technology |
| *KEYWORDS:* | Bloom's: Knowledge |

44. A _____ structure resembles an inverted tree in which the root is at the top and the branches are below it.
    a. parabolic hyperlink    b. hierarchical hyperlink
    c. rooted hyperlink    d. linear hyperlink

*ANSWER:*                b
*POINTS:*                1
*DIFFICULTY:*          Easy
*LEARNING OBJECTIVES:*  02.06
*NATIONAL STANDARDS:*  United States - BUSPROG: Technology
*KEYWORDS:*          Bloom's: Knowledge

45. A(n) _____ has a hypertext reference (HREF) property, which specifies the remote or local document's address.
    a. closing tag    b. paragraph tag
    c. opening tag    d. bold tag

*ANSWER:*                c
*POINTS:*                1
*DIFFICULTY:*          Easy
*LEARNING OBJECTIVES:*  02.06
*NATIONAL STANDARDS:*  United States - BUSPROG: Technology
*KEYWORDS:*          Bloom's: Knowledge

46. HTML was developed by _____.
    a. Robert Kahn    b. Vinton Cerf
    c. Ted Nelson    d. Tim Berners-Lee

*ANSWER:*                d
*POINTS:*                1
*DIFFICULTY:*          Easy
*LEARNING OBJECTIVES:*  02.05
*NATIONAL STANDARDS:*  United States - BUSPROG: Technology
*KEYWORDS:*          Bloom's: Knowledge

47. _____ was the first Web browser that became widely available for personal computers.
    a. Mosaic    b. Netscape
    c. Internet Explorer    d. CompuServe

*ANSWER:*                a
*POINTS:*                1
*DIFFICULTY:*          Easy
*LEARNING OBJECTIVES:*  02.05
*NATIONAL STANDARDS:*  United States - BUSPROG: Technology
*KEYWORDS:*          Bloom's: Knowledge

48. _____ are sets of words that are assigned to specific IP addresses.
    a. Domain names    b. URLs
    c. Octets    d. Headers

*ANSWER:*                a

| | |
|---|---|
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |
| *LEARNING OBJECTIVES:* | 02.04 |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Technology |
| *KEYWORDS:* | Bloom's: Knowledge |

49. The early versions of _____ let Web page designers create text-based electronic documents with headings, title bar titles, bullets, lines, and ordered lists.

    a. HTTP    b. HTML

    c. SGML    d. XML

| | |
|---|---|
| *ANSWER:* | b |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |
| *LEARNING OBJECTIVES:* | 02.05 |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Technology |
| *KEYWORDS:* | Bloom's: Knowledge |

50. In HTML, hyperlinks are created using the HTML _____ tag.

    a. head    b. anchor

    c. title    d. opening

| | |
|---|---|
| *ANSWER:* | b |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |
| *LEARNING OBJECTIVES:* | 02.06 |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Technology |
| *KEYWORDS:* | Bloom's: Knowledge |

51. A(n) _____ is any technology that allows people to connect computers to each other.

| | |
|---|---|
| *ANSWER:* | computer network |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |
| *LEARNING OBJECTIVES:* | 02.01 |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Technology |
| *KEYWORDS:* | Bloom's: Knowledge |

52. A computer network which uses a specific set of rules and connects networks all over the world to each other is called the _____.

| | |
|---|---|
| *ANSWER:* | Internet |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |
| *LEARNING OBJECTIVES:* | 02.01 |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Technology |
| *KEYWORDS:* | Bloom's: Knowledge |

53. _____ is a subset of the computers on the Internet that are connected to one another in a specific way that makes them

and their contents easily accessible to each other.

| | |
|---|---|
| *ANSWER:* | World Wide Web (WWW) |
| | WWW |
| | World Wide Web |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |
| *LEARNING OBJECTIVES:* | 02.01 |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Technology |
| *KEYWORDS:* | Bloom's: Knowledge |

