TEST BANK

ELECTRONIC
COMMERCE

SEVENTH ANNUAL EDITION

GARY SCHNEIDER

TRUE/FALSE

1. Computer networks and the Internet form the basic technology structure that underlies all electronic commerce.

   ANS: T   PTS: 1   REF: 53

2. The USENET was the earliest of the networks that combined to become what we now call the Internet.

   ANS: F   PTS: 1   REF: 54

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

   ANS: T   PTS: 1   REF: 54

4. In 1989, the NSF permitted two commercial e-mail services, MCI Mail and CompuServe, to establish limited connections to the Internet for the sole purpose of exchanging e-mail transmissions with users of the Internet.

   ANS: T   PTS: 1   REF: 55

5. The Web is software that runs on computers that are connected to the Internet.

   ANS: T   PTS: 1   REF: 57

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

   ANS: F   PTS: 1   REF: 58

7. A network of computers that are located close together—for example, in the same building—is called a local area network.

   ANS: T   PTS: 1   REF: 60

8. A network of computers connected over greater distance than possible with a LAN is called a wide area network.

   ANS: T   PTS: 1   REF: 60

9. An IP address is a 128-bit number used to identify computers connected to the Internet.

   ANS: F   PTS: 1   REF: 63

10. IP addresses appear as five numbers separated by periods.

    ANS: F   PTS: 1   REF: 63

11. The address, "www.amazon.com" is an IP Address.

ANS: F   PTS: 1   REF: 63

12. A domain name is a set of words assigned to specific IP addresses.

ANS: T   PTS: 1   REF: 64

13. The organization for managing domain names and coordinating them with their IP addresses registrars is known as the Internet Corporation for Actualized Names and Nuances.

ANS: F   PTS: 1   REF: 65

14. The set of rules for delivering Web page files over the Internet are in a protocol called the HTTP (Hypertext Transfer Protocol).

ANS: T   PTS: 1   REF: 66

15. The acronym SMTP is short for Simple Markup Tracer Protocol.

ANS: F   PTS: 1   REF: 67

16. IMAP is a newer e-mail protocol that performs the same basic functions as POP, but includes additional features.

ANS: T   PTS: 1   REF: 67

17. The POP protocol provides support for MIME.

ANS: T   PTS: 1   REF: 67

18. SGML offers a system of marking up documents that is independent of any software application.

ANS: T   PTS: 1   REF: 69

19. HTML is a meta language because users can create their own markup elements that extend the usefulness of XML.

ANS: F   PTS: 1   REF: 68

20. The term cascading means that designers can apply many style sheets to the same Web page, one on top of the other.

ANS: T   PTS: 1   REF: 76

21. XML is a markup language with defined tags.

ANS: F   PTS: 1   REF: 79

22. Although fax, e-mail, and overnight carriers have been the main communications tools for business for many years, extranets can replace many of them at a lower cost.

ANS: T   PTS: 1   REF: 82

23. Intranets are not compatible with the Internet.

ANS: F   PTS: 1   REF: 82

24. The Internet provides a high degree of security in its basic structure.

ANS: F   PTS: 1   REF: 83

25. The "virtual" part of VPN means that the connection seems to be a temporary, internal network connection, but the connection is actually permanent.

ANS: F   PTS: 1   REF: 84

26. Establishing VPNs does not require leased lines.

ANS: T   PTS: 1   REF: 84

27. Although an extranet is a VPN, not every VPN is an extranet.

ANS: F   PTS: 1   REF: 84

28. The higher the bandwidth, the faster data files travel and the faster Web pages appear on your screen.

ANS: T   PTS: 1   REF: 85

29. Asymmetric connections provide the same bandwidth for each direction.

ANS: F   PTS: 1   REF: 85

30. The Internet2 project is focused mainly on technology development.

ANS: T   PTS: 1   REF: 92

MULTIPLE CHOICE

1. HTML was developed by ____.
   a. ARPANET   c. Ted Nelson
   b. NSF   d. Tim Berners-Lee

   ANS: D   PTS: 1   REF: 58

2. A(n) ____ is a way of presenting program control functions and program output to users.
   a. HTML   c. HTTP
   b. ISDN   d. GUI

