

Chapter 1: Computers and Digital Basics

MULTIPLE CHOICE

1. ____ is the process of converting text, numbers, sound, photos, and video into data that can be processed by digital devices.
- a Digitization
 - b Analog conversion
 - c Scanning
 - d Rasterization

ANS: A PTS: 1 REF: 5

2. The first digital computers were built during World War II for ____.
- a census taking
 - b code breaking
 - c communication
 - d troop placement

ANS: B PTS: 1 REF: 6

3. ____ software refers to any software that is installed on a computer's hard disk.
- a Local
 - b Proprietary
 - c Cloud
 - d Digital

ANS: A

PTS: 1

REF: 7

4. Initially sales were slow for the personal computer because of ____.
- a price
 - b size
 - c lack of software
 - d lack of availability

ANS: C

PTS: 1

REF: 7

5. In 1982, the percentage of households that had a computer was closest to ____ percent.
- a 10
 - b 30
 - c 50
 - d 70

ANS: A

PTS: 1

REF: 7

6. A global computer network originally developed as a military project is the ____.
- a World Wide Web
 - b Internet
 - c Wide-area network
 - d Local-area network

ANS: B

PTS: 1

REF: 8

7. When restrictions on commercial use of the ____ were lifted in 1995, companies such as AOL and CompuServe became popular services.

a World Wide Web c Wide-area network

.

.

b Internet

d Local-area network

.

.

ANS: B

PTS: 1

REF: 8

8. The ____ phase of the digital revolution materialized in the 1990s when the Internet was opened to public use.

a first c third

.

.

b second

d fourth

.

.

ANS: C

PTS: 1

REF: 8

9. According to the text, a key aspect of ____ is that it adds content and substance to ____.

a the Web, the Internet c the Internet, the Web

.

.

b convergence, the cloud

d the cloud, local applications

.

.

ANS: A

PTS: 1

REF: 8

10. During the period from ____, computing was characterized by the Web, e-mail, multiplayer games, music downloads, and enormous software applications.

- a 1982-1985
- b 1985-1990
- c 1990-1995
- d 1995-2010

ANS: D PTS: 1 REF: 8

11. The ____ is a collection of linked documents, graphics, and sounds.

- a network
- b Web
- c cyberspace
- d Internet

ANS: B PTS: 1 REF: 8

12. A group of computers linked together to share data and resources is a(n) ____.

- a network
- b Web
- c cyberspace
- d Internet

ANS: A PTS: 1 REF: 8

13. ____ computing provides access to information, applications, communications, and storage over the Internet.

- a Distance
- c Cloud

b Disparate

d Local

ANS: C

PTS: 1

REF: 9

14. Technology ____ is a process by which several different technologies with distinct functionality evolve to form a single product.

a evolution

c convergence

b rotation

d diversification

ANS: C

PTS: 1

REF: 9

15. ____ media are cloud-based applications designed for social interaction and consumer-generated content.

a Sharing

c Blogging

b Wiki

d Social

ANS: D

PTS: 1

REF: 10

16. Myspace lost steam in _____, but Facebook and Twitter marched ahead by attracting millions of users.

a 2004

c 2008

b 2006

d 2010

ANS: C

PTS: 1

REF: 10

17. _____ tools cloak a person's identity online.

a Anonymizer

c ID free

b Free ID

d Cloaking

ANS: A

PTS: 1

REF: 11

18. The modern definition and use of the term computer emerged in the _____.

a 1930s

c 1950s

b 1940s

d 1960s

ANS: B

PTS: 1

REF: 14

19. In a computer, most processing takes place in _____.

a memory

c the CPU

b RAM

d the motherboard

ANS: C

PTS: 1

REF: 15

20. An electronic component that can be programmed to perform tasks is a ____.
- a CPU
 - b microprocessor
 - c transistor
 - d none of the above

ANS: B

PTS: 1

REF: 15

21. A named collection of data that exists on a storage medium is known as (a) ____.
- a memory
 - b file
 - c file name
 - d none of the above

ANS: B

PTS: 1

REF: 15

22. An area of a computer that temporarily holds data waiting to be processed is ____.
- a the CPU
 - b memory
 - c storage
 - d a file

ANS: B

PTS: 1

REF: 15

23. A set of computer programs that helps a person carry out a task is ____.
- a an operating system
 - b system software
 - c application software
 - d Windows

ANS: C PTS: 1 REF: 16

24. A set of computer programs that helps a computer monitor itself and function more efficiently is ____.
- a a software suite
 - b system software
 - c application software
 - d processing software

ANS: B PTS: 1 REF: 16

25. The master controller for all activities that take place within a computer is ____.
- a application software
 - b system software
 - c the operating system
 - d the CPU

ANS: C PTS: 1 REF: 16

26. A(n) ____ is a microprocessor-based computing device designed to meet the computing needs of an individual.
- a personal computer
 - c ALU

b mainframe

d server

.

.

ANS: A

PTS: 1

REF: 17

27. An ordinary personal computer that is connected to a network is a ____.

a mainframe

c server

.

.

b workstation

d console

.

.

ANS: B

PTS: 1

REF: 18

28. A powerful desktop computer used for high-performance tasks is a ____.

a mainframe

c server

.

.

b workstation

d console

.

.

ANS: B

PTS: 1

REF: 18

29. A compute-intensive problem runs on a ____.

a server

c supercomputer

.

.

b miniframe

d super PC

.

.

ANS: C

PTS: 1

REF: 19

30. Data becomes ____ when it is presented in a format that people can understand and use.

a information

c graphs

.

.

b processed

d presentation

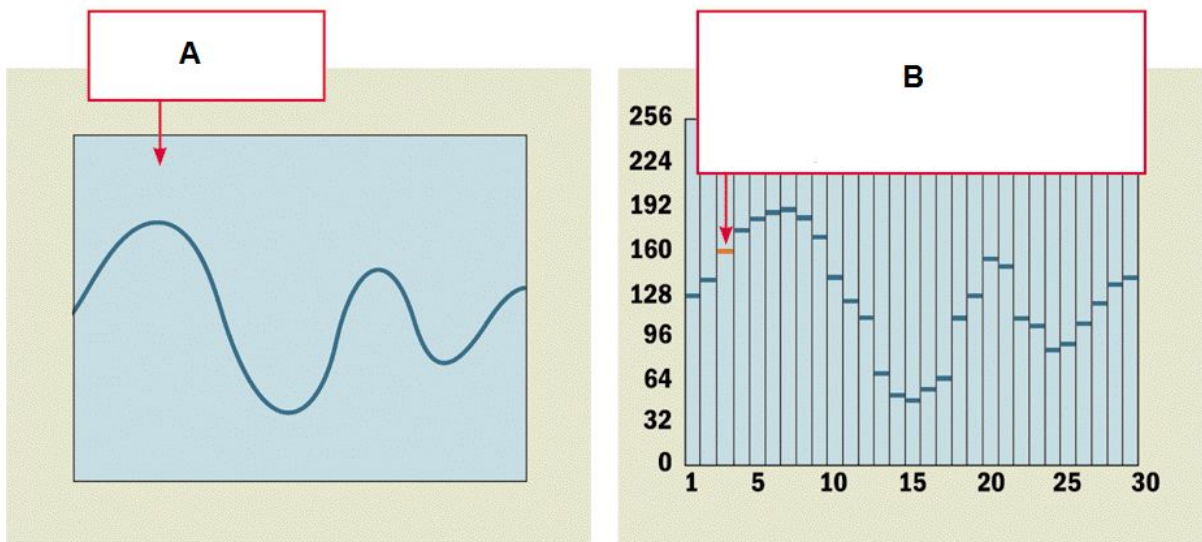
.

.

ANS: A

PTS: 1

REF: 22



31. The type of data where text, numbers, graphics, sound, and video have been converted into discrete digits as represented in the accompanying figure is ____.

a information

c digital

.

.

b analog

d none of the above

.

.

ANS: C

PTS: 1

REF: 22, 25

32. The type of data that is represented using an infinite scale of values as represented in the accompanying figure is ____.

a information

c digital

.

.

b analog

d none of the above

.

.

ANS: B

PTS: 1

REF: 22, 25

33. The binary number 10 represents ____ in the decimal number system.

a 1

c 10

.

.

b 2

d 100

.

.

ANS: B

PTS: 1

REF: 23

34. The type of code that uses only seven bits for each character is ____.

a ASCII

c EBCDIC

.

.

b Extended ASCII

d all of the above

.

.

ANS: A

PTS: 1

REF: 24

35. The type of code that uses eight bits for each character is ____.
- a ASCII
 - b Extended ASCII
 - c EBCDIC
 - d all of the above

ANS: B PTS: 1 REF: 24

36. Digital devices can use ____ as a code to represent character data.
- a ASCII
 - b Extended ASCII
 - c EBCDIC
 - d all of the above

ANS: D PTS: 1 REF: 24

37. You might represent ____ using character codes.
- a color dots
 - b bank balances
 - c Social Security numbers
 - d none of the above

ANS: C PTS: 1 REF: 25

38. Data transmission speeds are typically expressed as ____.
- a bits
 - c hertz

- . b bytes
- . d none of the above

ANS: A PTS: 1 REF: 26

39. Storage is typically expressed as ____.
- a bits
 - b bytes
 - c hertz
 - d none of the above

ANS: B PTS: 1 REF: 26

40. 1,024 bytes is a ____.
- a kilobyte
 - b megabyte
 - c gigabyte
 - d terabyte

ANS: A PTS: 1 REF: 26

41. 1,048,576 bytes is a ____.
- a kilobyte
 - b megabyte
 - c gigabyte
 - d terabyte

ANS: B

PTS: 1

REF: 26

42. 1,073,741,824 bytes is a ____.

a kilobyte

c gigabyte

b megabyte

d terabyte

ANS: C

PTS: 1

REF: 26

43. A super-thin slice of semiconducting material packed with microscopic circuit elements is a(n) ____.

a integrated circuit

c microchip

b computer chip

d all of the above

ANS: D

PTS: 1

REF: 27



44. The accompanying figure represents two types of chip carriers. The one on the left is a ____.

- a PGA
- b DIP
- c PID
- d GAP

ANS: B PTS: 1 REF: 27

45. The accompanying figure represents two types of chip carriers. The one on the right is a ____.

- a PGA
- b DIP
- c PID
- d GAP

ANS: A PTS: 1 REF: 27

46. The ____ houses all essential chips and provides connecting circuitry between them.

- a system board
- b housing structure
- c circuit breaker
- d chip set

ANS: A PTS: 1 REF: 28

47. C, BASIC, COBOL, and Java are examples of ____ programming languages.

- a low-level
- b computer
- c system
- d high-level

ANS: D PTS: 1 REF: 29

48. The human-readable version of a program is called ____.
- a source code
 - b program code
 - c human code
 - d system code

ANS: A PTS: 1 REF: 29

49. A(n) ____ converts all the statements in a program in a single batch; the resulting collection of instructions is placed in a new file.
- a compiler
 - b interpreter
 - c converter
 - d instruction

ANS: A PTS: 1 REF: 30

50. A(n) ____ converts and executes one statement at a time.
- a compiler
 - b interpreter
 - c converter
 - d instruction

ANS: B

PTS: 1

REF: 30

51. A collection of preprogrammed activities such as addition, subtraction, counting, and comparison is called a(n) ____.

a compiler code

c machine code

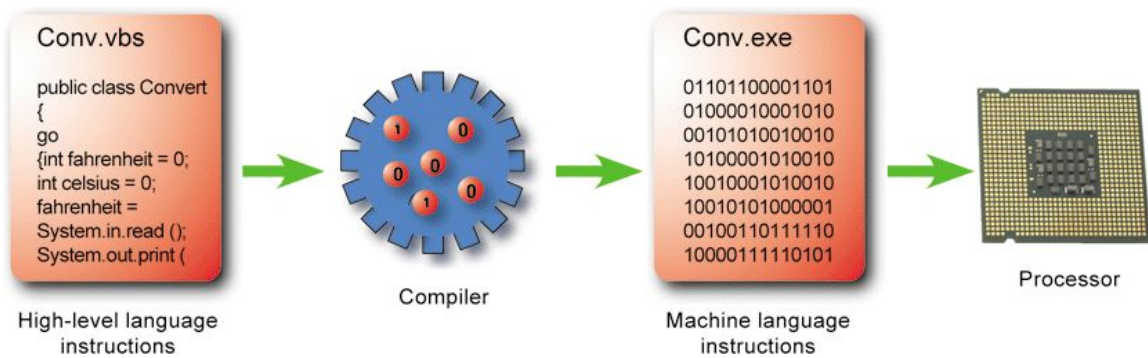
b interpreter code

d instruction set

ANS: D

PTS: 1

REF: 30



52. ____, as shown in the accompanying figure, can be directly executed by the processors's circuitry.

a Machine sets

c Programming language

b Machine language

d none of the above

ANS: B

PTS: 1

REF: 30

53. The ____ in machine language is a command word for an operation such as add, compare, or jump.

a op code

c ALU

.

.

b operand

d instruction code

.

.

ANS: A

PTS: 1

REF: 31

54. The ____ from an instruction specifies the data.

a op code

c ALU

.

.

b operand

d instruction code

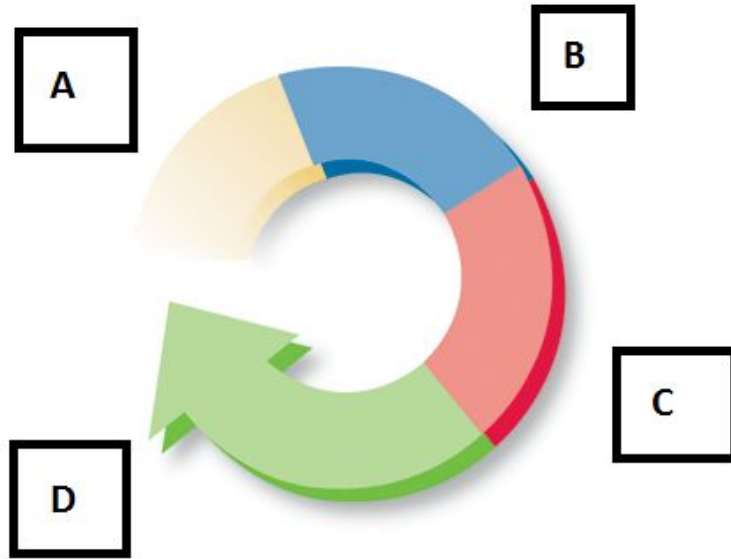
.

.

ANS: B

PTS: 1

REF: 31



57. The accompanying figure represents the instruction cycle. The first step is Box A and represents the _____.

- | | | | |
|---|-----------------------|---|---------------------|
| a | fetch instruction | c | execute instruction |
| b | interpret instruction | d | increment pointer |

ANS: A PTS: 1 REF: 32

58. The accompanying figure represents the instruction cycle. The second step is Box B and represents the _____.

- | | | | |
|---|-----------------------|---|---------------------|
| a | fetch instruction | c | execute instruction |
| b | interpret instruction | d | increment pointer |

ANS: B

PTS: 1

REF: 32

59. The accompanying figure represents the instruction cycle. The third step is Box C and represents the

_____.

a fetch instruction

c execute instruction

.

.

b interpret instruction

d increment pointer

.

.

ANS: C

PTS: 1

REF: 32

60. The accompanying figure represents the instruction cycle. The fourth step is Box D and represents the

_____.

a fetch instruction

c execute instruction

.

.

b interpret instruction

d increment pointer

.

.

ANS: D

PTS: 1

REF: 32

61. In terms of an authentication protocol, the phrase 'something a person knows' refers to _____.

a a password

c biometrics

.

.

b an ID card

d none of the above

.

.

ANS: A

PTS: 1

REF: 34

62. A ____ is a series of characters that becomes a person's unique identifier.
- a PIN code
 - b password
 - c user ID
 - d all of the above

ANS: C

PTS: 1

REF: 34

63. In terms of an authentication protocol, the phrase 'something a person possesses' could refer to ____.
- a a password
 - b an ID card
 - c biometrics
 - d none of the above

ANS: B

PTS: 1

REF: 34

64. In terms of an authentication protocol, the phrase 'something a person is' refers to a(n) ____.
- a password
 - b ID card
 - c biometric device
 - d none of the above

ANS: C

PTS: 1

REF: 34

65. A problem a hacker can cause after breaking into your computer might be ____.
- a applying for credit in your name
 - c applying for a mortgage using your data

b sending embarrassing e-mails d all of the above

.

.

ANS: D

PTS: 1

REF: 36

66. A term which can refer to a person who manipulates computers with malicious intent is _____.

a black hat

c hacker

.

.

b cracker

d all of the above

.

.

ANS: D

PTS: 1

REF: 36

67. A _____ attack uses password-cracking software.

a brute force

c phishing

.

.

b sniffing

d cracker

.

.

ANS: A

PTS: 1

REF: 37

68. _____ intercepts information sent over computer networks.

a Brute force

c Phishing

.

.

b Sniffing

d Cracking

.

.

ANS: B

PTS: 1

REF: 37

69. A hacker posing as a legitimate representative of an official organization such as your bank is an example of ____.
- a brute force
 - b sniffing
 - c phishing
 - d cracking

ANS: C

PTS: 1

REF: 37

70. Password management functions include all of the following EXCEPT ____.
- a generating passwords
 - b tracking passwords
 - c providing password strength
 - d recording keystrokes

ANS: D

PTS: 1

REF: 40 - 41

Chapter 2: Computer Hardware

MULTIPLE CHOICE

1. The term ____ designates equipment that might be added to a computer system to enhance its functionality.
- a digital device
 - b system add-on
 - c disk pack
 - d peripheral device

ANS: D

PTS: 1

REF: 56

2. The ____ is the case that holds the computer's main circuit boards, microprocessor, memory, power supply, and storage devices.
- a kiosk
 - b system unit
 - c form factor
 - d platform

ANS: B

PTS: 1

REF: 57

3. ____ are the form factor of choice for computer owners who might want to upgrade components in the future because it is easy to get inside the case and swap out parts.
- a Cube units
 - b Base units
 - c Tower units
 - d Minicases

ANS: C

PTS: 1

REF: 58

4. The term ____ refers to the size and dimensions of a computer component.

- a form factor
- b system specification
- c disk header
- d peripheral metric

ANS: A PTS: 1 REF: 58

5. A(n) ____ computer is a small, lightweight personal computer with screen, keyboard, storage, and processing components integrated into a single unit.

- a tower
- b all-in-one
- c desktop
- d portable

ANS: D PTS: 1 REF: 59

6. A laptop computer (also referred to as a ____ computer) is a small, lightweight portable computer that opens like a clamshell to reveal a screen and keyboard.

- a digital deskbook
- b mini-notebook
- c notebook
- d microtablet

ANS: C PTS: 1 REF: 59

7. A laptop can ____.

- a be plugged into an electrical outlet
- b be used in a car
- c both a. and b.

ANS: B

PTS: 1

REF: 60

11. Window Phone apps run on ____.

a iPhones

c BlackBerry devices

.

.

b Droids

d none of the above

.

.

ANS: D

PTS: 1

REF: 63

12. ____ means a billion cycles per second.

a Gigahertz

c Terahertz

.

.

b Megahertz

d Nanohertz

.

.

ANS: A

PTS: 1

REF: 67

13. In an advertisement, a speed specification, such as 3.4 GHz, indicates the speed of the microprocessor ____.

a control unit

c clock

.

.

b register

d none of the above

.

.

ANS: C

PTS: 1

REF: 67

14. ____ refers to the number of bits that a microprocessor can manipulate at one time.

a Processor speed

c Register space

.

.

b Word size

d ALU

.

.

ANS: B

PTS: 1

REF: 68

15. A processor that includes circuitry for two or more processing units is called a ____ processor.

a HyperTransport

c multi-core

.

.

b pipelined

d serial

.

.

ANS: C

PTS: 1

REF: 68

16. A technology called ____ allows the processor to begin executing another instruction before it completes the previous instruction.

a pipelining

c benchmarking

.