54. A(n) _____ is an e-mail address that forwards any message it receives to any user who has subscribed to the list.

| | |
|---|---|
| *ANSWER:* | mailing list |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |
| *LEARNING OBJECTIVES:* | 02.01 |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Technology |
| *KEYWORDS:* | Bloom's: Knowledge |

55. In 1979, a group of students and programmers at Duke University and the University of North Carolina started _____, which allows anyone who connects to the network to read and post articles on a variety of subjects.

| | |
|---|---|
| *ANSWER:* | Usenet |
| | User's News Network |
| | User's News Network (Usenet) |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |
| *LEARNING OBJECTIVES:* | 02.01 |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Technology |
| *KEYWORDS:* | Bloom's: Knowledge |

56. Usenet survives on the Internet today, with more than 1000 different topic areas that are called _____.

| | |
|---|---|
| *ANSWER:* | newsgroups |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |
| *LEARNING OBJECTIVES:* | 02.01 |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Technology |
| *KEYWORDS:* | Bloom's: Knowledge |

57. Internet _____ are computers that are directly connected to the Internet.

| | |
|---|---|
| *ANSWER:* | hosts |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |
| *LEARNING OBJECTIVES:* | 02.01 |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Technology |
| *KEYWORDS:* | Bloom's: Knowledge |

58. Companies known as _____ sell Internet access rights directly to larger customers and indirectly to smaller firms and

individuals through other companies, called ISPs.

| | |
|---|---|
| *ANSWER:* | network access providers |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |
| *LEARNING OBJECTIVES:* | 02.01 |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Analytic |
| *KEYWORDS:* | Bloom's: Knowledge |

59. The subset of the Internet that includes computers and sensors connected to each other for communication and automatic transaction processing is called the _____.

| | |
|---|---|
| *ANSWER:* | Internet of Things |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |
| *LEARNING OBJECTIVES:* | 02.01 |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Technology |
| *KEYWORDS:* | Bloom's: Knowledge |

60. A(n) _____ is a set of standards that defines, in detail, the relationships among resource description framework (RDF) standards and specific extensible markup language (XML) tags within a particular knowledge domain.

| | |
|---|---|
| *ANSWER:* | ontology |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |
| *LEARNING OBJECTIVES:* | 02.08 |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Technology |
| *KEYWORDS:* | Bloom's: Knowledge |

61. A group of network research scientists from nearly 200 universities and a number of major corporations joined together in 1996 to recapture the original enthusiasm of the ARPANET and created an advanced research network called _____.

| | |
|---|---|
| *ANSWER:* | Internet2 |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |
| *LEARNING OBJECTIVES:* | 02.08 |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Technology |
| *KEYWORDS:* | Bloom's: Knowledge |

62. A(n) _____ is used when the Internet extends beyond the boundaries of an organization and includes networks of other organizations.

| | |
|---|---|
| *ANSWER:* | extranet |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |
| *LEARNING OBJECTIVES:* | 02.02 |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Technology |
| *KEYWORDS:* | Bloom's: Knowledge |

63. The _____ controls the disassembly of a message or a file into packets before it is transmitted over the Internet, and it

controls the reassembly of those packets into their original formats when they reach their destinations.

| | |
|---|---|
| *ANSWER:* | Transmission Control Protocol |
| | TCP |
| | Transmission Control Protocol (TCP) |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |
| *LEARNING OBJECTIVES:* | 02.03 |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Technology |
| *KEYWORDS:* | Bloom's: Knowledge |

64. The _____ in TCP/IP specifies the addressing details for each packet, labeling each with the packet's origination and destination addresses.

| | |
|---|---|
| *ANSWER:* | Internet Protocol |
| | IP |
| | Internet Protocol (IP) |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |
| *LEARNING OBJECTIVES:* | 02.03 |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Technology |
| *KEYWORDS:* | Bloom's: Knowledge |