   ANS: D   PTS: 1   REF: 58

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

   ANS: A   PTS: 1   REF: 58

4. The combination of telephone lines and the closed switches that connect them to each other is called a(n) ____.

a. LAN   c. circuit
b. WAN   d. pathway

ANS: C   PTS: 1   REF: 60

5. On a packet-switched network, files and e-mail messages are broken down into small pieces, called
    ____.
    a. messages   c. circuits
    b. pieces   d. packets

ANS: D   PTS: 1   REF: 60

6. ____ is a centrally controlled, single-connection model.
    a. Packet-switched   c. Routing
    b. Circuit switching   d. Merchandising

ANS: B   PTS: 1   REF: 60

7. When packets leave a network to travel on the Internet, they must be translated into a standard format.
    ____ usually perform this translation function.
    a. Switches   c. Routers
    b. Bridges   d. Routing algorithms

ANS: C   PTS: 1   REF: 61

8. ____ travel from computer to computer along the interconnected networks until they reach their
    destinations.
    a. Routers   c. Switches
    b. Packets   d. Bridges

ANS: B   PTS: 1   REF: 60

9. The programs on router computers that determine the best path on which to send each packet contains
    rules called ____.
    a. circuits   c. protocols
    b. gateways   d. routing algorithms

ANS: D   PTS: 1   REF: 60

10. A(n) ____ is a collection of rules for formatting, ordering, and error-checking data sent across a
     network.
     a. routing algorithm   c. protocol
     b. backbone router   d. packet

ANS: C   PTS: 1   REF: 62

11. Routers and the telecommunications lines connecting them are collectively referred to as ____.
     a. backbone routers   c. an asynchronous backbone
     b. Internet routers   d. the Internet backbone

ANS: D   PTS: 1   REF: 61

12. ____ determine how the sending device indicates that it has finished sending a message, and how the
     receiving device indicates that it has received the message.
     a. Routers   c. Protocols
     b. Bridges   d. Adapters

ANS: C   PTS: 1   REF: 62

13. In networking applications, an 8-bit number is often called a(n) ____.
    a. octet   c. piconet
    b. byte   d. bit

    ANS: A   PTS: 1   REF: 63

14. The two primary protocols on which the Internet is based are ____.
    a. FTP and HTTP   c. TCP and IP
    b. HTTP and SMTP   d. TCP and HTTP

    ANS: C   PTS: 1   REF: 62

15. Network engineers have devised a number of stopgap techniques to stretch the supply of IP addresses.
    One of the most popular techniques is ____.
    a. subnetting   c. subIPing
    b. subletting   d. piconetting

    ANS: A   PTS: 1   REF: 64

16. Private ____ are a series of IP numbers that are not permitted on packages that travel on the Internet.
    a. IP addresses   c. address masks
    b. masks   d. PIPs

    ANS: A   PTS: 1   REF: 64

17. A computer called a(n) ____ converts private IP addresses into normal IP address when it forwards
    packets from those computers to the Internet.
    a. routing algorithm device   c. subnet translation device
    b. Network Address Translation device d. private network device

    ANS: B   PTS: 1   REF: 64

18. Which of the following organizations assigns and manages IP addresses for North America, South
    America, the Caribbean, and sub-Saharan Africa?
    a. APNIC   c. ARIN
    b. APNC   d. RIPE

    ANS: C   PTS: 1   REF: 63

19. IPv6 uses a(n) ____ number for addresses.
    a. 32-bit   c. 128-bit
    b. 56-bit   d. 256-bit

    ANS: C   PTS: 1   REF: 64

20. The ____ numbering system uses 16 digits.
    a. hexadecimal   c. binary
    b. decimal   d. ASCII

    ANS: A   PTS: 1   REF: 64

21. The rightmost part of a domain name is called a(n) ____.
    a. top-level domain   c. category
    b. URL   d. government-level domain

ANS: A   PTS: 1   REF: 65

22. ____ are sets of words that are assigned to specific IP addresses.
    a. Domain names   c. Octets
    b. URLs   d. Piconets

ANS: A   PTS: 1   REF: 64

23. Which of the following organizations is responsible for setting standards for the router computers that make up the Internet?
    a. ARIN   c. IETF
    b. ICANN   d. APNIC