.

b serial processing

d HyperTransport

.

.

ANS: A

PTS: 1

REF: 69

17. A microprocessor whose instruction set includes a limited set of simple instructions uses ____ technology.

- a HyperTransport
- b RISC
- c CISC
- d benchmarked

ANS: B PTS: 1 REF: 69

18. ____ is used to enhance processor performance.

- a Pipelining
- b A benchmark
- c Parallel processing
- d both a and c

ANS: D PTS: 1 REF: 69

19. Many of today's microprocessors perform ____, in which multiple instructions are executed at the same time.

- a serial processing
- b multitasking
- c parallel processing
- d benchmarking

ANS: C PTS: 1 REF: 69

20. ____ are the result of a series of tests used to gauge overall microprocessor speed and are useful in comparing microprocessor performance.
- a Benchmarks
 - b Hyper-Threads
 - c Clocking figures
 - d FSC reports

ANS: A PTS: 1 REF: 70

21. Overclocking is a technique for increasing the speed of a computer component, such as _____. It can be very risky.
- a the processor
 - b a graphics card
 - c memory
 - d all of the above

ANS: D PTS: 1 REF: 71

22. ____ is a temporary holding area for data, application program instructions, and the operating system.
- a ROM
 - b EEPROM
 - c Disk storage
 - d RAM

ANS: D PTS: 1 REF: 72

23. RAM can be thought of as the ____ for the computer's processor.
- a factory
 - c waiting room

.
b operating room
.

.
d planning room
.

ANS: C

PTS: 1

REF: 72

24. Unlike disk storage, most RAM is ____.

a virtual

c non-volatile

b integrated

d volatile

ANS: D

PTS: 1

REF: 72

25. If a program exceeds its allocated space, the operating system uses an area of the hard disk called ____ to store parts of a program or data file until they are needed.

a volatile memory

c virtual memory

b capacitor memory

d integrated memory

ANS: C

PTS: 1

REF: 73

26. For good basic performance, a computer running Windows 7 or 8 should have at least ____ of RAM.

a 100 MB

c 500 MB

b 250 MB

d 1 GB

ANS: D

PTS: 1

REF: 73

27. ____ is used by most of today's personal computers because it is fast and relatively inexpensive.

a RDRAM

c SDRAM

.

.

b EEPROM

d none of the above

.

.

ANS: C

PTS: 1

REF: 73

28. ____ is a type of memory circuitry that holds the computer's startup routine.

a RIM (Read initial memory)

c ROM (Read only memory)

.

.

b RAM (Random access memory)

d REM (Ready ever memory)

.

.

ANS: C

PTS: 1

REF: 74

29. ROM BIOS is a small set of instructions that tells the computer all of the following EXCEPT ____.

a how to access the hard disk

.

b where to find the operating system

.

c how to load the operating system into RAM

.

d what the data transfer rate should be

.

ANS: D

PTS: 1

REF: 74

30. A(n) ____ chip is a type of non-volatile memory chip that does not require power to hold data.

a RAM

c SDRAM

.

.

b EEPROM

d all of the above

.

.

ANS: B

PTS: 1

REF: 74

31. ____ time is the average time it takes a computer to locate and read data on the storage medium.

a Identification

c Access

.

.

b Isolation

d Find

.

.

ANS: C

PTS: 1

REF: 77

32. ____ is the ability of a device to "jump" directly to the requested data.

a Sequential access

c Random access

.

.

b Quick access

d all of the above

.

.

ANS: C

PTS: 1

REF: 77

33. The ____ is the amount of data that a storage device can move from the storage medium to the computer per second.

- a data migration rate
- b data transfer rate
- c data digitizing rate
- d data access rate

ANS: B PTS: 1 REF: 77

34. Storage capacity usually is measured in ____.

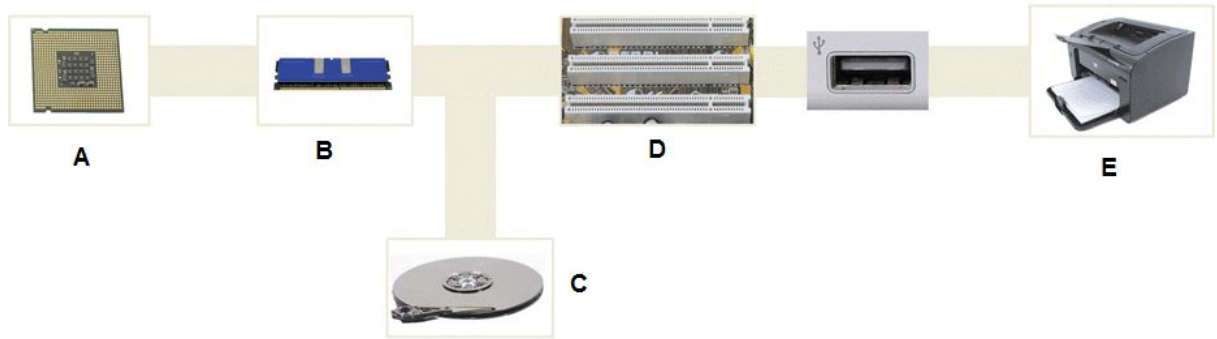
- a milliseconds (ms)
- b gigabytes or terabytes
- c gigabits or terabits per second
- d none of the above

ANS: B PTS: 1 REF: 77

35. Hard disk storage technology can be classified as ____ storage.

- a optical
- b magnetic
- c fluid-state
- d pipelined

ANS: B PTS: 1 REF: 78



36. In the accompanying figure, which of the following is NOT true of the component in picture C?
- a It provides lots of storage capacity.
 - . .
 - b It is volatile.
 - . .
 - c It provides economical storage.
 - . .
 - d It is the preferred type of main storage for most personal computers.
 - . .

ANS: B

PTS: 1

REF: 78, 94

37. A hard disk ____ is a flat, rigid disk made of aluminum or glass and coated with magnetic iron oxide particles.
- a window
 - . .
 - b fragment
 - . .
 - c platter
 - . .
 - d control unit
 - . .

ANS: C

PTS: 1

REF: 78

38. Personal computer hard disk platters typically have storage capacities ranging from 40 GB to ____.
- a 60 GB
 - b 100 GB
 - c 750 GB
 - d 2 TB

ANS: D PTS: 1 REF: 78

39. CD, DVD, and Blu-ray technologies can be classified as ____ storage.
- a solid state
 - b bubble
 - c magnetic
 - d optical

ANS: D PTS: 1 REF: 81

40. Which of the following is an example of a rerecordable optical storage medium?
- a BD-RE
 - b CD-RW
 - c DVD+RW
 - d all of the above

ANS: D PTS: 1 REF: 83

41. A built-in ____ in your personal computer can make it simpler to transfer photos from a solid state memory card used in your digital camera.
- a card reader
 - c U3 drive

b USB drive

d MP3 media player

ANS: A

PTS: 1

REF: 84

42. Solid state storage, also called flash memory storage, ____.

a contains platters made of aluminum or glass

b provides fairly fast access to data

c includes moving parts

d all of the above

ANS: B

PTS: 1

REF: 84



43. The accompanying figure shows a ____.
- a CompactFlash card
 - b SmartMedia card
 - c USB flash drive
 - d CD drive

ANS: C PTS: 1 REF: 85

44. The item in the accompanying figure can have capacities ranging from ____.
- a 1 MB to 16 MB
 - b 16 MB to 64 MB
 - c 1 MB to 64 GB
 - d 16 MB to 256 GB

ANS: D PTS: 1 REF: 85

45. A ____ is an example of a pointing device.
- a joystick
 - b trackpad
 - c mouse
 - d all of the above

ANS: D PTS: 1 REF: 88 - 89

46. A ____ is a touch-sensitive surface on which you can slide your fingers to move the on-screen pointer.
- a pointing stick
 - c trackball

b trackpad

d joystick

.

.

ANS: B

PTS: 1

REF: 89

47. Tablet computers, handheld devices, retail store self checkouts, and information kiosks collect input from a ____.

a pointing stick

c trackball

.

.

b joystick

d touchscreen

.

.

ANS: D

PTS: 1

REF: 89

48. ____ technology produces an image by filtering light through a layer of liquid crystal cells.

a PDA

c LCD

.

.

b HTML

d URL

.

.

ANS: C

PTS: 1

REF: 90

49. Dot pitch is the distance in millimeters between like-colored ____ —the small dots of light that form an image.

a pixels

c points

.

.

b picas

d icons

.

.

ANS: A

PTS: 1

REF: 90

50. For gaming systems, a response rate of ____ or less is desirable.

a 5 ms

c 11 ms

.

.

b 7 ms

d 12 ms

.

.

ANS: A

PTS: 1

REF: 90

51. The number of colors a monitor can display is referred to as ____.

a resolution

c veracity

.

.

b color depth

d GPU

.

.

ANS: B

PTS: 1

REF: 90

52. Which is the highest resolution?

a SXGA

c WQXGA

.

.

b VGA

d SVGA

.

.

ANS: C

PTS: 1

REF: 91

53. A printer's ____ determines how many pages a printer is able to churn out.

- a resolution
- b duplex index
- c duty cycle
- d PCL

ANS: C PTS: 1 REF: 93

54. A(n) ____ printer can print on both sides of the paper.

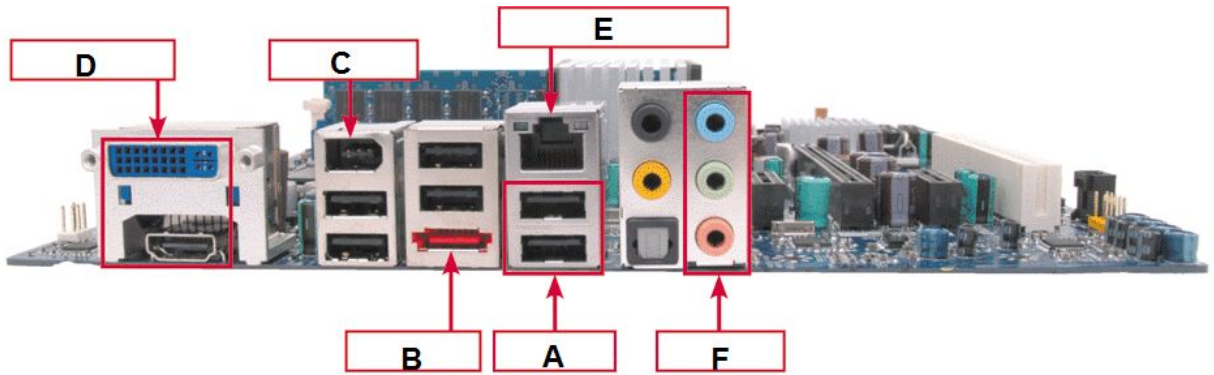
- a duplex
- b remastered
- c dot-matrix
- d ink-jet

ANS: A PTS: 1 REF: 94

55. ____ is the most widely used language for communication between computers and printers.

- a Linux
- b PostScript
- c PCL
- d USB

ANS: C PTS: 1 REF: 94



56. In the accompanying figure, the item marked A is a ____.
- | | | | |
|---|------------|---|--------------|
| a | USB port | c | printer port |
| . | . | . | . |
| b | mouse port | d | modem port |
| . | . | . | . |

ANS: A PTS: 1 REF: 95

57. In the accompanying figure, the item marked B is a ____.
- | | | | |
|---|------------|---|---------------|
| a | USB port | c | parallel port |
| . | . | . | . |
| b | eSATA port | d | keyboard port |
| . | . | . | . |

ANS: B PTS: 1 REF: 95

58. In the accompanying figure, the item marked C is a ____.
- | | | | |
|---|-------------|---|---------------|
| a | USB port | c | FireWire port |
| . | . | . | . |
| b | serial port | d | keyboard port |
| . | . | . | . |

ANS: C

PTS: 1

REF: 95

59. Hot plugging is allowed with what kind of devices?

a PCI

c FireWire

b USB

d both b and c

ANS: D

PTS: 1

REF: 97

60. The ____ is a security mechanism that is factory-installed on many personal computers.

a STOP plate

c Kensington Security Slot

b EPA

d slate tablet

ANS: C

PTS: 1

REF: 98

61. A ____ is a sudden increase or spike in electrical energy, affecting the current that flows to electrical outlets.

a brownout

c power surge

b UPS

d battery blast

ANS: C

PTS: 1

REF: 99

62. ____ plates leave an indelible tattoo on your computer equipment, which contains a unique ID number registered in an international database.

a power

c StealthSignal

.

.

b STOP

d Computrace

.

.

ANS: B

PTS: 1

REF: 99

63. Which of the following is tracking and recovery software?

a Lojack for Laptops

c WebAngel

.

.

b Laptop Location System

d STOP

.

.

ANS: A

PTS: 1

REF: 99

64. Power ____ can originate from a number of sources: downed power lines, power grid switching by the electric company, faulty wiring, and large appliances powering on and off.

a flashes

c cycles

.

.

b surges

d portages

.

.

ANS: B

PTS: 1

REF: 99

65. A ____ is a device that not only provides surge protection, but also furnishes your computer with battery backup power during a power outage.

- a surge strip
- b USB
- c UPS
- d battery strip

ANS: C PTS: 1 REF: 100

66. A(n) ____ strip monitors the electrical current that passes from the outlet to all the devices plugged into the strip.

- a outlet
- b surge
- c backup
- d battery

ANS: B PTS: 1 REF: 100

67. The ____ indicates that the operating system has encountered an error from which it cannot recover, and the computer no longer accepts any commands.

- a STOP
- b blue screen of death
- c RISC
- d HTTP

ANS: B PTS: 1 REF: 103

68. A good computer maintenance routine would include regularly ____.
- a running utilities like Disk Cleanup and Disk Defragmenter
 - .
 - b scanning your computer for viruses and spyware
 - .
 - c deleting your browser's history and cache files
 - .
 - d all of the above
 - .

ANS: D

PTS: 1

REF: 103

69. To reboot a PC, hold down the ____ keys at the same time.
- a Ctrl, Alt, and Esc
 - .
 - b Alt, Esc, and Del
 - .
 - c Ctrl, Alt, and Del
 - .
 - d Del and Alt
 - .

ANS: C

PTS: 1

REF: 104

70. ____ is a limited version of Windows that allows you to use your mouse, screen, and keyboard but no other peripheral devices.
- a Control Panel
 - .
 - b UPS State
 - .
 - c Power Mode
 - .
 - d Safe Mode
 - .

ANS: D

PTS: 1

REF: 105

Chapter 3: Software

MULTIPLE CHOICE

1. System software is designed to accomplish ____ tasks.
- | | |
|--------------------|-------------------------|
| a real-world | c only gaming |
| . | . |
| b computer-centric | d only operating system |
| . | . |

ANS: B PTS: 1 REF: 120

2. Application software is designed to accomplish ____ tasks.
- | | |
|--------------------|-------------------------|
| a real-world | c only gaming |
| . | . |
| b computer-centric | d only operating system |
| . | . |

ANS: A PTS: 1 REF: 120

3. DVD authoring software offers tools for creating DVDs with ____-style menus.
- | | |
|------------|-------------|
| a London | c Cannes |
| . | . |
| b New York | d Hollywood |
| . | . |

ANS: D

PTS: 1

REF: 122

4. 3-D graphics software provides a set of tools for creating ____ that represent three-dimensional objects.

a stereoscopes

c wireframes

.

.

b prototypes

d photos

.

.

ANS: C

PTS: 1

REF: 124

5. An example of mathematical modeling software is ____.

a SPSS Statistics

c Quicken

.

.

b Mathcad

d all of the above

.

.

ANS: B

PTS: 1

REF: 126

6. Productivity software that has sophisticated features to help you produce typeset-quality output is considered ____ software.

a word processing

c Web authoring

.

.

b desktop publishing

d spreadsheet

.

.

ANS: B

PTS: 1

REF: 127

7. Software considered to be utility software is ____.
- a the Windows operating system
 - b word processing
 - c spell check
 - d hard disk backup software

ANS: D

PTS: 1

REF: 129

8. The type of system software designed to help you monitor and configure settings for your computer system equipment is ____ software.
- a settings set
 - b execution
 - c utility
 - d config

ANS: C

PTS: 1

REF: 129

9. Adobe Reader works with files stored in standard ____ format.
- a PDF
 - b GIF
 - c HTML
 - d both a and c

ANS: A

PTS: 1

REF: 130

10. Word ____ determines how your text flows from line to line by automatically moving words down to the next line as you reach the right margin in a word processing document.

- a placement
- b wrap
- c format
- d authoring

ANS: B PTS: 1 REF: 133

11. ____ utilities alter a user's interface to create an accessible environment.

- a Shareware
- b Adaptive
- c Collaborative
- d Functional

ANS: B PTS: 1 REF: 130

12. An example of software most commonly associated with productivity software is ____.

- a the Windows operating system
- b a real-time player
- c word processing software
- d a browser

ANS: C PTS: 1 REF: 132

13. Productivity software that provides you with the ability to create, spell-check, edit, and format is considered ____ software.

- a word processing
- b desktop processing
- c Web authoring
- d spreadsheet

ANS: A PTS: 1 REF: 133

14. When using word processing software to analyze the reading level of your document, you should use a

- _____.
- a thesaurus
 - b grammar checker
 - c readability formula
 - d paragraph checker

ANS: C PTS: 1 REF: 134

15. The paragraph style that is used to assure paragraphs are aligned evenly on both the right and left is

- _____.
- a both align
 - b paragraph justify
 - c fully justified
 - d page align

ANS: C PTS: 1 REF: 135

16. A page layout includes _____.

- a headers and footers
- c margins

b page numbers

d all of the above

ANS: D

PTS: 1

REF: 135

17. The intersection of a column and a row on a spreadsheet is called a ____.

a formula

c number

b value

d cell

ANS: D

PTS: 1

REF: 136

18. Spreadsheets are particularly useful for ____.

a what-if analysis

c creating tables

b use as a calculator

d none of the above

ANS: A

PTS: 1

REF: 136

	A	B	C	D
1	Espresso Espresso	Current	Scenario 1	Scenario 2
2	Projected Income (total from Income tab)	\$486,000.00	\$972,000.00	\$243,000.00
3	Cost of coffee, etc. (total from cost tab)	\$130,000.00	\$130,000.00	\$130,000.00
4	Wages	\$120,000.00	\$120,000.00	\$120,000.00
5	Rent	\$36,000.00	\$36,000.00	\$36,000.00
6	Advertising	\$6,600.00	\$6,600.00	\$6,600.00
7	Telephone	\$1,080.00	\$1,080.00	\$1,080.00
8	Utilities	\$6,600.00	\$6,600.00	\$6,600.00
9	Insurance	\$1,080.00	\$1,080.00	\$1,080.00
10	Projected Expenses	\$96,440.00	\$396,440.00	\$396,440.00
11	Projected Profit	\$89,560.00	\$575,560.00	-\$153,440.00

19. In the accompanying figure, the item marked A is a(n) ____.
- a formula
 - b active cell
 - c caption
 - d label

ANS: B PTS: 1 REF: 136

20. In the accompanying figure, the item marked B is a(n) ____.
- a formula
 - b active cell
 - c value
 - d label

ANS: D

PTS: 1

REF: 136

21. In the accompanying figure, the item marked C is a(n) ____.

a formula

c value

.

.

b label

d active cell

.

.

ANS: C

PTS: 1

REF: 136

22. A formula can contain ____ and mathematical operators.

a manipulatives

c cell references

.