65. The set of rules for delivering Web page files over the Internet is in a protocol called the _____.

| | |
|---|---|
| *ANSWER:* | Hypertext Transfer Protocol (HTTP) |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |
| *LEARNING OBJECTIVES:* | 02.03 |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Technology |
| *KEYWORDS:* | Bloom's: Knowledge |

66. A(n) _____ is a computer that stores files written in HTML.

| | |
|---|---|
| *ANSWER:* | hypertext server |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |
| *LEARNING OBJECTIVES:* | 02.05 |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Technology |
| *KEYWORDS:* | Bloom's: Knowledge |

67. A(n) _____ is a language that can be used to define other languages.

| | |
|---|---|
| *ANSWER:* | metalanguage |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |
| *LEARNING OBJECTIVES:* | 02.05 |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Technology |
| *KEYWORDS:* | Bloom's: Knowledge |

68. HTML, XML, and XHTML have descended from the original _____ specification.

*ANSWER:* Standard Generalized Markup Language (SGML)
Standard Generalized Markup Language
SGML

*POINTS:* 1

*DIFFICULTY:* Easy

*LEARNING OBJECTIVES:* 02.05

*NATIONAL STANDARDS:* United States - BUSPROG: Technology

*KEYWORDS:* Bloom's: Knowledge

69. In HTML, the text elements that are related to each another are called _____ elements.

*ANSWER:* hypertext

*POINTS:* 1

*DIFFICULTY:* Easy

*LEARNING OBJECTIVES:* 02.05

*NATIONAL STANDARDS:* United States - BUSPROG: Technology

*KEYWORDS:* Bloom's: Knowledge

70. A(n) _____ hyperlink structure resembles conventional paper documents in that the reader begins on the first page and clicks a Next button to move to the next page in a serial fashion.

*ANSWER:* linear

*POINTS:* 1

*DIFFICULTY:* Easy

*LEARNING OBJECTIVES:* 02.06

*NATIONAL STANDARDS:* United States - BUSPROG: Technology

*KEYWORDS:* Bloom's: Knowledge

71. A(n) _____ is a set of instructions that gives Web developers more control over the format of displayed pages.

*ANSWER:* style sheet

*POINTS:* 1

*DIFFICULTY:* Easy

*LEARNING OBJECTIVES:* 02.06

*NATIONAL STANDARDS:* United States - BUSPROG: Technology

*KEYWORDS:* Bloom's: Knowledge

72. _____ uses paired start and stop tags in much the same way as database software defines a record structure.

*ANSWER:* XML
Extensible Markup Language (XML)
Extensible Markup Language

*POINTS:* 1

*DIFFICULTY:* Easy

*LEARNING OBJECTIVES:* 02.05

*NATIONAL STANDARDS:* United States - BUSPROG: Technology

*KEYWORDS:* Bloom's: Knowledge

73. _____ tags convey the meaning (the semantics) of the information included within them.

*ANSWER:* Extensible Markup Language (XML)

Extensible Markup Language
XML

| | |
|---|---|
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |
| *LEARNING OBJECTIVES:* | 02.05 |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Technology |
| *KEYWORDS:* | Bloom's: Knowledge |

74. _____ is the amount of data that can travel through a communication medium per unit of time.

| | |
|---|---|
| *ANSWER:* | Bandwidth |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |
| *LEARNING OBJECTIVES:* | 02.07 |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Technology |
| *KEYWORDS:* | Bloom's: Knowledge |

75. _____ is a measure of the amount of information that can travel from a user to the Internet in a given amount of time.

| | |
|---|---|
| *ANSWER:* | Upstream bandwidth |
| | Upload bandwidth |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Easy |
| *LEARNING OBJECTIVES:* | 02.07 |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Technology |
| *KEYWORDS:* | Bloom's: Knowledge |