ANS: B   PTS: 1   REF: 65

24. The purpose of a(n) ____ is to respond to requests for Web pages from Web clients.
    a. URL   c. Web server
    b. e-mail   d. top-level domain

ANS: C   PTS: 1   REF: 66

25. The combination of the protocol name and the domain name is called a(n) ____.
    a. URI   c. URL
    b. URO   d. HTTP

ANS: C   PTS: 1   REF: 66

26. ____ 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. IMAP   c. SMTP
    b. MIME   d. POP

ANS: B   PTS: 1   REF: 67

27. ____ lets users manipulate and store their e-mail on one computer and access it from any number of other computers.
    a. POP   c. MIME
    b. SMTP   d. IMAP

ANS: D   PTS: 1   REF: 67

28. ____ 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. SMTP   c. MIME
    b. TCP/IP   d. POP

ANS: A   PTS: 1   REF: 67

29. A newer e-mail protocol that performs the same basic functions as POP, but includes additional features, is known as ____.
    a. IMAP   c. POPI
    b. SMTP   d. IPOP

ANS: A   PTS: 1   REF: 67

30. ____ lets users create and manipulate mail folders, delete messages, and search for certain parts of a message while the e-mail is still on the e-mail computer.
   a. POP
   b. SMTP
   c. IMAP
   d. MIME

   ANS: C   PTS: 1   REF: 67

31. The protocol used to send e-mail is ____.
   a. SMTP
   b. MIME
   c. HTTP
   d. XML

   ANS: A   PTS: 1   REF: 67

32. The early versions of ____ allowed Web page designers to create text-based electronic documents with headings, title bar titles, bullets, lines, and ordered lists.
   a. HTTP
   b. HTML
   c. SGML
   d. XML

   ANS: B   PTS: 1   REF: 70

33. ____ is nonproprietary and platform independent and offers user-defined tags. However, it is not well suited to certain tasks, such as the rapid development of Web pages.
   a. HTML
   b. XML
   c. SGML
   d. DSL

   ANS: C   PTS: 1   REF: 69

34. The ____ tag is used to create hyperlinks in a Web document.
   a. head
   b. anchor
   c. title
   d. ol

   ANS: B   PTS: 1   REF: 75

35. A(n) ____ is an interconnected network, usually one that uses the TCP/IP protocol set, and does not extend beyond the organization that created it.
   a. Internet
   b. extranet
   c. intranet
   d. ARPANET

   ANS: C   PTS: 1   REF: 82

36. ____ effectively creates a private passageway through the public Internet that provides secure transmission from one computer to another.
   a. IP wrapping
   b. Scaling
   c. IP tunneling
   d. Bandwidth

   ANS: C   PTS: 1   REF: 84

37. A(n) ____ is like a separate, covered commuter lane on a highway (the Internet) in which passengers are protected from being seen by the vehicles traveling in the other lanes.
   a. VPN
   b. IP wrapper
   c. extranet
   d. IAP

   ANS: A   PTS: 1   REF: 84

38. An extranet that uses public networks and their protocols to send sensitive data to partners, customers, suppliers, and employees using a system called IP tunneling or encapsulation is known as a(n) ____.

a. public network   c. virtual private network
b. virtual public network   d. private network

ANS: C   PTS: 1   REF: 84

39. Increasing the number of leased lines in private networks is difficult, costly, and time consuming. This is known as a(n) _____.
a. network problem   c. scaling problem
b. private network problem   d. tunneling problem

ANS: C   PTS: 1   REF: 84

40. A(n) _____ is a program or hardware device that protects information inside an organization's network from attacks that originate outside the network.
a. VPN   c. IP tunnel
b. firewall   d. packet

ANS: B   PTS: 1   REF: 84

COMPLETION

1. A computer _____ is any technology that allows people to connect computers to each computer.

    ANS: network

    PTS: 1   REF: 53

2. The _____ is a large system of interconnected computer networks that spans the globe.

    ANS: Internet

    PTS: 1   REF: 53

3. The part of the Internet known as the _____ is a subset of the computers on the Internet that are connected to each other in a specific way that makes them and their contents easily accessible to each other.

    ANS:
    World Wide Web
    WWW
    Web
    WWW (World Wide Web)
    World Wide Web (WWW)

    PTS: 1   REF: 53

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

    ANS: mailing list

    PTS: 1   REF: 55

5. 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.