.

b labels

d locations

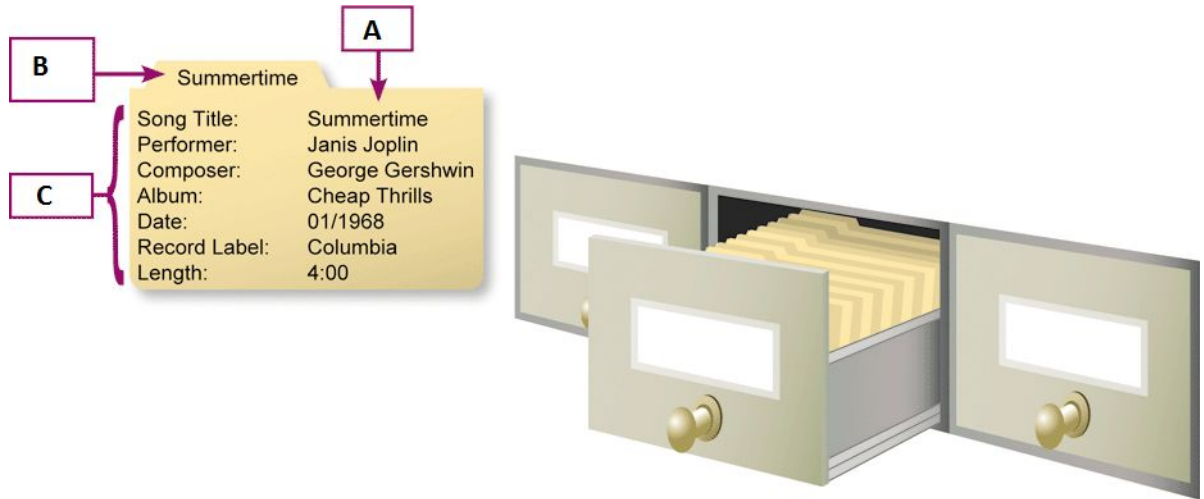
.

.

ANS: C

PTS: 1

REF: 137



23. In the accompanying figure, the index card represents a single database ____.
- a data
 - b field
 - c record
 - d item

ANS: C PTS: 1 REF: 139

24. In the accompanying figure, the item marked A represents ____.
- a data
 - b a field
 - c a record
 - d an item

ANS: A PTS: 1 REF: 139

25. In the accompanying figure, the item marked B represents ____.

- a a column
- b a field
- c a record
- d an item

ANS: C PTS: 1 REF: 139

26. In the accompanying figure, the items marked C represent ____.
- a a cell
 - b fields
 - c records
 - d items

ANS: B PTS: 1 REF: 139

27. To find a particular record or group of records in a database, you use a(n) ____.
- a find
 - b query
 - c inquiry
 - d search

ANS: B PTS: 1 REF: 141

28. You can use the results from a search on a database in all of these ways EXCEPT to ____.
- a print reports
 - b export data
 - c convert formats
 - d create records

ANS: D

PTS: 1

REF: 141

29. ____ queries are questions stated in a language such as English, rather than an esoteric query language.

a Natural language

c QBE

.

.

b Keyword

d Notational

.

.

ANS: A

PTS: 1

REF: 141

30. ____ searches are simply a collection of words relevant to a search.

a Natural language

c QBE

.

.

b Keyword

d Notational

.

.

ANS: B

PTS: 1

REF: 141

31. ____ simply requires you to fill out a form with the type of data you want to locate in a database.

a Natural language modification

c QBE

.

.

b Keyword searching

d Notational resonance

.

.

ANS: C

PTS: 1

REF: 141

32. Popular presentation software products include all of the following EXCEPT ____.

- a Microsoft PowerPoint
- b iWork Keynote
- c LibreOffice Impress
- d Movie Maker

ANS: D

PTS: 1

REF: 142

33. Web applications are ____.

- a installed locally and run on the Web
- b accessed and run on the Web
- c installed on the Web and run locally
- d all of the above

ANS: B

PTS: 1

REF: 143

34. Mobile apps ____.

- a are usually small
- b typically are sold through an App store
- c often cost less than \$5.00, or are even free
- d all of the above

ANS: D

PTS: 1

REF: 145

38. ____ applications are software that is installed on a computer's hard disk.

- | | |
|------------|---------|
| a Help | c Data |
| . | . |
| b Resident | d Local |
| . | . |

ANS: D PTS: 1 REF: 146

39. When you install a local application, all of its files are placed in the appropriate folders on your computer's hard disk, and then your computer performs any software or hardware ____ necessary to make sure the program is ready to run.

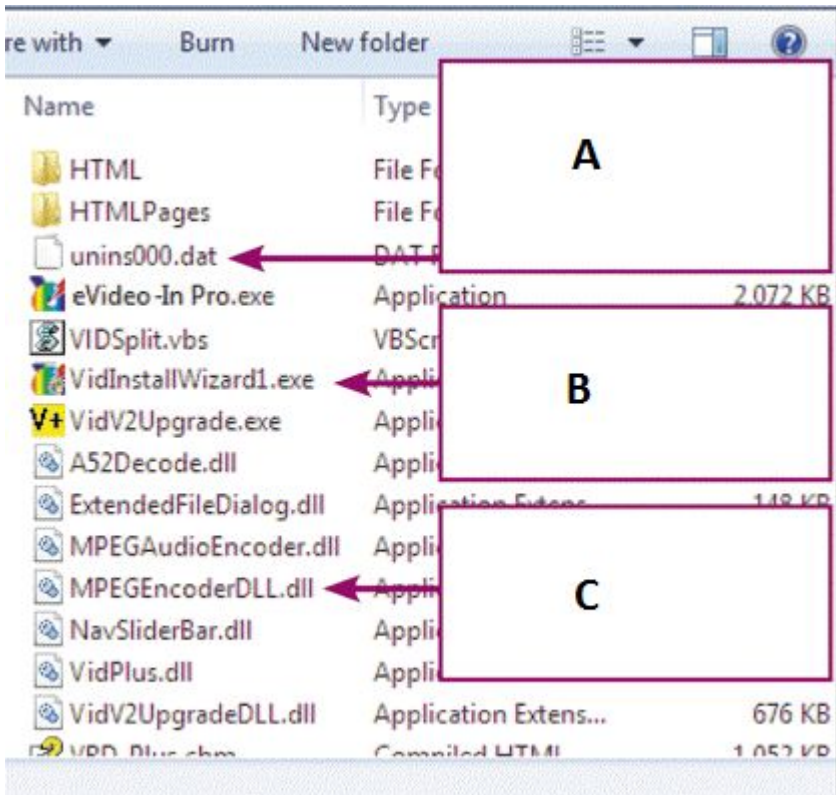
- | | |
|-------------------|------------------|
| a authentications | c configurations |
| . | . |
| b reboots | d verifications |
| . | . |

ANS: C PTS: 1 REF: 146

40. Support program files for PC applications often have a(n) ____ extension.

- | | |
|--------|--------|
| a .exe | c .dll |
| . | . |
| b .hlp | d .spt |
| . | . |

ANS: C PTS: 1 REF: 146



41. In the accompanying figure, the file marked A is a(n) ____.
- a data file
 - b executable file
 - c support program file
 - d help file

ANS: A PTS: 1 REF: 146

42. In the accompanying figure, the file marked B is a(n) ____.
- a data file
 - b help file
 - c support program file
 - d executable file

ANS: D

PTS: 1

REF: 147

43. In the accompanying figure, the files marked C is a(n) ____.

a data file

c support program file

.

.

b executable file

d help file

.

.

ANS: C

PTS: 1

REF: 147

44. Most applications for PCs consist of multiple files. Additional files contain support modules called ____.

a application extensions

c text files

.

.

b data files

d All of the above

.

.

ANS: D

PTS: 1

REF: 146

45. When installing a PC application, most ____ for new software are placed in the folder you specify.

a executable files

c both a and b

.

.

b data files

d neither a nor b

.

.

ANS: C

PTS: 1

REF: 146

46. A(n) ____ installation gives you access to all features of the software.

- a custom
- b hash
- c activated
- d full

ANS: D PTS: 1 REF: 149

47. In a(n) ____ installation, the setup program displays a list of software features for your selection.

- a custom
- b hash
- c activated
- d full

ANS: A PTS: 1 REF: 149

48. All the following are examples of portable applications EXCEPT ____.

- a Firefox
- b FileZilla
- c Thunderbird
- d Microsoft Internet Explorer

ANS: D PTS: 1 REF: 151

49. Portable software is ____.

- a lighter than local software
- c designed to run from removable storage

b licensed only for portable devices d designed to run on portable devices

.

.

ANS: C PTS: 1 REF: 151

50. A service pack ____.

a unlocks computer services

.

b requires a service call to a technician

.

c provides updates to the operating system

.

d repairs and fixes the hardware

.

ANS: C PTS: 1 REF: 152

51. To get rid of software you no longer want from a PC, you ____.

a delete the icon

c run an uninstall routine

.

.

b delete the files

d both a and b

.

.

ANS: C PTS: 1 REF: 153

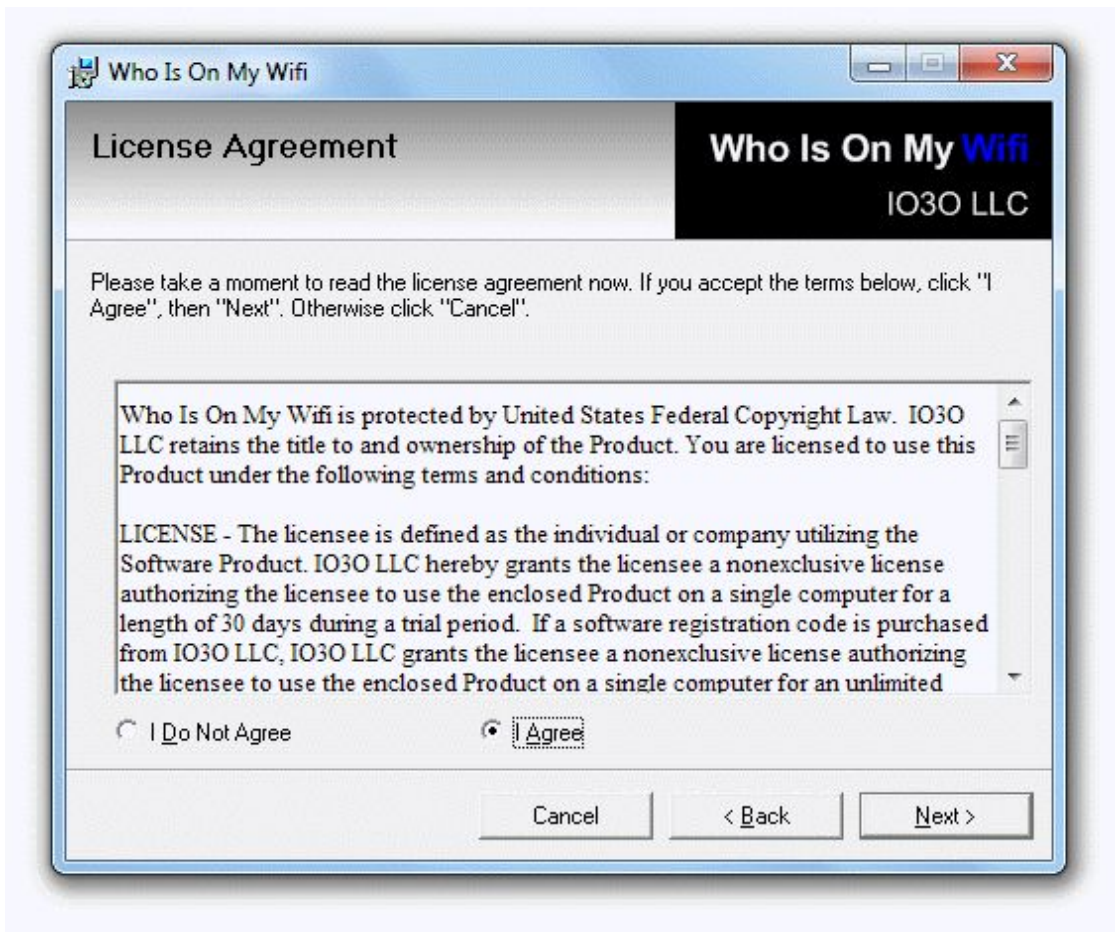
52. It is illegal to do all the following with software EXCEPT ____.

a copy and sell to a friend

c copy and keep as backup

.

.



55. As shown in the accompanying figure, a(n) ____ is a legal contract that defines the ways in which you may use a computer program.
- a software license
 - b term of sale
 - c Open Source Understanding
 - d transfer of ownership

ANS: A PTS: 1 REF: 157

56. The item shown in the accompanying figure is ____.
- a purchased separately from the software

- b really pirated software
- .
- c displayed on-screen when you first install software
- .
- d licensed only to as many as one dozen separate computers
- .

ANS: C PTS: 1 REF: 157

57. Software that may be freely copied, distributed, and even resold is ____.
- a shareware
 - b open source
 - c public domain
 - d GPL

ANS: C PTS: 1 REF: 158

58. ____ is typically sold in computer stores or at Web sites.
- a Commercial software
 - b Open source software
 - c Shareware
 - d Freeware

ANS: A PTS: 1 REF: 159

59. ____ is typically available as a trial version.
- a Freeware
 - c Demoware

ANS: C

PTS: 1

REF: 161

63. During product activation, you must ____.
- a run the program
 - b create a password
 - c enter a product key
 - d none of the above

ANS: C

PTS: 1

REF: 161

64. A ____ is any software that can automate a task or autonomously execute a task when commanded to do so.
- a virus
 - b worm
 - c Trojan horse
 - d bot

ANS: D

PTS: 1

REF: 164

65. The term rootkit refers to ____.
- a a program that repairs the computer's hardware core
 - b a program that repairs the kernel
 - c software tools used to conceal malware and backdoors
 - d software tools used to conceal security tools

ANS: C

PTS: 1

REF: 165

66. To avoid security threats, a user can ____.
- a store all data on a thumb drive
 - .
 - b enable the Hide extensions option
 - .
 - c read email as soon as it comes in
 - .
 - d avoid opening suspicious email attachments
 - .

ANS: D

PTS: 1

REF: 165

67. A security suite will typically include all of the following EXCEPT ____ software.
- a antivirus
 - c antispyware
 - .
 - b firewall
 - d browser
 - .

ANS: D

PTS: 1

REF: 166

68. Security suites can be ____.
- a downloaded from the Web
 - c purchased at electronics stores
 - .
 - b purchased at computer stores
 - d all of the above
 - .

ANS: D

PTS: 1

REF: 167

69. A virus signature is a ____.
- a type of utility that looks for and eradicates viruses
 - .
 - b unique series of instructions to defend against malicious code
 - .
 - c section of program code used to identify a known malicious program
 - .
 - d the personal identifier of the author of the virus
 - .

ANS: C

PTS: 1

REF: 167

70. If virus protection software identifies a virus, it can try to ____.
- a remove the infection
 - c delete the file
 - .
 - b put the file in quarantine
 - d All of the above
 - .

ANS: D

PTS: 1

REF: 169

Chapter 4: Operating Systems and File Management

MULTIPLE CHOICE

1. A(n) ____ system is a type of system software that acts as the master controller for all activities that take place within a computer system.

- a incremental
- b physical storage
- c boot
- d operating

ANS: D PTS: 1 REF: 184

2. A command to print a document is relayed through various levels of ____.

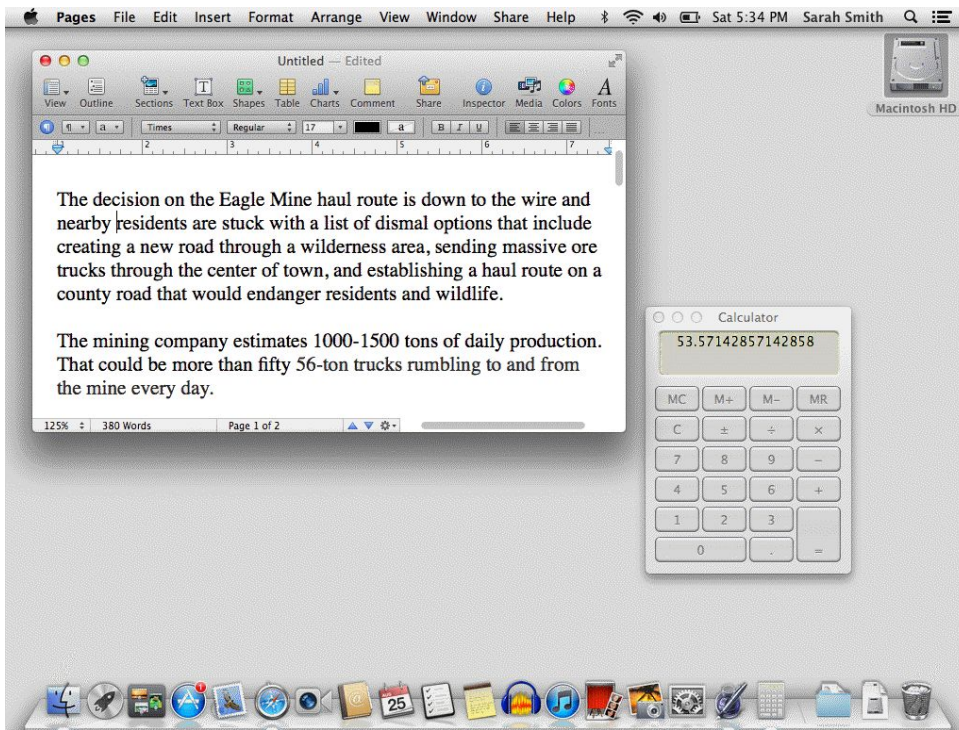
- a hardware
- b software
- c both a. and b.
- d neither a. nor b.

ANS: B PTS: 1 REF: 185

3. The operating system, application software, and ____ are organized similar to the chain of command in an army.

- a file types
- b device drivers
- c disk sectors
- d desktop

ANS: B PTS: 1 REF: 185



10. At the upper-right corner of the accompanying figure, the object labeled “Macintosh HD” is an example of a(n) ____.
- a icon
 - b menu
 - c taskbar
 - d window

ANS: A PTS: 1 REF: 191

11. In the accompanying figure, the word "Calculator" appears in ____.
- a an icon
 - b an Application window
 - c the taskbar
 - d none of the above

ANS: B

PTS: 1

REF: 191

12. In the accompanying figure, the icons at the bottom of the screen appear in the ____.

a menu bar

c dock

.

.

b Start menu

d Address bar

.

.

ANS: C

PTS: 1

REF: 191

13. In the accompanying figure, "Untitled" Word Document appears in a(n) ____.

a icon

c widget

.

.

b menu

d application window

.

.

ANS: D

PTS: 1

REF: 191

14. A ____ is an additional set of commands that the computer displays after you make a selection from the main menu.

a submenu

c menu selection

.

.

b dialog box

d all of the above

.

.

ANS: A

PTS: 1

REF: 193

15. A ____ displays the options associated with a command.
- a submenu
 - b dialog box
 - c menu selection
 - d all of the above

ANS: B PTS: 1 REF: 193

16. Microsoft Windows is installed on more than ____ of the world's personal computers.
- a 80%
 - b 85%
 - c 90%
 - d 95%

ANS: A PTS: 1 REF: 194

17. Through many editions, the Windows user interface was characterized by a colorful Start button in the ____ corner of the screen.
- a upper-left
 - b lower-left
 - c upper-right
 - d lower-right

ANS: B PTS: 1 REF: 195

18. The strengths of Microsoft Windows include all of the following EXCEPT ____.
- a number of applications

21. VMWare and Parallels Desktop software are examples of ____.
- a virtual machine software
 - b dual boot software
 - c application software
 - d operating systems

ANS: A PTS: 1 REF: 199

22. Weaknesses of Mac OS include ____.
- a limited selection of applications
 - b typically requires more tinkering
 - c cryptic command-line user interface
 - d all of the above

ANS: A PTS: 1 REF: 199

23. Files maintained by the Macintosh operating system can have two parts, called ____.
- a components
 - b segments
 - c forks
 - d identifier and size

ANS: C PTS: 1 REF: 199

24. In the Mac OS, the data ____ contains data or the commands for a program.
- a file
 - c segment

b fork

d identifier

.

.

ANS: B

PTS: 1

REF: 199

25. In the Mac OS, the resource _____ stores information about the data.

a tab

c segment

.