76. Describe the process of routing packets in a network.

| | |
|---|---|
| *ANSWER:* | As an individual packet travels from one network to another, the computers through which the packet travels determine the most efficient route for getting the packet to its destination. The most efficient route changes from second to second, depending on how much traffic each computer on the Internet is handling at each moment. The computers that decide how to best forward each packet are called routing computers, router computers, routers, gateway computers (because they act as the gateway from a LAN or WAN to the Internet), border routers, or edge routers (because they are located at the border between the organization and the Internet or at the edge of the organization.) The programs on the routers that determine the best path on which to send each packet contain rules called routing algorithms. The programs apply these algorithms to information they have stored in routing tables or configuration tables. This information includes lists of connections that lead to particular groups of other routers, rules that specify which connection to use first, and rules for handling instances of heavy packet traffic and network congestion. |
| *POINTS:* | 1 |
| *DIFFICULTY:* | Moderate |
| *LEARNING OBJECTIVES:* | 02.02 |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Technology |
| *KEYWORDS:* | Bloom's: Comprehension |

77. What is the difference between a public network and a private network?

| | |
|---|---|
| *ANSWER:* | A public network is any computer network or telecommunications network that is available |

to the public. The Internet is one example of a public network. Public networks such as the Internet do not provide much security as part of their basic structures.

A private network is a leased-line connection between two companies that physically connects their computers and/or networks to one another. A leased line is a permanent telephone connection between two points. Unlike the telephone circuit connection you create when you dial a telephone number, a leased line is always active. The advantage of a leased line is security. Only the two parties that lease the line to create the private network have access to the connection.

*POINTS:*                          1
*DIFFICULTY:*                  Moderate
*LEARNING OBJECTIVES:*  02.02
*NATIONAL STANDARDS:*   United States - BUSPROG: Technology
*KEYWORDS:*                   Bloom's: Comprehension


78. Identify the four key rules for message handling.
*ANSWER:*                     The open architecture philosophy developed for the evolving ARPANET, which later became the core of the Internet, included the use of a common protocol for all computers connected to the Internet and four key rules for message handling:
1) Independent networks should not require any internal changes to be connected to the network.
2) Packets that do not arrive at their destinations must be retransmitted from their source network.
3) Router computers act as receive-and-forward devices; they do not retain information about the packets that they handle.
4) No global control exists over the network.

*POINTS:*                          1
*DIFFICULTY:*                  Easy
*LEARNING OBJECTIVES:*  02.03
*NATIONAL STANDARDS:*   United States - BUSPROG: Technology
*KEYWORDS:*                   Bloom's: Knowledge


79. Describe the two main protocols used by the Internet.
*ANSWER:*                     The Internet uses two main protocols: the Transmission Control Protocol (TCP) and the Internet Protocol (IP). The TCP controls the disassembly of a message or a file into packets before it is transmitted over the Internet, and it controls the reassembly of those packets into their original formats when they reach their destinations. The IP specifies the addressing details for each packet, labeling each with the packet's origination and destination addresses.

*POINTS:*                          1
*DIFFICULTY:*                  Easy
*LEARNING OBJECTIVES:*  02.03
*NATIONAL STANDARDS:*   United States - BUSPROG: Technology
*KEYWORDS:*                   Bloom's: Knowledge


80. What are the advantages of Bluetooth technology?
*ANSWER:*                     One major advantage of Bluetooth technology is that it consumes very little power, which is an important consideration for many devices. Another advantage is that Bluetooth devices can discover each other and exchange information automatically. For example, a person using a laptop computer in a temporary office can print to a local Bluetooth-enabled printer

without logging in to the network or installing software on either device. The printer and laptop computer electronically recognize each other as Bluetooth devices and can immediately begin exchanging information.

| | |
|---|---|
| *POINTS:* | 1 |
| *DIFFICULTY:* | Moderate |
| *LEARNING OBJECTIVES:* | 02.07 |
| *NATIONAL STANDARDS:* | United States - BUSPROG: Technology |
| *KEYWORDS:* | Bloom's: Comprehension |