ANS:
Usenet
User's News Network

PTS: 1   REF: 55

6. Usenet survives on the Internet today with over 1000 different topic areas that are called _____.

ANS: newsgroups

PTS: 1   REF: 55

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

ANS: hosts

PTS: 1   REF: 56

8. _____ providers sell Internet access rights directly to larger customers and indirectly to smaller firms and individuals through other companies, called ISPs.

ANS: Network access

PTS: 1   REF: 56

9. A(n) _____ server is a computer that stores files written in the hypertext markup language and lets other computers connect to it and read these files.

ANS: hypertext

PTS: 1   REF: 57

10. Programs apply their routing algorithms to information they have stored in routing tables or _____ tables.

ANS: configuration

PTS: 1   REF: 60

11. The routers connected to the Internet backbone are sometimes called _____ routers.

ANS: backbone routers

PTS: 1   REF: 61

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

ANS: Transmission Control

PTS: 1   REF: 62

13. The _____ protocol specifies the addressing details for each packet, labeling each with the packet's origination and destination addresses.

ANS: Internet

PTS: 1   REF: 62

14. The set of rules for delivering Web pages over the Internet are collected in a protocol called the _____.

ANS:
Hypertext Transfer Protocol
Hypertext Transfer Protocol (HTTP)
HTTP
HTTP (Hypertext Transfer Protocol)

PTS: 1   REF: 66

15. _____ is a meta language, which is a language that can be used to define other languages.

ANS:
SGML
Standard Generalized Markup Language
SGML (Standard Generalized Markup Language)
Standard Generalized Markup Language (SGML)

PTS: 1   REF: 68

16. HTML and XML were derived from _____.

ANS:
SGML
Standard Generalized Markup Language
SGML (Standard Generalized Markup Language)
Standard Generalized Markup Language (SGML)

PTS: 1   REF: 68

17. In HTML, the text elements that are related to one another are called _____ elements.

ANS: hypertext

PTS: 1   REF: 70

18. 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.

ANS: linear

PTS: 1   REF: 74

19. An XML document is embedded within a(n) _____ document.

ANS:
HTML
Hypertext Markup Language
HTML (Hypertext Markup Language)
Hypertext Markup Language (HTML)

PTS: 1   REF: 76

20. _____ let designers define formatting styles that can be applied to multiple Web pages.

ANS:
Cascading Style Sheets
CSS
CSS (Cascading Style Sheets)
Cascading Style Sheets (CSS)

PTS: 1   REF: 76

21. _____ tags do not specify how text appears on a Web page; the tags convey the meaning of the information included within them.

ANS:
Extensible markup language
XML
XML (Extensible markup language)
Extensible markup language (XML)

PTS: 1   REF: 79

22. A(n) _____ is an intranet that has been extended to include specific entities outside the boundaries of the organization.

ANS: extranet

PTS: 1   REF: 82

23. Any computer network or telecommunications network that is made available to the public is known as a(n) _____.

ANS: public network

PTS: 1   REF: 83

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

ANS: Bandwidth

PTS: 1   REF: 85

25. Upstream bandwidth is also called _____ bandwidth.

ANS: upload

PTS: 1   REF: 85

ESSAY

1. As an individual packet travels from one network to another, the computers through which the packet travels determine the best route for getting the packet to its destination. Describe this process.

ANS:
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) or border routers (because they are located at the border between the organization and the Internet.) The programs on the routers that determine the best path 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.

PTS: 1   REF: 60

2. Identify the four key rules for message handling.

ANS:
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, and 4) No global control exists over the network.

PTS: 1   REF: 62

3. What is the difference between TCP and IP?

ANS:
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.

PTS: 1   REF: 62

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

ANS:
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. A private network is a private, leased-line connection between two companies that physically connects their intranets to one another.

PTS: 1   REF: 83

5. What are the advantages of Bluetooth technology?

    ANS:
    One major advantage of Bluetooth technology is that it consumes very little power, which is an important consideration for mobile 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 in either device. The printer and laptop computer electronically recognize each other as Bluetooth devices and immediately can begin exchanging information.

    PTS: 1   REF: 89