.

b fork

d metadata

.

.

ANS: B

PTS: 1

REF: 199

26. The operating system that was developed in 1969 by AT&T's Bell Labs and gained a good reputation for its dependability is _____.

a INIX

c LINUX

.

.

b UNIX

d LUNIX

.

.

ANS: B

PTS: 1

REF: 202

27. _____ was developed by a Finnish student. It continues to gain popularity as an operating system for personal computers. It is distributed under the terms of a GPL.

a INIX

c LINUX

.

.

b UNIX

d LUNIX

.

.

ANS: C

PTS: 1

REF: 202

28. A Linux ____ contains the Linux kernel, system utilities, GUI, applications, and installation routine.

a set

c distribution

.

.

b group

d push

.

.

ANS: C

PTS: 1

REF: 202

29. The significance of ____ data is that it cannot be intercepted by corporate spies or government censors.

a encrypted

c saved

.

.

b packaged

d parsed

.

.

ANS: A

PTS: 1

REF: 203

30. RIM is the ____ company that developed the BlackBerry smartphone.

a Canadian

c Finnish

.

.

b American

d Chinese

.

.

ANS: A

PTS: 1

REF: 203

31. Current versions of Windows support file names up to ____ characters long.

- a 125
- b 200
- c 255
- d unlimited

ANS: C PTS: 1 REF: 204

32. An optional file identifier that is separated from a main file name by a period is a ____.

- a file convention
- b file extension
- c file path
- d file folder

ANS: B PTS: 1 REF: 204

33. The main directory maintained by your computer's operating system is the ____ directory.

- a root
- b leaf
- c preset
- d support

ANS: A PTS: 1 REF: 206

34. A computer file's location is defined by a ____.

- a file name
- c file extension

b file specification

d file folder

ANS: B

PTS: 1

REF: 206

C:\Music\Reggae\Marley One Love.Mp3

35. In the accompanying figure, C: is an example of a(n) _____.

a drive

c file name

b folder

d extension

ANS: A

PTS: 1

REF: 206

36. In the accompanying figure, Music is an example of a _____.

a drive

c secondary folder

b primary folder

d file name

ANS: B

PTS: 1

REF: 206

37. In the accompanying figure, Reggae is an example of a ____.
- a drive
 - b primary folder
 - c secondary folder
 - d file name

ANS: C

PTS: 1

REF: 206

38. In the accompanying figure, Marley One Love is an example of a ____.
- a primary folder
 - b secondary folder
 - c file name
 - d file extension

ANS: C

PTS: 1

REF: 206

39. In the accompanying figure, mp3 is an example of a ____.
- a primary folder
 - b secondary folder
 - c file name
 - d file extension

ANS: D

PTS: 1

REF: 206

40. An extension of .sys designates a ____ type of file.
- | | |
|-----------------|------------|
| a configuration | c sound |
| . | . |
| b support | d database |
| . | . |

ANS: A PTS: 1 REF: 208

41. An extension of .ocx designates a ____ type of file.
- | | |
|-----------------|------------|
| a configuration | c sound |
| . | . |
| b support | d database |
| . | . |

ANS: B PTS: 1 REF: 208

42. An extension of .wav designates a ____ type of file.
- | | |
|-----------------|------------|
| a configuration | c sound |
| . | . |
| b support | d database |
| . | . |

ANS: C PTS: 1 REF: 208

43. File management capabilities available from application software include ____ files.
- | | |
|------------|--------------------|
| a saving | c deleting |
| . | . |
| b renaming | d all of the above |

ANS: D

PTS: 1

REF: 212

44. A file _____, in the context of Windows, is a piece of information that describes a file.

a identifier

c tag

b description

d meta data

ANS: C

PTS: 1

REF: 212

45. The difference between the Save and the Save As commands is that _____.

a one is used with an existing file and one is used when a new file without a name is open

b one is used with an existing file, and one is used when you need a new name

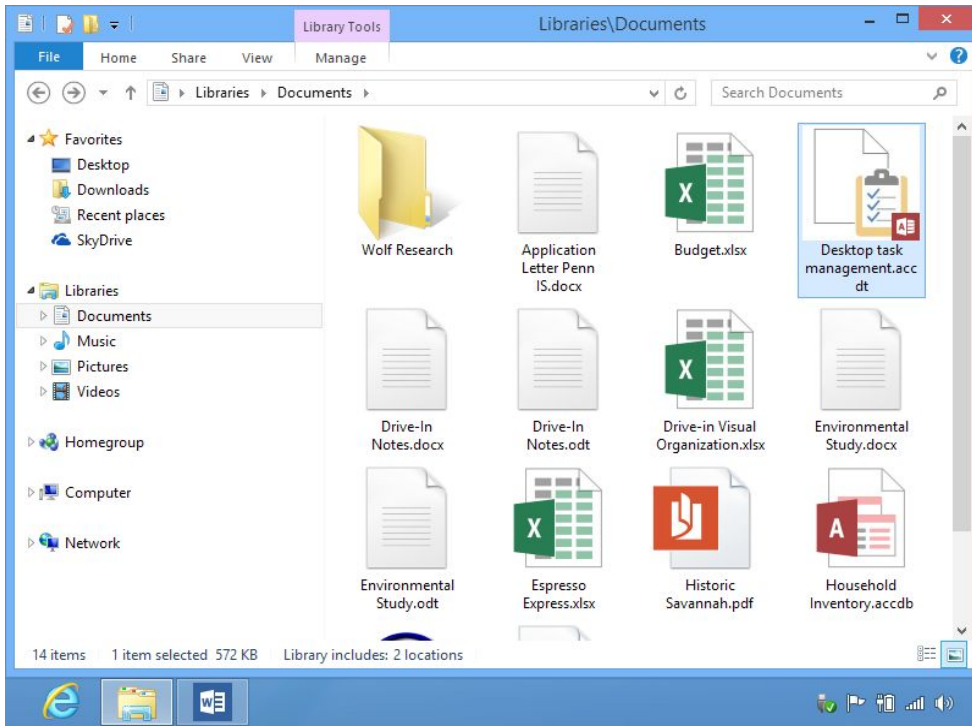
c one is used with an existing file, and one is used when you want to save in a new location

d all of the above

ANS: D

PTS: 1

REF: 213



46. The accompanying figure is an example of a(n) ____ utility.
- a file management
 - b exploration
 - c find file
 - d file organization

ANS: A PTS: 1 REF: 215

47. Utilities, like the one shown in the accompanying figure, often use some sort of storage metaphor to help you visualize and mentally organize the files on your disks. The metaphors are called ____ storage models.
- a visual
 - b file
 - c logical
 - d tree

ANS: C

PTS: 1

REF: 215

48. Using Microsoft Windows products, like the one in the accompanying figure, to select files and folders which are not listed consecutively, ____.
- a click on each file
 - . .
 - b click on each file while holding down the Ctrl key
 - . .
 - c click on each file while holding down the Shift key
 - . .
 - d can't be done
 - . .

ANS: B

PTS: 1

REF: 217

49. Using Microsoft Windows products, like the one in the accompanying figure, to select files and folders which are listed consecutively, ____.
- a click on each file
 - . .
 - b click on each file while holding down the Alt key
 - . .
 - c click on the first and last file while holding down the Shift key
 - . .
 - d can't be done
 - . .

ANS: C

PTS: 1

REF: 217

50. A description of what actually happens on the disk and in the circuits is represented by a ____.
- a logical storage model
 - c disk storage model

b physical storage model

d computer storage model

ANS: B

PTS: 1

REF: 218

51. Most hard disks are formatted by the ____.

a user

c software

b factory

d operating system

ANS: B

PTS: 1

REF: 219

52. ____ is the process of creating a CD, DVD, or BD by selecting all the files and then copying them in a single session.

a Master writing

c Disc mastering

b Packet writing

d Packet mastering

ANS: C

PTS: 1

REF: 219

53. In relation to disks, ____ is a recording technology that lets you record in multiple sessions.

a master writing

c disk mastering

b packet writing

d packet mastering

ANS: B

PTS: 1

REF: 219

54. A group of sectors is called a ____.

a file system

c track

.

.

b cluster

d folder

.

.

ANS: B

PTS: 1

REF: 219

55. The file system used by Mac OS is ____.

a HFS+

c FAT32

.

.

b NTFS

d Ext3fs

.

.

ANS: A

PTS: 1

REF: 219

56. The file system used by Windows 8 is ____.

a HFS+

c FAT32

.

.

b NTFS

d Ext3fs

.

.

ANS: B

PTS: 1

REF: 219

b external

d managed

ANS: A

PTS: 1

REF: 223

61. Web sites that offer storage space for backups are called ____ backup services.

a external

c removable

b online

d network

ANS: B

PTS: 1

REF: 223

62. An easy way to back up your important data is simply by copying selected files to a ____.

a download area

c USB flash drive

b validation server

d all of the above

ANS: C

PTS: 1

REF: 224

63. You should consider making backups of your ____.

a ISP's phone number, IP address, user ID, and password

b favorite URLs

c downloaded software you paid for

.
d all of the above
.

ANS: D

PTS: 1

REF: 224

64. ____ compares the content of files on two devices and makes them the same.

a Networking

c Synchronization

b Externalization

d Rendering

ANS: C

PTS: 1

REF: 225

65. A(n) ____ system backup includes a copy of every file stored on your computer's hard drive. In addition to data files, it includes copies of all installed programs, settings, and the operating system.

a full

c incremental

b differential

d full file

ANS: A

PTS: 1

REF: 226

66. A(n) ____ backup contains any files that were added or changed since the last full backup.

a incremental

c parity

b differential

d incomplete

ANS: B

PTS: 1

REF: 228

67. A(n) ____ backup makes a copy of only those files that were added or changed since your last backup.

a incremental

c parity

.

.

b differential

d incomplete

.

.

ANS: A

PTS: 1

REF: 228

68. A(n) ____ disk is a bootable CD, DVD, or other media that contains a complete copy of your computer's hard disk as it existed when the computer was new.

a boot

c OS

.

.

b recovery

d complete

.

.

ANS: B

PTS: 1

REF: 226

69. A disk ____ is a bit-by-bit copy of the data from all sectors of a disk.

a copy

c image

.

.

b full backup

d management

.

.

ANS: C

PTS: 1

REF: 229

70. One file storage metaphor that is based on a hierarchical diagram is sometimes referred to as a _____ structure.

a visual

c logical

.

.

b file

d tree

.

.

ANS: D

PTS: 1

REF: 215

Chapter 5: Local Area Networks

TRUE/FALSE

1. In the early years of personal computers, networks were plentiful.

ANS:F

PTS: 1

REF: 246

2. A WAN provides connectivity within a limited geographical area, often within a single building.

ANS:F

PTS: 1

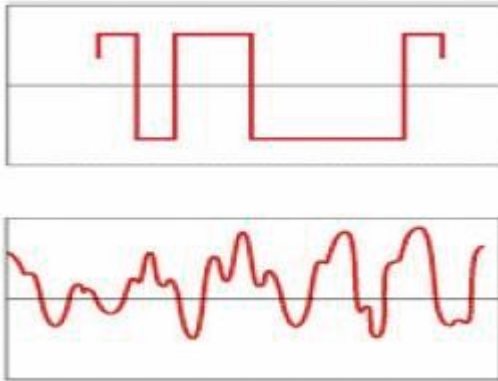
REF: 247

3. A process called handshaking allows two communications devices on a network to negotiate their communications protocols.

ANS: T

PTS: 1

REF: 252



4. The wave on the bottom in the accompanying figure depicts a digital signal.

ANS: F

PTS: 1

REF: 253

5. The wave on the top in the accompanying figure depicts an analog signal.

ANS: F

PTS: 1

REF: 253

6. MAC addresses are used for some low-level network functions and can also be employed to establish network security.

ANS:T PTS: 1 REF: 254

7. A packet always travels from the source directly to the destination, never traveling through intermediate routing devices.

ANS:F PTS: 1 REF: 255

8. IP addresses can be assigned by ISPs or system managers.

ANS:T PTS: 1 REF: 255



9. In the accompanying figure, the item on the left simply plugs into a serial port on the outside of the system unit.

ANS:F PTS: 1 REF: 258

15. A gateway joins two different types of networks.

ANS: T PTS: 1 REF: 266

16. WPA2 makes sure that packets have not been intercepted or tampered with in any way.

ANS: T PTS: 1 REF: 270

17. Most routers supply a WAN port designed for an Internet connection.

ANS: T PTS: 1 REF: 271

18. Windows automatically senses nearby networks and displays their SSIDs.

ANS: T PTS: 1 REF: 272



19. In the accompanying figure, the networks that don't have an icon of a lock next to them aren't secured, and are open targets for hackers to steal data, spread viruses, and create a launching pad for spam.

ANS:T

PTS: 1

REF: 282-283

20. A cryptographic algorithm is a word, number, or phrase that must be known to encrypt or decrypt a message.

ANS:F

PTS: 1

REF: 285

MODIFIED TRUE/FALSE

1. The Internet is the world's largest example of a(n) LAN. _____

ANS: F, WAN

PTS: 1 REF: 247

2. A storage device that directly connects to a network is called network peripheral storage.

ANS: F, attached storage

PTS: 1 REF: 250

3. High-bandwidth communications systems, such as cable TV and DSL, are sometimes referred to as peakband. _____

ANS: F, broadband

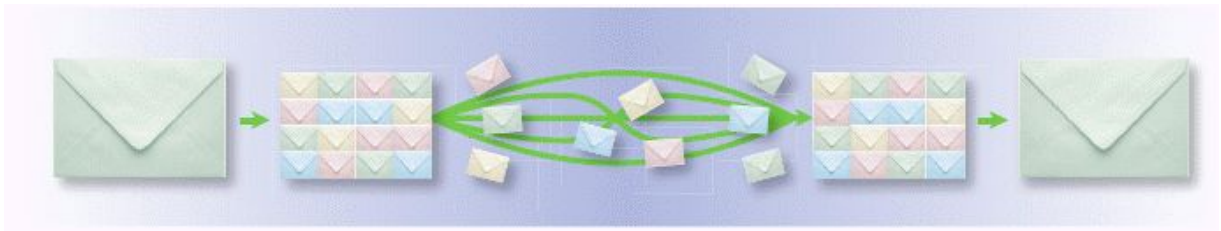
PTS: 1 REF: 251

4. The best-known communications protocol is probably SMTP, which regulates Internet data transport. _____

ANS: F, TCP/IP

PTS: 1

REF: 252



5. A more efficient alternative to packet switching is shown in the accompanying figure.

ANS: F, circuit

PTS: 1

REF: 253

6. Data in a(n) wired network travels without the use of network cables.

ANS: F, wireless

PTS: 1 REF: 259

7. Microwaves are electromagnetic signals that can be aimed in a single direction and have more carrying capacity than radio waves. _____

ANS: T PTS: 1 REF: 259

8. Wi-Fi signals cannot be disrupted by interference from devices such as microwave ovens, cordless telephones, and baby monitors. _____

ANS: F, can

PTS: 1 REF: 259

9. A wireless ad hoc network uses a centralized broadcasting device, such as a wireless access point or router. _____

ANS: F, infrastructure

PTS: 1 REF: 262

10. If you are using a file server without its own keyboard or monitor, server configuration software is accessible using a(n) browser. _____

ANS:T

PTS: 1

REF: 278



11. When network discovery is turned on in a wireless network, any Wi-Fi enabled device within range of your network, such as the one shown in the accompanying figure, can see its URL.

ANS:F, SSID

PTS: 1

REF: 282

12. In the accompanying figure, the lock icon indicates a network secured with wired encryption.

ANS:F

wireless

WEP

WPA

PTS: 1

REF: 282

13. In the accompanying figure, IWC-guest is a(n) secure network.

ANS:F

unsecure

unsecured

unencrypted

PTS: 1

REF: 282

14. The process of converting ciphertext into plaintext is called encryption.

ANS: F, decryption

PTS: 1

REF: 285

15. Public key encryption uses one key to encrypt a message and another key to decrypt it.

ANS: T

PTS: 1

REF: 286

MULTIPLE CHOICE

1. A LAN would be used to ____.
- a connect personal computers within a very limited geographical area, such as a single building
 - b connect several smaller networks together
 - c provide high-speed connectivity for a metropolitan area
 - d connect devices over a large geographical area

ANS: A

PTS: 1

REF: 247

2. A ____ is a public high-speed network capable of voice and data transmission within a range of about 50 miles.

a LAN

c MAN

.
b PAN
.

.
d WAN
.

ANS: C

PTS: 1

REF: 247

3. A ____ is a term sometimes used to refer to the interconnection of personal digital devices or consumer electronics within a range of about 30 feet and without the use of wires or cables.

a LAN

c MAN

b WAN

d PAN

ANS: D

PTS: 1

REF: 247

4. If networked, ____ can be accessed by an authorized LAN user.

a scanners

c photo printers

b high-capacity storage devices

d all of the above

ANS: D

PTS: 1

REF: 249

5. A ____ is NOT a type of network device.

a hub

c workstation

b switch

d router

ANS: C

PTS: 1

REF: 250

6. A network ____ usually contains a computer, networked peripheral, or network device.

- a node
- b file
- c application
- d index

ANS: A

PTS: 1

REF: 250

7. To connect to a LAN, a computer requires ____.

- a a peer-to-peer network
- b network attached storage
- c a network interface card
- d a client

ANS: C

PTS: 1

REF: 250

8. The most important network device is a ____.

- a router
- b switch
- c hub
- d wireless access point

ANS: A

PTS: 1

REF: 250

9. A ____ is a physical path or a frequency used for signal transmissions.
- a logical channel
 - b communications channel
 - c connecting link
 - d node link

ANS: B PTS: 1 REF: 251

10. High-bandwidth communications systems are sometimes referred to as ____.
- a quickband
 - b broadband
 - c fireband
 - d Internet 2

ANS: B PTS: 1 REF: 251

11. Dial-up Internet access is an example of a(n) ____ communications system.
- a broadband
 - b fireband
 - c narrowband
 - d Internet 2

ANS: C PTS: 1 REF: 251

12. Two devices on a network might have to negotiate their communications protocols through a process called ____.

- a handshaking
- .
- b synchronization
- .
- c realization
- .
- d introduction
- .

ANS: A PTS: 1 REF: 252

13. The telephone system uses a technology called ____, which establishes a dedicated, private link between telephones for the duration of a call.

- a packet switching
- .
- b circuit switching
- .
- c bus switching
- .
- d ring switching
- .

ANS: B PTS: 1 REF: 253

14. In the technology referred to as ____, a message is divided into several parcels that can be routed independently to their destination.

- a packet switching
- .
- b handshaking
- .
- c circuit switching
- .
- d protocol
- .

ANS: A PTS: 1 REF: 253

15. A protocol known as ____ is designed to automatically distribute IP addresses.

- a DHCP
- .
- c CSMA/CD
- .

ANS: B

PTS: 1

REF: 257

19. Ethernet is easy to ____.

- a implement
- b maintain
- c manage
- d All of the above

ANS: D

PTS: 1

REF: 257

20. On an Ethernet, a ____ is broadcast to every device but is accepted only by the device to which it is addressed.

- a code
- b packet
- c band
- d node

ANS: B

PTS: 1

REF: 257

21. Ethernet networks ____.

- a are difficult to implement, manage, and maintain
- b use a nonproprietary technology, making Ethernet equipment available from a variety of vendors
- c do not offer much flexibility in network design
- d are not compatible with Wi-Fi wireless networks

ANS: B

PTS: 1

REF: 257

22. The original Ethernet standard carried data over a coaxial cable bus topology at ____.

a 10 Mbps

c 10 Gbps

.

.

b 100 Mbps

d 100 Gbps

.

.

ANS: A

PTS: 1

REF: 258

23. The IEEE designation for the Gigabit Ethernet standard is ____.

a IEEE 802.3

c IEEE 802.3u

.

.

b IEEE 802.3ae

d IEEE 802.3z

.

.

ANS: D

PTS: 1

REF: 258

24. Most wireless networks transport data as ____ signals.

a infrared

c microwave

.

.

b satellite

d RF (radio frequency)

.

.

ANS: D

PTS: 1

REF: 259

28. The most popular wireless LAN technology is ____.

- a WUSB (Wireless USB)
- b Wi-Fi
- c Bluetooth
- d WiMAX

ANS: B PTS: 1 REF: 260

29. ____ is a wireless MAN or WAN technology commonly used for fixed Internet access.

- a FCC
- b WiMAX
- c Bluetooth
- d Ethernet

ANS: B PTS: 1 REF: 260

30. In ____ mode two Bluetooth devices can find each other and exchange passkeys.

- a distance
- b locational
- c transmission
- d discovery

ANS: D PTS: 1 REF: 261

31. A true statement about Bluetooth is ____.

- a It requires cables to connect electronic devices.

- b It has a very long transmission range of over 500 feet.
.
- c It is used exclusively to connect workstations to a LAN.
.
- d It forms networks automatically when two or more devices in discovery mode are within
. range.

ANS: D PTS: 1 REF: 261

32. A Wi-Fi device ____.
- a transmits data as radio waves
 - b is compatible with Ethernet
 - c both a. and b.
 - d neither a. nor b.

ANS: C PTS: 1 REF: 262

33. To stay with the current Wi-Fi standard, make sure your device is compatible with ____.
- a 802.11b
 - b 802.11g
 - c 802.11n
 - d 802.11p

ANS: C PTS: 1 REF: 262

34. Legacy equipment without Wi-Fi can be outfitted with a Wi-Fi adapter that plugs into a(n)
____.
- a USB port
 - c either a. or b.

.
b internal expansion slot
.

.
d neither a. nor b.
.

ANS: C

PTS: 1

REF: 262

35. In a wireless ____ network, devices broadcast directly to each other.

a ad-hoc

c embedded

b infrastructure

d SSID

ANS: A

PTS: 1

REF: 262

36. Devices with one or more antennas use ____ technology to boost signals and spread them more evenly over the signal range.

a WiMAX

c Zigbee

b MIMO

d MAN

ANS: B

PTS: 1

REF: 263

37. Before using your network, you should adjust the configuration settings of the ____ to make sure your network is secure.

a gateway

c bridge

b router

d repeater

ANS: B

PTS: 1

REF: 267

38. The configuration settings are stored in the router's _____ memory.

a EEPROM

c IEEROM

b EEPROM

d IEERAM

ANS: B

PTS: 1

REF: 267

39. To access your router's configuration utility, open a browser and enter the router _____.

a encryption key

c address

b serial number

d password

ANS: C

PTS: 1

REF: 267

40. In areas where there are overlapping wireless networks, such as in a city or on a college campus, _____ help you log in to the right network, rather than a network run by a hacker who will try to suck important information off your computer as soon as you connect.

a topographical maps

c ISPs

b routers

d SSIDs

ANS: D

PTS: 1

REF: 268

41. Most routers ship with a(n) _____ predefined by the manufacturer.

a gateway

c SSID

.

.

b ISP

d topology

.

.

ANS: C

PTS: 1

REF: 268

42. Legacy equipment without Wi-Fi can be upgraded using a Wi-Fi _____.

a FireWire

c port

.

.

b adapter

d cable

.

.

ANS: B

PTS: 1

REF: 262

43. A _____ is a network device that extends a wired network by adding additional ports.

a bridge

c switch

.

.

b hub

d repeater

.

.

ANS: B

PTS: 1

REF: 266

44. A ____ is a network device that intelligently facilitates communication among multiple devices on a network.

- a bridge
- b hub
- c switch
- d repeater

ANS: C PTS: 1 REF: 266

45. A ____ is a network device that extends the range of a network by restoring signals to maximum strength and retransmitting them.

- a bridge
- b hub
- c switch
- d repeater

ANS: D PTS: 1 REF: 266

46. A ____ is a network device that connects two similar networks.

- a bridge
- b repeater
- c switch
- d hub

ANS: A PTS: 1 REF: 267

47. Wireless ____ scrambles the data transmitted between wireless devices and then unscrambles the data only on devices that have a valid key.

- a polymorphism
- b concatenation
- c protected access
- d encryption

ANS: D PTS: 1 REF: 269

48. The original wireless encryption was called ____.

- a WEP
- b WPA
- c WPA2
- d WSA

ANS: A PTS: 1 REF: 270

49. ____, also referred to as personal mode, is a type of WPA used on most home networks.

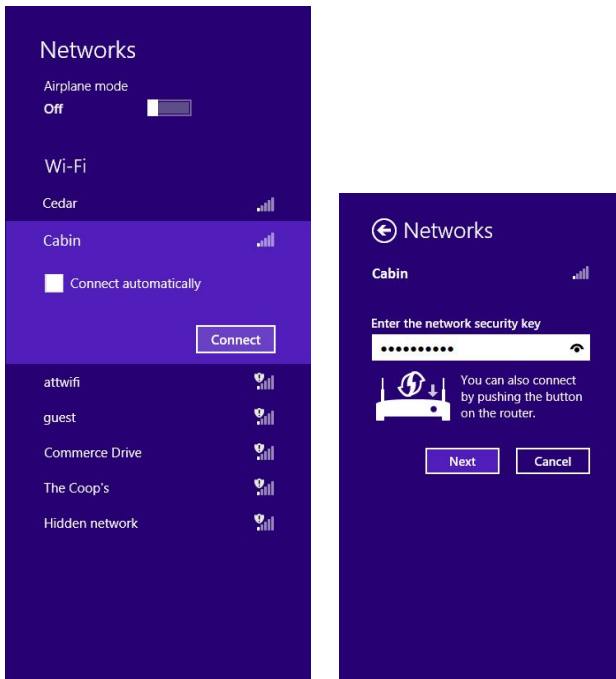
- a WSA
- b WEP
- c WEP2
- d PSK

ANS: D PTS: 1 REF: 270

50. A(n) ____ is the basis for scrambling and unscrambling the data transmitted between wireless devices.

- a active link
- b wireless encryption key
- c PSK
- d algorithm

ANS: B PTS: 1 REF: 270



51. As illustrated in the accompanying figure, Windows should automatically find the network _____ and ask you to enter the wireless encryption key or passphrase.

- a bus
- b SSID
- c router
- d ISP

ANS: B PTS: 1 REF: 272

52. To connect a phone or other device to a network, make sure that ____ is enabled, then wait for the device to sense the network, and when asked, enter the encryption key.

- a NIC
- b Wi-Fi
- c WiMAX
- d Ethernet

ANS: B PTS: 1 REF: 273

53. On a home network, file ____ allows you to view and copy photos, for example, from your desktop computer to a tablet computer.

- a sharing
- b porting
- c routing
- d logging

ANS: A PTS: 1 REF: 274

54. The following is NOT a factor upon which your ability to share files with other devices on a network depends: ____.

- a which devices your computer can discover
- b how long you have been using your computer
- c whether other network devices can discover your computer
- d what others are allowed to do with the files they can access

ANS: B

PTS: 1

REF: 274

55. To see a list of devices on your network, you can use your operating system's ____ utility.

- a file server
- b file management
- c destination
- d public

ANS: B

PTS: 1

REF: 275

56. If you connect to a network and do not get a list of other devices, check your computer's network ____ setting.

- a Network Neighborhood
- b My Network Places
- c Local Area Connection
- d discovery

ANS: D

PTS: 1

REF: 275

57. A ____ server is a computer whose primary purpose is to be a repository for files that can be accessed by network workstations.

- a file
- b print
- c document
- d backup

ANS: A

PTS: 1

REF: 278

58. To configure a file server, open a browser from any workstation, enter the file server's _____ address, and provide the administrator ID and password.

- a SSID
- b MAC
- c LAN
- d IP

ANS: D PTS: 1 REF: 278

59. Symptoms of network problems include _____.

- a intermittent outages
- b slow response time
- c non-availability of network services to all workstations
- d all of the above

ANS: D PTS: 1 REF: 279

60. _____ transforms a message in such a way that its contents are hidden from unauthorized readers.

- a Encryption
- b Encapsulation
- c Concatenation
- d Polymorphism

ANS: A PTS: 1 REF: 285

61. A message that has not been encrypted is referred to as ____.
- a ciphertext
 - b plaintext
 - c keytext
 - d weak text

ANS: B PTS: 1 REF: 285

62. An encrypted message is referred to as ____.
- a keytext
 - b strong text
 - c ciphertext
 - d plaintext

ANS: C PTS: 1 REF: 285

63. The process of converting ciphertext into plaintext is called ____.
- a right-texting
 - b decryption
 - c war driving
 - d AES

ANS: B PTS: 1 REF: 285

64. A ____ is a procedure for encrypting or decrypting a message.
- a nexus
 - c cryptographic index

- . b cryptographic algorithm
- . d message
- . .

ANS: B PTS: 1 REF: 285

65. A ____ is a word, number, or phrase that must be known to encrypt or decrypt a message.
- a cryptographic index
 - c cryptographic key
 - . .
 - b rank
 - d message
 - . .

ANS: C PTS: 1 REF: 285

66. In ____ key encryption, the key used to encrypt a message is also used to decrypt the message.
- a balanced
 - c PKE
 - . .
 - b symmetric
 - d PGP
 - . .

ANS: B PTS: 1 REF: 286

67. ____ encryption uses one key to encrypt a message but another key to decrypt the message.
- a Symmetric
 - c Asynchronous
 - . .
 - b Public key
 - d Brute force
 - . .

ANS: B

PTS: 1

REF: 286

68. ____ software may be used by personal computer users when they want to encrypt e-mail or other documents.

- a SMTP
- b PGP
- c HTTP
- d URL

ANS: B

PTS: 1

REF: 287

69. ____ is a crucial technology for e-commerce and e-mail.

- a Symmetric key encryption
- b Network security key
- c Public key encryption
- d all of the above

ANS: C

PTS: 1

REF: 287

70. With PGP, you send the private key to ____.

- a people whom you have authorized to send you plaintext messages
- b people whom you have authorized to send you encrypted messages
- c anyone with whom you expect to have e-mail correspondence
- d no one

ANS: D

PTS: 1

REF: 287

Case-Based Critical Thinking Questions

Case 5-1

Thomas is a network expert, having mastered the finer points of network structure, topology, and geographical scope. He has built many different types of networks at home, school, and work. He is now designing a home network for his friend.

71. Thomas's friend has asked that the network be configured such that, if he has photos on his tablet computer and wants to transfer them to his desktop computer, he can do so easily. What capability is Thomas's friend looking for?

- | | | | |
|---|--------------|---|--------------|
| a | Wi-Fi | c | encryption |
| . | . | . | . |
| b | file routing | d | file sharing |
| . | . | . | . |

ANS: D

PTS: 1

REF: 274

TOP: Critical Thinking

72. Thomas's friend has indicated that he will accept the system that Thomas is constructing for him. However, he is concerned about security risks and wants to know what limits he can place on the system. Which of the following is NOT a true statement that Thomas can make to his friend?

- a He can assign permissions to files.
- .
- b He can limit sharing to specific people.
- .
- c He can use a homegroup to limit what is shared on the network.
- .
- d He can't remove sharing from files that he no longer wants to share.
- .

ANS: D

PTS: 1

REF: 277

TOP: Critical Thinking

73. Thomas's friend has a particular folder into which he wants to allow people to put files without allowing them to open, copy, or change any files in that folder. What kind of permission should Thomas assign to this folder?

a Read only

c Homegroup

.

.

b Read and write

d Write only

.

.

ANS: D

PTS: 1

REF: 277

TOP: Critical Thinking

74. Thomas's friend has a particular file that he wants to allow authorized people to open and view without being able to modify or delete it. What kind of permission should Thomas assign to this file?

a Read

c Homegroup

.

.

b Read and write

d Write only

.

.

ANS: A

PTS: 1

REF: 277

TOP: Critical Thinking

Case-Based Critical Thinking Questions

Case 5-2

Esteban has decided to install a computer network in his home. He knows he can choose wired or wireless and that there are differences in transmission speed and security.

75. Esteban decides to install a wireless network. Which LAN technology will he most likely choose?

- a Bluetooth
- b WUSB
- c Infrared
- d Wi-Fi

ANS: D

PTS: 1

REF: 260

TOP: Critical Thinking

76. Esteban's router has no screen or keyboard of its own so the easiest way for him to access the router's configuration software is for him to make this connection with a(n) ____.

- a SSID utility
- b administrator firewall
- c Ethernet cable
- d all of the above

ANS: C

PTS: 1

REF: 267

TOP: Critical Thinking

77. The signal on Esteban's wireless network is weak. What is the best solution to this problem?

- a Make sure to be using the correct password and that the password has not expired.
- b Make sure that the wireless networking switch is in the On position for networking.
- c Move the workstation closer to the router, if possible.
- d Make sure that the network hub, switch, router, or wireless access point is plugged in and functioning properly.

Case-Based Critical Thinking Questions**Case 5-3**

You have just secured a new job with a new firm that is very security conscious. You've been instructed to learn as much as possible about encryption to ensure the confidentiality of customer transactions as well as electronic communications about new research and development projects.

78. After researching this topic, you find that encryption can be used in ____.
- a securing credit card numbers transferred from shoppers' computers to e-commerce sites
.
 - b scrambling data sent over wired or wireless networks to prevent intrusions
.
 - c scrambling the contents of e-mail messages to maintain privacy
.
 - d all of the above
.

79. As part of your research, you find that the longer the key, the longer it will take a devious competitor to crack the code. You also find that most encryption today uses a ____ key, and so you decide to use an encryption key of that size.

- a 56-bit
- b 64-bit
- c 128-bit
- d 256-bit

ANS: C

PTS: 1

REF: 286

TOP: Critical Thinking

80. You decide to use public key encryption to protect e-commerce transactions. Once the browser uses the public key it receives from the server to encrypt the credit card information, who can decrypt the message?

- a you
- .
- b any user you authorize in the firm
- .
- c any hacker who intercepts the transaction
- .
- d the Web server with access to the private key
- .

ANS: D

PTS: 1

REF: 287

TOP: Critical Thinking

COMPLETION

1. _____ resources like hardware, software, and data are made available for authorized network users to access.

ANS: Shared

PTS: 1

REF: 248

2. A(n) _____ is any device that contains network circuitry to directly connect to a network.

ANS:

networked peripheral
network-enabled peripheral

PTS: 1 REF: 250

3. A(n) _____ is a connection point on a network.

ANS: node

PTS: 1 REF: 250

4. If a network interface card is not built into the main system board of a computer, it can be added to a slot in the system board or to a(n) _____ port.

ANS: USB

PTS: 1 REF: 250

5. A communications _____, or link, is a physical path or a frequency used for signal transmission.

ANS: channel

PTS: 1 REF: 251

6. High-bandwidth communications systems are sometimes referred to as _____.

ANS: broadband

PTS: 1 REF: 251

7. The bandwidth of a digital channel is usually measured in _____ per second (bps).

ANS: bits

PTS: 1 REF: 251

8. In the context of networks, the communications _____ refers to the set of rules for efficiently transmitting data from one network node to another.

ANS: protocol

PTS: 1

REF: 252

9. Transmission signals can be disrupted by interference called _____, which has the potential to corrupt data.

ANS: noise

PTS: 1

REF: 252

10. A(n) _____ is a parcel of data that is sent across a computer network.

ANS: packet

PTS: 1

REF: 253

11. _____ switching essentially establishes a private link between one telephone and another for the duration of a call.

ANS: Circuit

PTS: 1

REF: 253

12. A(n) _____ address is a series of numbers, such as 204.127.55.1, used to identify a network device.

ANS: IP

PTS: 1

REF: 255

13. Most wireless networks transport data using _____ signals.

ANS:

RF
radio frequency
radio frequency (RF)
RF (radio frequency)

PTS: 1

REF: 259

14. _____ connectivity replaces the short cables that would otherwise tether a mouse, keyboard, game controller, or similar device to a computer.

ANS: Bluetooth

PTS: 1

REF: 261

15. For a typical home network, all that's needed in terms of network equipment is a wireless _____ that includes an Ethernet switch and Internet gateway.

ANS: router

PTS: 1

REF: 266

16. A(n) _____ is the name of a wireless network.

ANS:

SSID (service set identifier)
service set identifier (SSID)
service set identifier
SSID

PTS: 1

REF: 268

17. File _____ allows files containing documents, photos, music, and other data to be accessed from computers other than the one on which they are stored.

ANS: sharing

PTS: 1

REF: 274

18. A(n) _____ is a collection of trusted Windows computers that automatically share files and folders.

ANS: homegroup

PTS: 1

REF: 277

19. If there are not unsecured networks in an area, networks with _____ encryption are the easiest to breach.

ANS: WEP

PTS: 1

REF: 283

20. _____ encryption is loosely defined as "very difficult to break."

ANS: Strong

PTS: 1

REF: 285

MATCHING

Identify the letter of the choice that best matches the phrase or definition.

- | | | | |
|----|-------------------|----|-------------------------|
| a | cryptographic key | g | communications protocol |
| . | . | . | . |
| b | ciphertext | h | bandwidth |
| . | . | . | . |
| c | gateway | i. | MAC address |
| . | . | . | . |
| d | node | j. | Ethernet adapter |
| . | . | . | . |
| e | narrowband | k | packet |
| . | . | . | . |
| f. | infrared light | l. | RF signals |

1. A device used to join two different types of networks
2. Systems with less capacity, such as dial-up Internet access
3. A set of rules for efficiently transmitting data from one network node to another
4. Another name for a NIC
5. Also called radio waves
6. The transmission capacity of a communications channel

7. A word, number, or phrase that must be known to decrypt or encrypt a message
8. Carries data signals only for short distances and with a clear line of sight
9. A parcel of data that is sent across a computer network
10. An encrypted message
11. Each connection point on a network
12. A unique number assigned to a network interface card when it is manufactured

- | | | | |
|----|--------|--------|----------|
| 1. | ANS: C | PTS: 1 | REF: 266 |
| 2. | ANS: E | PTS: 1 | REF: 251 |
| 3. | ANS: G | PTS: 1 | REF: 252 |
| 4. | ANS: J | PTS: 1 | REF: 258 |
| 5. | ANS: L | PTS: 1 | REF: 259 |

- | | | | |
|-----|--------|--------|----------|
| 6. | ANS: H | PTS: 1 | REF: 251 |
| 7. | ANS: A | PTS: 1 | REF: 285 |
| 8. | ANS: F | PTS: 1 | REF: 259 |
| 9. | ANS: K | PTS: 1 | REF: 253 |
| 10. | ANS: B | PTS: 1 | REF: 285 |
| 11. | ANS: D | PTS: 1 | REF: 250 |
| 12. | ANS: I | PTS: 1 | REF: 254 |

ESSAY

1. Discuss the disadvantages of LANs.

ANS:

One disadvantage of LANs is that when a network malfunctions, all the resources you're accustomed to accessing are unavailable until the network is repaired.

Another disadvantage of LANs is their vulnerability to unauthorized access. Whereas a standalone computer is vulnerable to on-premises theft or access, network computers are vulnerable to unauthorized access from many sources and locations.

Through unauthorized use of a LAN workstation, intruders can access data stored on the network server or other workstations. LANs connected to the Internet are vulnerable to intrusions from remote computers in distant states, provinces, or countries. Unsecured wireless LANs can be tapped from any computers within range of the wireless signal.

LANs are also more vulnerable than standalone computers to malicious code. Whereas the most prevalent threat to standalone computers is diskborne viruses, networks are susceptible to an ever-increasing number of worms, Trojan horses, and blended threats. If a worm gets through LAN security, every computer on the network is at risk.

PTS: 1

REF: 249

TOP: Critical Thinking

2. What are microwaves and how do they transport data?

ANS:

Microwaves provide another option for transporting data over wireless networks. Like radio waves, microwaves are electromagnetic signals, but they behave differently. The microwaves can be aimed in a single direction, and they have more carrying capacity than radio waves. However, microwaves cannot penetrate metal objects, and they work best for line-of-sight transmission when a clear path exists between the transmitter and receiver. Microwave installations typically provide data transport for large corporate networks.

PTS: 1

REF: 259

TOP: Critical Thinking

3. What is the difference between strong encryption and weak encryption? Explain how Public Key Encryption (PKE) can be used to provide strong encryption.

ANS:

An encryption method is an example of weak encryption if it is easy to decrypt, even if you do not have access to the algorithm and key. Unauthorized decryption is sometimes referred to as breaking or cracking a code. The book used a simple substitution method that used a symmetric key (a technique used by Caesar) as an example of weak encryption. Simple substitution methods often can be easily cracked, especially in cases where the encryption method uses letters of the alphabet in sequence and not at random. Recall that, with symmetric key encryption, the key used to encrypt the message is also used to decrypt it.

Strong encryption is loosely defined as “very difficult to break.” Public Key Encryption (PKE) is a technique used to strengthen encryption which uses two different keys - a public key and a private key. Each key has a distinct function. The public key is used by the sender to encrypt the message, and the private key is used by the receiver to decrypt it. The sender does NOT have access to the private key.

For example, when a customer decides to make a purchase through a secured e-commerce site which uses PKE, the server sends a public key to the browser on the customer’s computer. This public key is used to encrypt the purchase information, including the credit card number. The browser then sends the encrypted message to the server, which has access to the private key. The private key is then used to decrypt the message.

PTS: 1

REF: 285-287

TOP: Critical Thinking

Chapter 6: The Internet

MULTIPLE CHOICE

1. The Internet began with a project called _____.
 - a NSF
 - c ARPANET

.
b AOL
.

.
d WWW
.

ANS: C

PTS: 1

REF: 302

2. There are estimated to be more than ____ users of the Internet.

a 2 million

c 2 trillion

b 2 billion

d 100 million

ANS: B

PTS: 1

REF: 303

3. Network service providers include ____.

a AT&T

c Verizon

b Sprint

d all of the above

ANS: D

PTS: 1

REF: 303

4. ISPs can maintain servers for ____.

a music file sharing

c instant messaging

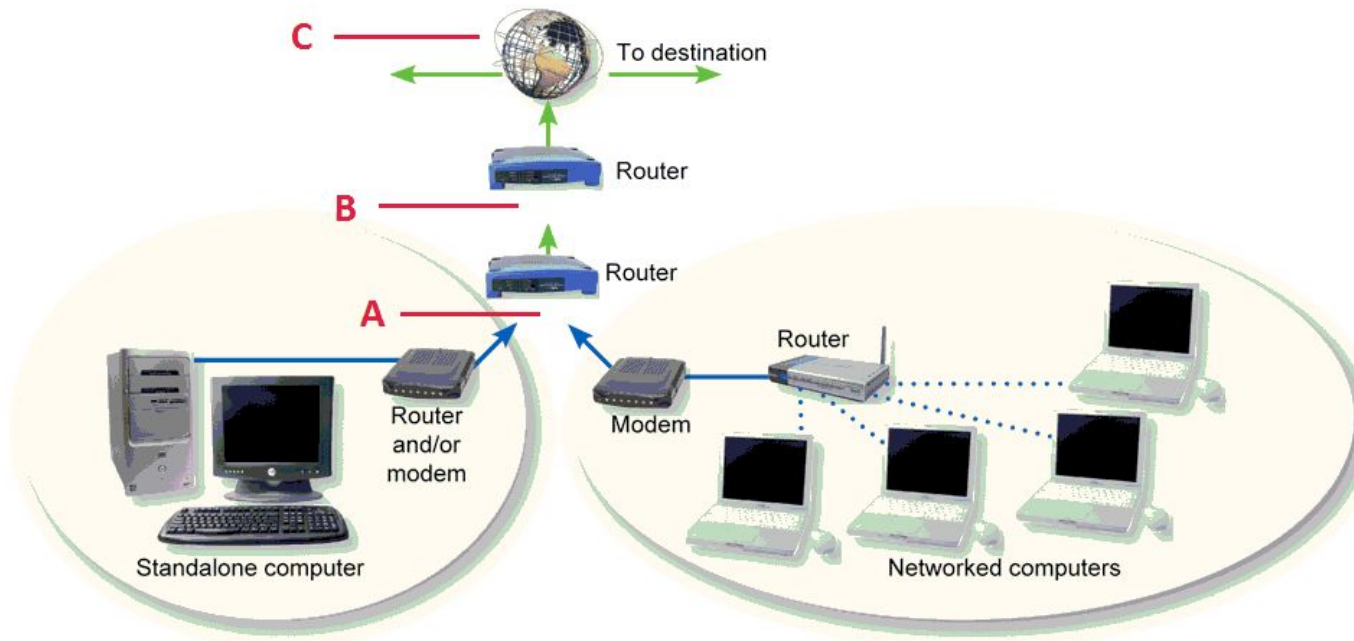
b online discussions

d all of the above

ANS: D

PTS: 1

REF: 304



5. The accompanying figure represents the connection of your computer to the Internet; the router marked A should belong to a(n) ____.

a ISP

c end user

b NSP

d none of the above

ANS: A

PTS: 1

REF: 304

6. The accompanying figure represents the connection of your computer to the Internet; the router marked B should belong to a(n) _____.

- a ISP
- b NSP
- c company
- d none of the above

ANS: B PTS: 1 REF: 304

7. In the accompanying figure, C points to _____.

- a an ISP
- b an NSP
- c the Internet backbone
- d an Internet router

ANS: C PTS: 1 REF: 304

8. The octets in an IP address correspond to a _____.

- a network class
- b network location
- c network configuration
- d none of the above

ANS: A PTS: 1 REF: 305

9. Most Internet servers have an easy to remember name that is known as a(n) _____.

- a top-level name
- c FQDN

b ISP

d NAP name

.

.

ANS: C

PTS: 1

REF: 307

10. ____ is a valid top-level domain.

a .ca

c .gog

.

.

b .can

d .aol

.

.

ANS: A

PTS: 1

REF: 307

11. Every domain name corresponds to a unique IP address that has been entered into the ____.

a domain database

c name server

.

.

b Domain Name System

d Internet Name Server

.

.

ANS: B

PTS: 1

REF: 308

12. Until domain names are added to the DNS database, new sites can only be accessed by entering their numeric ____.

a ports

c protocols

.

.

b domain names

d IP addresses

.

.

ANS: D

PTS: 1

REF: 308

13. DNS cache ____ has been used by governments to keep citizens away from Web sites that supply politically or culturally inflammatory information.

a diversion

c poisoning

.

.

b rerouting

d distraction

.

.

ANS: C

PTS: 1

REF: 308

14. You need your own domain name if ____.

a you use the Internet

c you have your own Web site

.

.

b you have an always-on connection

d you have a router

.

.

ANS: C

PTS: 1

REF: 309

15. Technical management of the Internet's Domain Name System is coordinated by ____.

a the government

c CANN

.

.

b ICANN

d the Internet

.

.

ANS: B

PTS: 1

REF: 309

16. The elapsed time for data to make a round trip from point A to point B and back is called ____.

- a speed
- b latency
- c mHz
- d access time

ANS: B PTS: 1 REF: 309

17. The rate of data that is transmitted from your computer to the Internet is ____.

- a downstream speed
- b upstream speed
- c latent speed
- d traceroute speed

ANS: B PTS: 1 REF: 310

18. The rate of data arriving at your computer is ____.

- a downstream speed
- b upstream speed
- c latent speed
- d traceroute speed

ANS: A PTS: 1 REF: 310

19. A fixed Internet connection that uses a voiceband modem and telephone lines is a(n) ____ connection.

- a dial-up
- c DSL

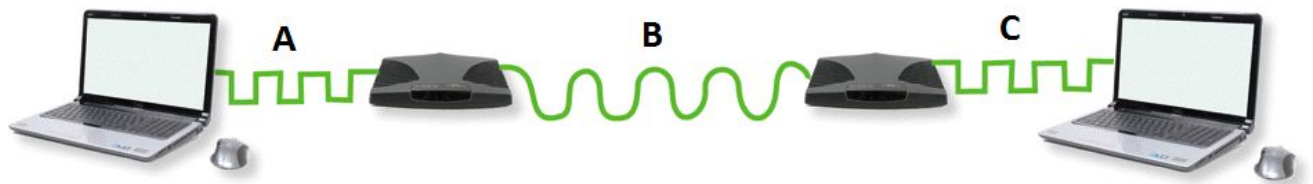
b fixed

d ISDN

ANS: A

PTS: 1

REF: 312



20. In the accompanying figure, the type of signal represented by A is a(n) ____.

a digital signal

c sine signal

b analog signal

d cosine signal

ANS: A

PTS: 1

REF: 313

21. In the accompanying figure, the type of signal represented by B is a(n) ____.

a digital signal

c sine signal

b analog signal

d cosine signal

ANS: B

PTS: 1

REF: 313

22. Digital telephone systems open up the possibilities for digital data transport options such as ____.
- a cable Internet service
 - b DSL
 - c WiMAX
 - d Both B and C

ANS: B

PTS: 1

REF: 313

23. ____ service offered slightly faster service than dial-up but has today been replaced by DSL.
- a ISDN
 - b WiMAX
 - c Cable Internet
 - d Satellite Internet

ANS: A

PTS: 1

REF: 313

24. DSL uses ____ to transmit data.
- a phone lines
 - b cable connections
 - c T1 lines
 - d none of the above

ANS: A

PTS: 1

REF: 314

28. Satellite data transport is subject to ____ delays of one second or more, which occur as your data is routed between your computer and a satellite that orbits 22,200 miles above the Earth.

- a latency
- b conditional
- c frequency
- d concatenation

ANS: A PTS: 1 REF: 318

29. Satellite Internet service and TV service requires ____.

- a two satellite dishes and a modem
- b a satellite dish and a modem
- c two satellites dishes and two modems
- d one satellite dish and two modems

ANS: A PTS: 1 REF: 318

30. ____ wireless Internet service is designed to offer Internet access to homes and businesses by broadcasting data signals over areas large enough to cover most cities and outlying areas.

- a Mobile
- b Cellular
- c WiFi
- d Fixed

ANS: D PTS: 1 REF: 319

31. An Ethernet-compatible network standard designated as IEEE 802.16 is ____.

- a WiFi
- b WiLAN
- c WiMAX
- d WiMAN

ANS: C PTS: 1 REF: 319

32. Portable Internet access includes all of the following EXCEPT ____.
- a WiFi
 - b portable satellite
 - c portable WiMAX
 - d cellular

ANS: D PTS: 1 REF: 321

33. The ability to easily move your Internet service from one location to another is considered ____ Internet service.
- a mobile
 - b portable
 - c moving
 - d cellular

ANS: B PTS: 1 REF: 321

34. ____ is an up-and-coming standard destined to be deployed by ISPs and cell phone carriers to allow seamless handoff between one tower and another.
- a WiMAX
 - c Portable WiMAX

b Mobile WiMAX

d Mobile WiFi

.

.

ANS: B

PTS: 1

REF: 324

35. Data transport rates depend on the technology of the cellular system. The generation of cellular technology associated with analog voice service is ____.

a 1G

c 2.5G

.

.

b 2G

d 3G

.

.

ANS: A

PTS: 1

REF: 325

36. Sending computer data over a ____ system required a voiceband modem to convert digital data into audible signals.

a 1G

c 3G

.

.

b 2G

d Both A and B

.

.

ANS: D

PTS: 1

REF: 325

37. ____ replaced analog technology with digital technology and added support for text messages.

a 1G

c 3G

.

.

b 2G

d 4G

.

.

ANS: B

PTS: 1

REF: 325

38. ____ technologies support digital transmission for both voice and data.

a 1G

c 3G

.

.

b 2G

d None of the above

.

.

ANS: C

PTS: 1

REF: 325

39. 3G technologies have speeds ranging from 200 Kbps to ____.

a 500 Kbps

c 2 Mbps

.

.

b 1 Mbps

d 5 Mbps

.

.

ANS: D

PTS: 1

REF: 325

40. Examples of 3G technologies include ____.

a EDGE

c HSUPA

.

.

b EV-DO

d all of the above

.

.

ANS: D

PTS: 1

REF: 325

41. Interim 4G technologies such as ____ have been deployed since 2009.

- a LTE
- b ITE
- c EV-DO
- d none of the above

ANS: A PTS: 1 REF: 325

42. A communications protocol that provides Internet access from handheld devices is ____.

- a WAP
- b WIP
- c HAP
- d HIP

ANS: A PTS: 1 REF: 325

43. The disadvantage of WAP-enabled devices is their ____.

- a access speed
- b screen size
- c portability
- d all of the above

ANS: B PTS: 1 REF: 325

44. With ____ you can easily assemble a small network just about anywhere.

- a RF
- c EVDO

b MiFi

d All of the above

ANS: B

PTS: 1

REF: 327

45. ____ computing depends on a grid of servers, storage devices, and protocols that offer Internet-accessible computing services ranging from consumer-level media sharing to office productivity applications and complex corporate data processing.

a Cloud

c Ambient

b Disperse

d Client

ANS: A

PTS: 1

REF: 330

46. Most messaging is based on a(n) ____ model.

a P2P

c LAN

b client/server

d Internet

ANS: B

PTS: 1

REF: 331

47. Messaging and chat protocols include all of the following EXCEPT ____.

a IRC

c Jabber

b MSNP

d Talkie

ANS: D

PTS: 1

REF: 331

48. VoIP software is sometimes referred to as a(n) _____ client.
- a ISP
 - b SIP
 - c HTTP
 - d none of these

ANS: B

PTS: 1

REF: 331

49. VoIP systems are offered by companies such as _____.
- a AT&T
 - b magicJack
 - c Vonage
 - d all of the above

ANS: D

PTS: 1

REF: 331

50. To set up free VoIP, you and the people you communicate with can install free VoIP clients such as _____.
- a SysIP
 - b Blink
 - c Presto
 - d none of these

ANS: B

PTS: 1

REF: 332

51. The ____ protocol allows the transfer of files from one computer to another over any TCP/IP network.

a ftp

c P2P

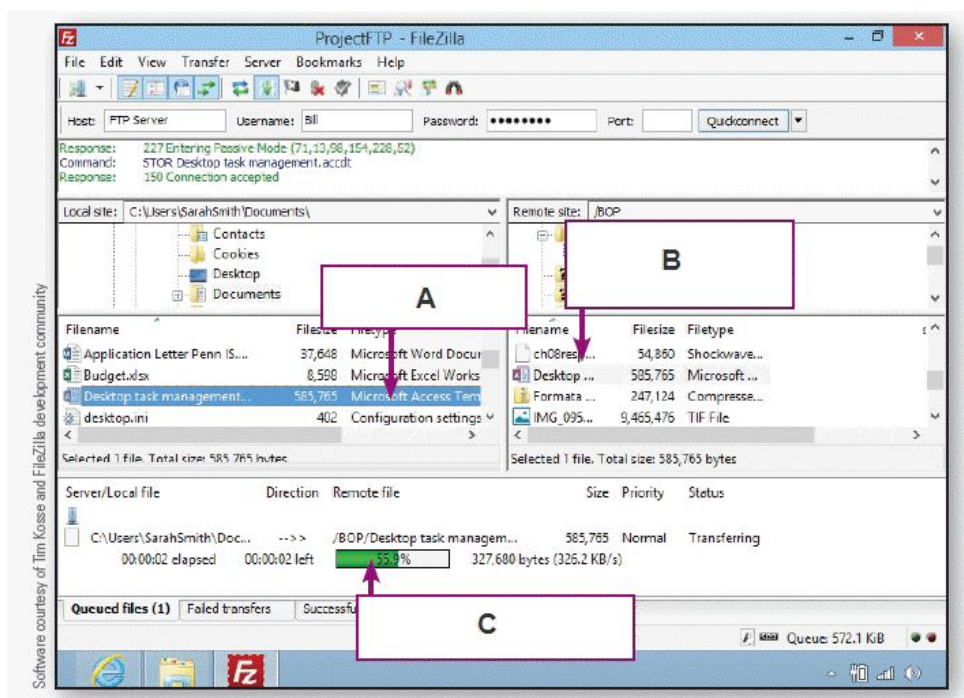
b http

d GRID

ANS: A

PTS: 1

REF: 335



52. The accompanying figure is a screenshot of FileZilla, in which the ____ file will go to the location pointed to by box B.

a downloaded

c redirected

b uploaded

d remastered

ANS: B PTS: 1 REF: 336

53. The accompanying figure is a screenshot of FileZilla, in which the ____ of the transfer is indicated by box C.

- a index
- b resolution
- c progress
- d accuracy

ANS: C PTS: 1 REF: 336

54. The accompanying figure is a screenshot of FileZilla, in which the file to be ____ is indicated by box A.

- a uploaded
- b downloaded
- c reloaded
- d remastered

ANS: A PTS: 1 REF: 336

55. ____ is a file sharing protocol that distributes the role of the file server across a collection of dispersed computers.

- a ftp
- b http
- c P2P
- d BitTorrent

ANS: D

PTS: 1

REF: 337

56. With BitTorrent, as more computers request the file, they become part of a ____ that uses peer-to-peer technology to exchange file pieces with each other.

a swarm

c leech

.

.

b seed

d choker

.

.

ANS: A

PTS: 1

REF: 337

57. BitTorrent can be used to distribute ____.

a spyware

c malicious code

.

.

b adware

d all of the above

.

.

ANS: D

PTS: 1

REF: 338

58. Network services such as the Web, ftp, and e-mail operate from ____.

a routers

c ports

.

.

b gateways

d portals

.

.

ANS: C

PTS: 1

REF: 340

59. The use of automated software to locate computers that are vulnerable to unauthorized access is a port

_____.

a search

c dig

.

.

b probe

d pry

.

.

ANS: B

PTS: 1

REF: 340

60. The average “survival time” for an unprotected computer to remain uncompromised is only _____.

a nine seconds

c nine hours

.

.

b nine minutes

d nine days

.

.

ANS: B

PTS: 1

REF: 340

61. Sharing files on a LAN or the Internet requires open _____.

a ports

c sources

.

.

b domains

d channels

.

.

ANS: A

PTS: 1

REF: 342

62. ____ are intended to work within LANs to monitor and direct packets being transported from one device to another.

- | | |
|------------|-------------|
| a Routers | c Filters |
| . | . |
| b Gateways | d Firewalls |
| . | . |

ANS: A

PTS: 1

REF: 342

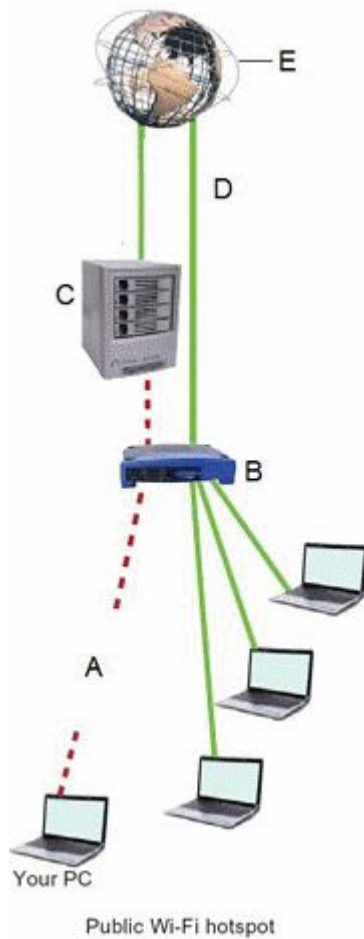
63. A ____ IP address is one which can be accessed by packets on the Internet.

- | | |
|-----------|------------|
| a static | c routable |
| . | . |
| b dynamic | d private |
| . | . |

ANS: C

PTS: 1

REF: 343



64. The accompanying figure represents a virtual private network. In this figure, A points to ____ data.
- | | |
|-------------|----------------|
| a encrypted | c routed |
| b remote | d nonencrypted |

ANS: A

PTS: 1

REF: 345

65. The accompanying figure represents a virtual private network. In this figure, B points to a(n) ____.
- | | |
|---------------------|----------|
| a corporate network | c router |
|---------------------|----------|

.
b remote access server
.

.
d ISP
.

ANS: C

PTS: 1

REF: 345

66. The accompanying figure represents a virtual private network. In this figure, C points to a(n) _____ server.

a unencrypted

c public

b VPN

d channel

ANS: B

PTS: 1

REF: 345

67. The accompanying figure represents a virtual private network. In this figure, D points to _____ data.

a nonencrypted

c wireless

b encrypted

d public

ANS: A

PTS: 1

REF: 345

68. The accompanying figure represents a virtual private network. In this figure, E points to _____.

a a server

c an Internet channel

b the Internet

d an ISP

ANS: B

PTS: 1

REF: 345

69. You can install personal VPN software such as ____.
- a WiTopia
 - b StrongVPN
 - c HotSpotVPN
 - d all of the above

ANS: D

PTS: 1

REF: 345

70. One important security precaution when connecting your computer to public networks is to install a(n) ____.
- a router
 - b repeater
 - c office suite
 - d remote PC

ANS: A

PTS: 1

REF: 345

Chapter 7: The Web and E-mail

MULTIPLE CHOICE

1. Which of the following Web-based applications is NOT sometimes characterized as Web 2.0?

- a wikis
- b blogs
- c social networking
- d cloud computing

ANS: D

PTS: 1

REF: 360-361

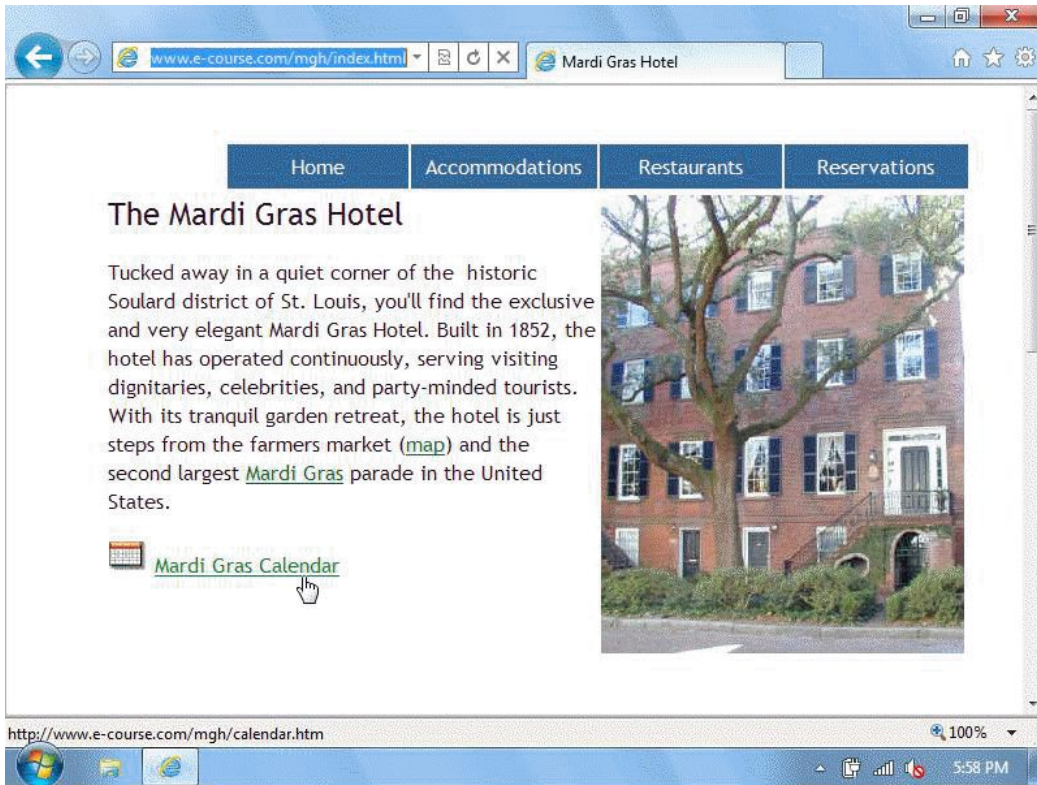
2. A(n) _____ is a collection of related information organized and formatted so it can be accessed using software called a browser.

- a Web site
- b Internet
- c podcast
- d tag

ANS: A

PTS: 1

REF: 361



3. The hand icon shown in the accompanying figure is pointing to a ____.
- a cookie
 - b key
 - c link
 - d tunnel

ANS: C PTS: 1 REF: 361

4. Visitors to a Web site are sometimes called Web ____.
- a browsers
 - b servers
 - c surfers
 - d users

ANS: C

PTS: 1

REF: 361

5. Examples of Uniform Resource Identifiers include ____.
- a URLs
 - b Social Security numbers
 - c ISBNs
 - d all of the above

ANS: D

PTS: 1

REF: 361

6. A(n) ____ is client software that displays Web page elements and handles links between pages.
- a explorer
 - b browser
 - c navigator
 - d manager

ANS: B

PTS: 1

REF: 361

<http://www.cnn.com/showbiz/movies.htm>

7. In the URL found in the accompanying figure, *http* is the ____.
- a Web protocol standard
 - b Web server name
 - c folder name
 - d file extension

ANS: A

PTS: 1

REF: 362

8. In the URL found in the accompanying figure, *.htm* is the ____.
- | | | | |
|---|-----------------------|---|----------------|
| a | Web protocol standard | c | folder name |
| . | | . | |
| b | Web server name | d | file extension |
| . | | . | |

ANS: D

PTS: 1

REF: 362

9. In the URL found in the accompanying figure, *showbiz* is a ____.
- | | | | |
|---|-----------------------|---|----------------|
| a | Web protocol standard | c | folder name |
| . | | . | |
| b | Web server name | d | file extension |
| . | | . | |

ANS: C

PTS: 1

REF: 362

10. In the URL found in the accompanying figure, *www.cnn.com* is the ____.
- | | | | |
|---|-----------------------|---|----------------|
| a | Web protocol standard | c | folder name |
| . | | . | |
| b | Web server name | d | file extension |
| . | | . | |

ANS: B

PTS: 1

REF: 362



11. The image of the vegetables in the accompanying figure is produced by a(n) ____ HTML tag when the Web page is displayed by a browser.

- | | | | |
|---|-----------|---|--------|
| a | <graphic> | c | <pic> |
| . | | . | |
| b | | d | <jpeg> |
| . | | . | |

ANS: B PTS: 1 REF: 363

12. Which of the following is a Web resource?

- | | | | |
|---|------------------|---|------------------|
| a | an HTML document | c | a graphic |
| . | | . | |
| b | a sound file | d | any of the above |
| . | | . | |

ANS: D

PTS: 1

REF: 364

13. For HTTP, _____ usually are associated with port 80 on the client and server.

a exchanges

c sockets

.

.

b methods

d actions

.

.

ANS: C

PTS: 1

REF: 364

14. _____ is the most frequently used HTTP method.

a FTP

c POST

.

.

b THIS

d GET

.

.

ANS: D

PTS: 1

REF: 364

15. _____ is a protocol that works in conjunction with TCP/IP to get Web resources to your desktop.

a HTML

c HTTP

.

.

b URL

d FTP

.

.

ANS: C

PTS: 1

REF: 364

19. When your browser fetches pages and graphics to form a Web page, it stores them in temporary files on your hard drive called a Web ____.
- a cache
 - b plug-in
 - c converter
 - d source

ANS: A PTS: 1 REF: 365

20. All of the following are currently popular browsers EXCEPT ____.
- a Firefox
 - b Chrome
 - c Safari
 - d Netscape Navigator

ANS: D PTS: 1 REF: 366

21. ____ allow a Web site to store information on the client computer for later retrieval.
- a Tags
 - b Cookies
 - c Biscuits
 - d Labels

ANS: B PTS: 1 REF: 368

22. A ____ enables a Web server to keep track of your activity and compile a list of your purchases.
- a cookie
 - c socket

ANS: B

PTS: 1

REF: 372

26. HTML ____ are used to display a question and a box into which you can enter an answer.

a bins

c gateways

.

.

b tables

d forms

.

.

ANS: D

PTS: 1

REF: 372

27. Server-side scripts can be written using any of the following EXCEPT ____.

a Perl

c Java

.

.

b C#

d Ada

.

.

ANS: D

PTS: 1

REF: 373

28. ____ scripts tend to be used for interactive user interface elements.

a Server-side

c User-side

.

.

b Client-side

d Java-side

.

.

ANS: B

PTS: 1

REF: 373

29. ____ scripts accept data submitted by a form, process that data, and then generate a custom HTML document that is sent to the browser for display.

- a Server-side
- b Client-side
- c User-side
- d Java-side

ANS: A PTS: 1 REF: 373

30. A popular ____ activity is verifying billing data at an e-commerce site.

- a Server-side
- b Client-side
- c User-side
- d Java-side

ANS: A PTS: 1 REF: 373

31. A(n) ____ helps people locate information on the Web by formulating simple keyword queries.

- a navigator
- b browser
- c search engine
- d HTML tag

ANS: C PTS: 1 REF: 374

32. A Web ____, automated to methodically visit Web sites, can be programmed to perform various activities as it visits those sites.

- a converter
- b crawler
- c archive
- d glossary

ANS: B PTS: 1 REF: 375

33. Search engine ____ software is designed to pull keywords from a Web page and store them in a database.

- a indexer
- b crawler
- c archive
- d tracker

ANS: A PTS: 1 REF: 376

34. A search engine's ____ looks for your search terms in the search engine's indexed database and returns a list of relevant Web sites.

- a query processor
- b link
- c Web crawler
- d indexer

ANS: A PTS: 1 REF: 376

35. A(n) ____ keyword is entered into a header section of a Web page when it is created and is supposed to describe the page contents.

- a query
- b link
- c archive
- d meta

ANS: D PTS: 1 REF: 377

36. When a Web page author includes meta keywords, like sex, that have little to do with the information on the page, the author is engaging in ____.

- a formulating searches
- b metasearching
- c keyword stuffing
- d e-commerce

ANS: C PTS: 1 REF: 377

37. Keyword ____ is an unethical practice in which meta keywords are manipulated to gain high relevancy rankings.

- a packing
- b stuffing
- c archiving
- d indexing

ANS: B PTS: 1 REF: 377

38. The ____ wildcard character allows a search engine to find pages with any derivation of a basic word.

a +

.

b &

.

c *

.

d \$

.

ANS: C

PTS: 1

REF: 379

39. In addition to using search engines, you can also find Web-based information using a(n) _____ engine that searches a series of other search engines and compiles the search results.

a compiled

.

b stuffed

.

c metasearch

.

d secure

.

ANS: C

PTS: 1

REF: 380

40. When you use a search engine, it stores all of the following information about your query EXCEPT _____.

a your name

.

b your IP address

.

c the date and time of the query

.

d the search terms you used

.

ANS: A

PTS: 1

REF: 382

41. Many _____ sites act as relay stations to forward your searches to search engines without leaving a trail back to a cookie or IP address.

a pharming

c annihilator

b anonymizer

d phishing

ANS: B

PTS: 1

REF: 382

42. When you purchase a textbook online from a site like *www.amazon.com*, you are participating in _____ e-commerce.

a C2C

c B2B

b B2C

d B2G

ANS: B

PTS: 1

REF: 385

43. When you purchase a used digital camera directly from the owner on an online auction, you are participating in _____ e-commerce.

a C2C

c B2B

b B2C

d B2G

ANS: A

PTS: 1

REF: 385

44. _____ e-commerce involves one enterprise buying goods or services from another enterprise.

a C2C

c B2B

b B2C

d B2G

ANS: C

PTS: 1

REF: 385

45. _____ e-commerce occurs when businesses sell to governments.

a G2B

c C2G

b B2G

d G2G

ANS: B

PTS: 1

REF: 385

46. A _____ ad overlays the content on a Web page, sometimes obscuring it until you click the ad or its timer expires and the ad disappears.

a banner

c pop-up

b hover

d click-through

ANS: B

PTS: 1

REF: 385

47. Both SSL and its successor, _____, are protocols that encrypt data traveling between a client computer and an HTTP server.

a TLS

c P2P

b S-HTTP

d EDGE

ANS: A

PTS: 1

REF: 390

48. ____ checks a Web server's security certificate to determine if the site is legitimate.

a XML

c HTTPS

.

.

b TLS

d P2P

.

.

ANS: C

PTS: 1

REF: 390

49. The following statement is NOT true: ____.

a Secure connections differ from secure Web sites.

.

b A secure connection encrypts the data transmitted between your computer and a Web site.

.

c A secure Web site uses password security to prevent unauthorized access to pages on the site.

.

d Web pages that provide a secure connection start with https: instead of http:.

.

ANS: D

PTS: 1

REF: 389-390

50. PayPal is a pioneering example of a(n) ____ payment system.

a B2B (business-to-business)

c electronic wallet

.

.

b P2P (person-to-person)

d C2B (consumer-to-business)

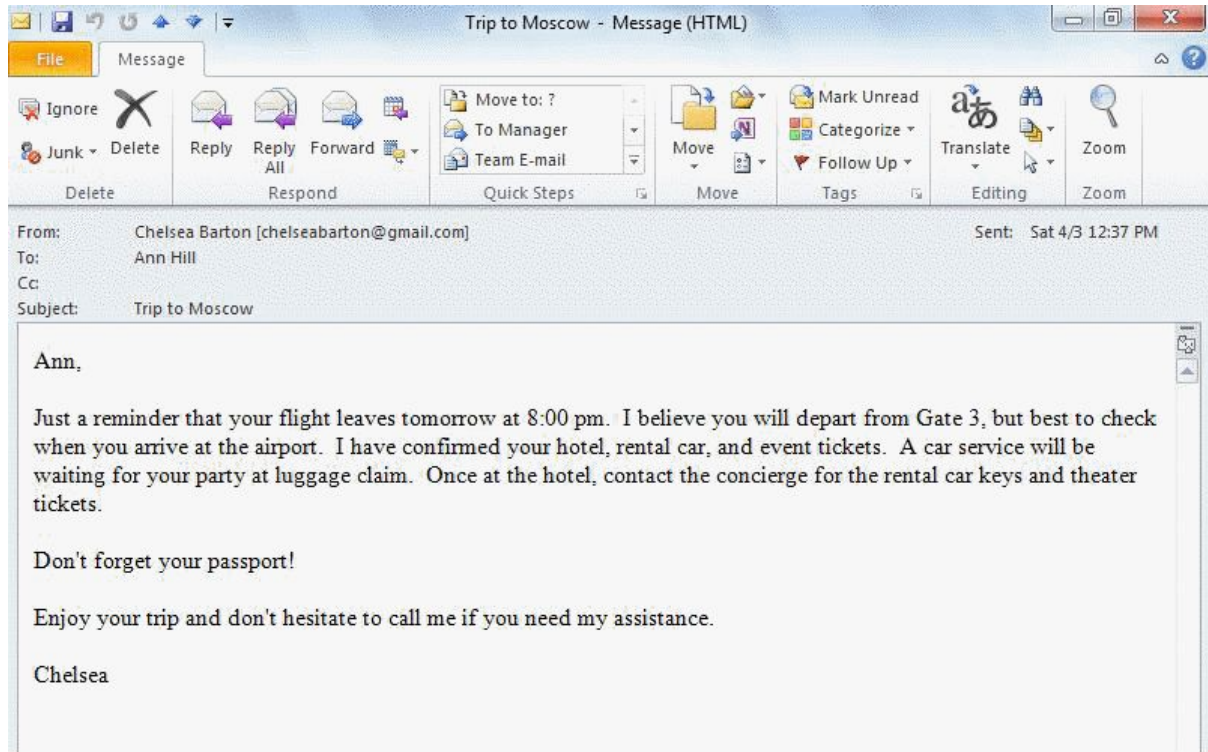
.

.

ANS: B

PTS: 1

REF: 391



51. In an e-mail message, such as the one found in the accompanying figure, the recipient's e-mail address and the message subject are found in the ____.

a tool bar

c attachment

b message header

d message body

ANS: B

PTS: 1

REF: 392

52. Incoming mail can be stored on a(n) ____ server until it is downloaded to the inbox on your hard disk.

- a Webmail
- b POP3
- c IMAP
- d SMTP

ANS: B PTS: 1 REF: 394

53. _____ is similar to POP3, but it leaves messages on the server until you specifically delete them.
- a SMTP (Simple Mail Transfer Protocol)
 - b IMAP (Internet Messaging Access Protocol)
 - c PIN (Private Identification Number)
 - d URL (Uniform Resource Locator)

ANS: B PTS: 1 REF: 394

54. To use local e-mail you must install e-mail _____ software on your computer.
- a server
 - b database
 - c resource
 - d client

ANS: D PTS: 1 REF: 395

55. In a classic Webmail configuration, messages are sent immediately and thus a(n) _____ is not needed.

a server

.

b client

.

c Inbox

.

d Outbox

.

ANS: D

PTS: 1

REF: 396

56. Webmail allows you to use a(n) _____ to access and view your e-mail messages.

a operating system

.

b server

.

c browser

.

d crawler

.

ANS: C

PTS: 1

REF: 396

57. An e-mail message in _____ format can include graphics in addition to a wide variety of fonts and font colors.

a HTML

.

b MIME

.

c ASCII

.

d RTF

.

ANS: A

PTS: 1

REF: 397

58. When working with _____ mail, make sure your antivirus software is checking incoming messages.

a MIME

.

b HTML

c ASCII

.

d RTF

ANS: B PTS: 1 REF: 397

59. Before sending a large attachment in an e-mail, you can use a(n) _____ to shrink it.
- a crawler program
 - b compression program
 - c netiquette scanner
 - d index utility

ANS: B PTS: 1 REF: 398

60. You just sent an e-mail message to your co-worker that includes the following message body:

MARY-
CAN YOU PLEASE TELL ME WHEN YOU WILL HAVE THE REPORTS COMPLETED?

Why might your coworker be offended by the message?

- a You used negative emoticons.
- b In terms of netiquette, you were using sarcasm and humor.
- c In terms of netiquette, you were shouting.
- d Your message was impolitely worded.

ANS: C PTS: 1 REF: 399

64. To access settings for Flash cookies, look for Flash Player in the ____ (PCs) or in System Preferences (Macs).
- a Preference Library
 - b Control Panel
 - c Preference Panel
 - d Control Library

ANS: B PTS: 1 REF: 402

65. When you view a page infested with a(n) ____, an HTTP set-cookie request automatically goes to a third-party server, which may set a cookie on your computer for later retrieval or record your IP address.
- a Flash cookie
 - b anonymous proxy server
 - c Web bug
 - d spam filter

ANS: C PTS: 1 REF: 403

66. A tradeoff to the anonymity offered by anonymous ____ is that they tend not to operate at the same speed as your regular browser.
- a FTP sites
 - b proxies
 - c URLs
 - d indices

ANS: B PTS: 1 REF: 403

70. ____ schemes redirect users to fake sites by poisoning a domain name server with a fake IP address.
- a Filtering
 - b Hypertexting
 - c Proxy
 - d Pharming

ANS: D

PTS: 1

REF: 406

Chapter 8: Digital Media

MULTIPLE CHOICE

1. The audio CDs you buy at your favorite music store are recorded at a sampling rate of ____.
- a 44.1 kHz
 - b 44.1 MHz
 - c 440 kHz
 - d 440 MHz

ANS: A

PTS: 1

REF: 423

2. Voice-overs and narrations are often recorded with a sampling rate of 11 KHz, which means that 11,000 samples are taken ____.
- a per minute
 - b per second
 - c per total recording
 - d per thousand notes

ANS: B

PTS: 1

REF: 423

3. A(n) ____ is a device that contains a variety of input and output jacks, plus audio-processing circuitry.
- a amplifier
 - b macro recorder
 - c sound card
 - d video card

ANS: C

PTS: 1

REF: 424

4. You can connect most standard microphones to your computer through the microphone socket or ____ port.
- a MP3
 - b RealAudio
 - c USB
 - d AAC

ANS: C

PTS: 1

REF: 425

5. The ____ format offers very good sound quality based on MPEG-4.
- a Wave
 - b AIFF
 - c MP3
 - d AAC

ANS: D

PTS: 1

REF: 425

6. ____ has been slow to catch on as a popular standard.

a AAC

c Ogg Vorbis

.

.

b MP3

d WMA

.

.

ANS: C

PTS: 1

REF: 425

7. ____ requires Windows Media Player 9 or above.

a MP3

c AAC

.

.

b WMA

d WAV

.

.

ANS: B

PTS: 1

REF: 425

8. ____ is supported by browsers without a plug-in.

a AAC

c WAV

.

.

b RM

d all of the above

.

.

ANS: C

PTS: 1

REF: 425

9. One minute of CDDA music requires in excess of ____ of storage space.

- a 1 MB
- b 10 MB
- c 100 MB
- d 1 GB

ANS: B PTS: 1 REF: 426

10. A MIDI sequence contains all of the following EXCEPT ____.

- a the pitch of a note
- b the volume of the note
- c the duration of the note
- d a wavetable

ANS: D PTS: 1 REF: 427

11.If you have dialed Directory Assistance lately to obtain a telephone number, you have probably encountered ____.

- a phonemic awareness
- b virtual listening
- c speech recognition
- d speech analysis

ANS: C PTS: 1 REF: 428

12. A ____ graphic is composed of a grid of dots.

- a roster
- c bitmap

b vector

d none of the above

ANS: C

PTS: 1

REF: 430

13. One way to transfer photo data from a camera directly to a computer is via ____.

a e-mail

c driver pins

b FireWire ports

d printer cables

ANS: B

PTS: 1

REF: 433

14. If your computer and your camera have ____ ports, you can connect a cable between these two ports to transfer the photo data.

a iTalk

c USB

b Flash

d UPS

ANS: C

PTS: 1

REF: 433

15. The size of the file that holds a bitmap depends on its resolution and ____.

a color depth

c megapixel ratio

b graphical attachment

d transfer rate

ANS: A

PTS: 1

REF: 434

16. A resolution of 1600 x 1200 could also be expressed as ____ megapixels.

a .19

c 19

.

.

b 1.9

d 190

.

.

ANS: B

PTS: 1

REF: 434

17. When a bitmap graphic is enlarged, it still retains its original ____.

a dimension

c resolution

.

.

b pixel

d interpolation

.

.

ANS: C

PTS: 1

REF: 435

18. Most experts recommend that Web graphics not exceed ____ KB.

a 1

c 10

.

.

b 5

d 100

.

.

ANS: D

PTS: 1

REF: 436

19. ____ refers to the process of selecting part of an image.
- a Interpolation
 - b Cropping
 - c Pixelation
 - d Resolution

ANS: B

PTS: 1

REF: 436



The figure above has a resolution of 130 x 130. The figure at right was enlarged to a resolution of 260 x 260, but it has a rough, pixelated appearance.



20. With images that contain strong curved or diagonal lines, pixel ____ can result in the kind of effects shown in the accompanying figure.

- a polarity
- b interpolation
- c interlacing
- d depth processing

ANS: B

PTS: 1

REF: 436

21. The quality of a bitmap graphic is ____ dependent.
- a vector
 - b resolution
 - c rastering
 - d codec

ANS: B PTS: 1 REF: 436

22. You have just decreased the number of pixels and file size of your graphic by selecting a portion of the image. You have ____.
- a zoomed in on your graphic
 - b cropped your graphic
 - c pixelated your graphic
 - d rastered your graphic

ANS: B PTS: 1 REF: 436

23. A ____ bitmap would be displayed by manipulating the pattern of "off" and "on" pixels displayed on the screen.
- a 32-bit
 - b monochrome
 - c 24-bit
 - d True Color

ANS: B PTS: 1 REF: 437

24. A ____ bit in a monochrome bitmap represents black.
- a 0
 - b 1
 - c 56
 - d 255

ANS: A PTS: 1 REF: 437

25. A True Color or 24-bit bitmap can produce a maximum of ____ colors.
- a 16.7 million
 - b 10 million
 - c 256
 - d 2

ANS: A PTS: 1 REF: 439

26. A ____ palette contains a standard set of colors used by most Internet Web browsers.
- a Web
 - b grayscale
 - c monitor
 - d system

ANS: A PTS: 1 REF: 438

27. Which of the following formats does not offer lossless compression?
- a GIF
 - b PNG
 - c TIFF
 - d JPEG

ANS: D PTS: 1 REF: 440

28. ____ preprocesses an image by tweaking the colors in adjoining pixels so that they are the same color whenever possible.

- | | | | |
|---|-----|---|------|
| a | BMP | c | JPEG |
| b | PCX | d | TIFF |

ANS: C PTS: 1 REF: 441

29. ____ file sizes might shrink by as much as 70% when compressed.

- | | | | |
|---|------|---|------|
| a | TIFF | c | JPEG |
| b | PCX | d | BMP |

ANS: D PTS: 1 REF: 442

30. You plan to create a cartoon-like image of a computer to be used in a flyer for your school's computer lab. You should create a ____ graphic.

- | | | | |
|---|--------|---|----------|
| a | vector | c | bitmap |
| b | raster | d | metafile |

ANS: A

PTS: 1

REF: 444

31. A ____ graphic consists of a set of instructions for re-creating a picture.

a bitmap

c raster

.

.

b vector

d pixelated

.

.

ANS: B

PTS: 1

REF: 444

32. Which of the following is a file extension you might find on a vector graphic filename?

a .bmp

c .wmf

.

.

b .jpg

d .gif

.

.

ANS: C

PTS: 1

REF: 444

33. One clue that an image might be a ____ graphic is a flat, cartoon-like quality.

a bitmap

c vector

.

.

b raster

d pixelated

.

.

ANS: C

PTS: 1

REF: 444

34. Vector graphics software is sometimes referred to as ____ software.
- a digitizing
 - b dithering
 - c drawing
 - d scaling

ANS: C PTS: 1 REF: 446

35. A ____ is a smooth blending of shades from one color to another or from light to dark.
- a dither
 - b metafile
 - c gradient
 - d trace

ANS: C PTS: 1 REF: 447

36. Graphics files that contain both bitmap and vector data are called ____.
- a raster files
 - b gradient files
 - c pixelated files
 - d metafiles

ANS: D PTS: 1 REF: 447

37. A vector graphic can quite easily be converted into a bitmap graphic through a process called ____.
- a resolution
 - c rasterizing

b dithering

d tracing

ANS: C

PTS: 1

REF: 447

38. ____ software locates the edges of objects in a bitmap image and converts the resulting shapes into vector graphic objects.

a Dithering

c Resolution

b Tracing

d Rasterizing

ANS: B

PTS: 1

REF: 447

39. ____ can be used to create the illusion of three dimensions by smoothly blending shades from one color to another or from light to dark.

a Rendering

c Megapixels

b Dithering

d Gradients

ANS: D

PTS: 1

REF: 447

40. ____ is supported by most modern browsers without requiring a plug-in; it supports gradients, drop shadows, multiple levels of transparency, and animation effects, along with portability to other platforms, such as handheld computers and cellular phones.

a BMP

c SVG

b JPEG

d GIF

.

.

ANS: C

PTS: 1

REF: 448

41. The process of covering a wireframe with surface color and texture is called ____.

a rendering

c rasterizing

.

.

b dithering

d resolution

.

.

ANS: A

PTS: 1

REF: 449

42. A video is composed of a series of bitmap graphics, each one called a ____.

a montage

c unit

.

.

b frame

d post

.

.

ANS: B

PTS: 1

REF: 452

43. Footage can originate from a ____.

a videotape

c DVD

.

.

b television

d all of the above

.

.

ANS: D

PTS: 1

REF: 452

44. The following is NOT a technique used to produce video footage that will maintain good quality as it is edited and processed: ____.
- a Use a tripod to maintain a steady image.
 - b Zoom in and out quickly.
 - c Move the camera slowly if it is necessary to pan from side to side.
 - d Position your shot to eliminate as much background detail as possible.

ANS: B

PTS: 1

REF: 454

45. The process of converting analog video signals into a digital format is referred to as ____.
- a video streaming
 - b video conversion
 - c video capture
 - d video cataloging

ANS: C

PTS: 1

REF: 455

46. Professionals opt to have at least ____ of RAM on their computer's hard disk for video editing.
- a 4 KB
 - b 4 MB
 - c 4 GB
 - d 4 TB

ANS: C

PTS: 1

REF: 456

47. All of the following are examples of video editing software EXCEPT ____.
- a Corel VideoStudio
 - b Adobe Illustrator
 - c Apple iMovie
 - d Windows Movie Maker

ANS: B

PTS: 1

REF: 456

48. Today's ____ editing simply requires a computer hard disk and video editing software.
- a linear
 - b extrapolated
 - c nonlinear
 - d rated

ANS: C

PTS: 1

REF: 456

49. Popular codecs include all of the following EXCEPT ____.
- a DivX
 - b Corel
 - c Theora
 - d H.264

ANS: B

PTS: 1

REF: 457

50. Each ____ uses a unique compression algorithm that allows the user to specify the compression ratio and/or bitrate used when compressing video.

- a container format
- b frame rate
- c key frame
- d codec

ANS: D PTS: 1 REF: 457

51. Digital video file formats are sometimes referred to as ____ formats.

- a baseline
- b integrated
- c container
- d tracked

ANS: C PTS: 1 REF: 458

52. ____ is a popular format for Web-based video that requires Adobe Flash Player.

- a RealMedia
- b Flash video
- c QuickTime Movie
- d Audio Video Interleave

ANS: B PTS: 1 REF: 458

53. ____ shifting is the process of recording a broadcast so that it can be played back at a more convenient time.

- a Time
- b Format
- c Program
- d Delay

ANS: A PTS: 1 REF: 465

54. ____ shifting is the process of converting media files from a format suitable for one device to a format suitable for a different kind of device.

- a Device
- b Format
- c Player
- d Bit

ANS: B PTS: 1 REF: 465

55. ____ shifting is often achieved using computer networks, as when you stream a movie from your computer to your Wi-Fi equipped DVD player to your Wi-Fi equipped HDTV.

- a Place
- b Generation
- c Time
- d Iteration

ANS: A PTS: 1 REF: 465

56. A common use of ____ shifting is ripping audio tracks from a CD and converting them into MP3 format for playback on a portable media device.

- a generation
- c device

b iteration

d format

ANS: D

PTS: 1

REF: 465

57. All of the following are DRM technologies EXCEPT ____.

a authentication

c dithering

b proprietary media formats

d watermarks

ANS: C

PTS: 1

REF: 466

58. ____ is a collection of techniques that copyright holders use to limit access to and use of digital content.

a Zune

c DRM

b Blu-ray

d AACs

ANS: C

PTS: 1

REF: 466

59. A ____ watermark is a pattern of bits inserted at various places in an image or a content stream that can be used to track, identify, verify, and control content use.

a patent

c digital

b streaming

d protected

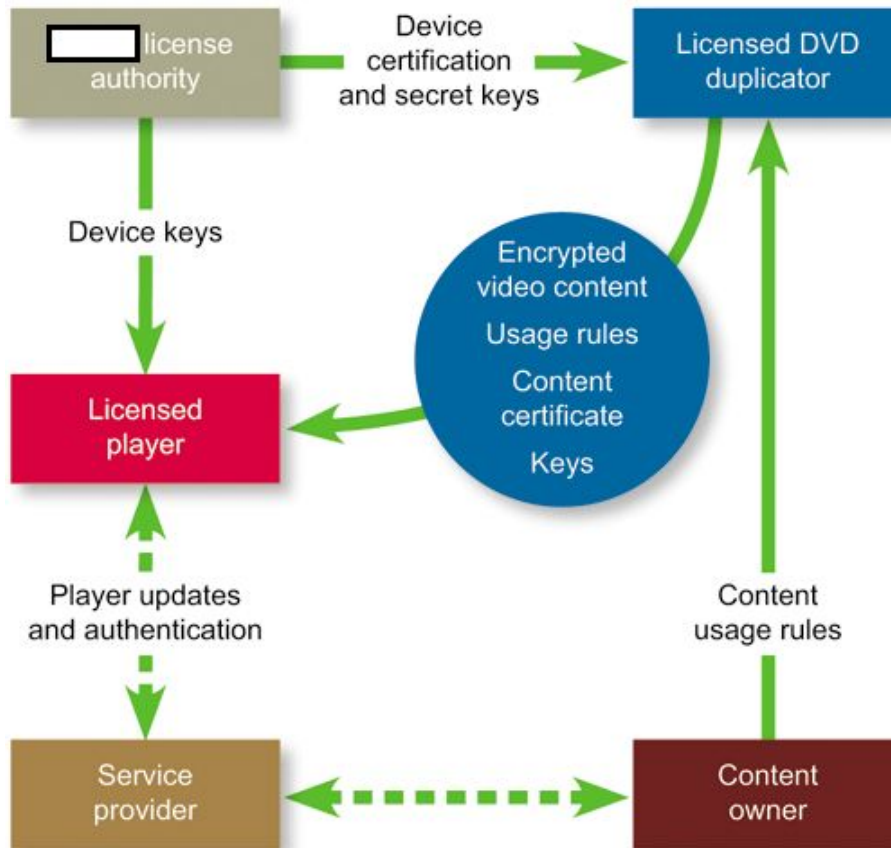
ANS: C PTS: 1 REF: 467

60. The following is NOT true of broadcast flags: ____.
- a They permit global access to content use.
 - b They can prevent fast-forwarding during commercials.
 - c They can prohibit copying or limit the number of copies that can be made.
 - d They limit the resolution or sound quality of playback.

ANS: A PTS: 1 REF: 467

61. Which of the following is NOT a DRM encryption technology?
- | | |
|--------|---------|
| a CDHA | c CSS |
| b HDCP | d AACCS |

ANS: A PTS: 1 REF: 467



62. As shown in the accompanying figure, ____ compliant devices each contain their own unique set of keys, and these keys can be revoked if a player is found to be compromised.
- | | | | |
|---|-------------------|---|-------------|
| a | Analog protection | c | AACS |
| . | | . | |
| b | CSS | d | Region code |
| . | | . | |

ANS: C

PTS: 1

REF: 469

63. As shown in the accompanying figure, the primary DRM technology for Blu-ray discs is ____.
- | | | | |
|---|----------|---|----------------|
| a | Red Book | c | FairPlay |
| . | | . | |
| b | AACS | d | Copy Generator |

ANS: B

PTS: 1

REF: 469

64. When you are streaming a Netflix movie over a basic cable Internet connection, Netflix transmits the first few minutes of the movie to a memory area of your computer called a(n) ____.

a clipboard

c buffer

b copyspot

d album

ANS: C

PTS: 1

REF: 470

65. ____ is a digital rights management technology designed to encrypt and control the use of content stored on DVDs.

a DeCSS

c CSS

b AACSS

d Revocation

ANS: C

PTS: 1

REF: 469

66. ____ depends on authorization and revocation built into devices and content.

a DRM

c AACSS

b CSS

d VoIP

ANS: C

PTS: 1

REF: 469

67. CSS stands for Content ____ System

a Security

c Scramble

.

.

b Seller

d Scribble

.

.

ANS: C

PTS: 1

REF: 469

68. ____ is a hardware-based DRM technology that requires compliant devices for content playback.

a EPM

c CSS

.

.

b HDCP

d VoIP

.

.

ANS: B

PTS: 1

REF: 470

69. Now when you purchase a digital book from ____, you can read it on devices that include computers, tablets, and smartphones.

a Amazon

c iTunes

.

.

b Barnes & Noble

d all of the above

.

.

ANS: D

PTS: 1

REF: 470

70. Under U.S. law, copyright holders may be awarded statutory damages up to ____ for copyright infringement.

- | | |
|-------------|-----------------|
| a \$25,000 | c \$2 million |
| b \$250,000 | d \$2.5 million |

ANS: B

PTS: 1

REF: 471

Chapter 9: The Computer Industry: History, Careers, and Ethics

MULTIPLE CHOICE

1. A step-by-step process by which numbers are manipulated is a(n) ____.

- | | |
|-------------|---------------|
| a algorithm | c calculation |
| b computer | d abacus |

ANS: A

PTS: 1

REF: 486

2. The type of manual calculator first used in ancient Rome, Greece, India, China, and Japan is called a(n) ____.

- | | |
|--------------|----------|
| a slide rule | c abacus |
|--------------|----------|

b algorithm

d Napier's Bones

ANS: C

PTS: 1

REF: 487

3. A device consisting of several rods divided into ten squares, each labeled with two numbers, with the rods positioned according to the numbers in the calculation, is a(n) ____.

a slide rule

c abacus

b algorithm

d Napier's Bones

ANS: D

PTS: 1

REF: 487

4. A calculator that implements instructions autonomously is a(n) ____.

a slide rule

c mechanical calculator

b abacus

d algorithm

ANS: C

PTS: 1

REF: 488

5. The first mass-produced mechanical calculator was the ____.

a Pascaline

c de Colmar's Arithmometer

b Leibniz

d IBM Selectrix

ANS: C

PTS: 1

REF: 488

6. Punched cards were used in ____.
- a PCs from 1983 to 1988
 - b first-generation computers
 - c 1970s mainframes
 - d none of the above

ANS: C

PTS: 1

REF: 488

7. The U.S. Census Bureau held a competition to find a way to tabulate the 1890 census. The Hollerith Tabulating Machine won. The company is now known as ____.
- a HP
 - b HTM
 - c IBM
 - d HAL

ANS: C

PTS: 1

REF: 489

8. An experimental device that typically must be further developed and perfected before going into production is called a(n) ____.
- a alpha
 - b beta
 - c prototype
 - d omega

ANS: C

PTS: 1

REF: 489

9. The first electronic computer to use vacuum tubes instead of switches was the ____.

a ABC

c Enigma

.

.

b Z3

d Mark 1

.

.

ANS: A

PTS: 1

REF: 489

10. IBM created a computer that integrated 73 IBM Automatic Accounting Machines into a single unified computing unit called the ____.

a ABC

c Enigma

.

.

b Z3

d Harvard Mark 1

.

.

ANS: D

PTS: 1

REF: 490

11. The electronic device used to decode messages encrypted by the Germans was the ____.

a COLOSSUS

c Enivac

.

.

b Enigma

d UNIVAC

.

.

ANS: A

PTS: 1

REF: 490

12. The general-purpose electronic computer designed to calculate trajectory tables for the U.S. Army was _____.

- a COLOSSUS
- b Enigma
- c ENIAC
- d UNIVAC

ANS: C PTS: 1 REF: 491

13. The first commercially successful digital computer was the _____.

- a COLOSSUS
- b Enigma
- c Enivac
- d UNIVAC

ANS: D PTS: 1 REF: 491

14. Computers characterized by their use of vacuum tubes are considered _____-generation.

- a first
- b second
- c third
- d fourth

ANS: A PTS: 1 REF: 492

15. A vacuum tube can have _____ state(s).

- a one
- c three

- . b two
- . d unlimited
- . .

ANS: B PTS: 1 REF: 492

16. Computers characterized by their use of transistors are considered ____ -generation.

- a first
- c third
- . .
- b second
- d fourth
- . .

ANS: B PTS: 1 REF: 492

17. The birth of the software industry was a result of high-level languages developed for ____ -generation computers.

- a first
- c third
- . .
- b second
- d fourth
- . .

ANS: B PTS: 1 REF: 493

18. The first commercially successful minicomputer was the ____.

- a RCA Spart 7
- c DEC PDP-8
- . .
- b IBM 360
- d IBM AS400
- . .

ANS: C

PTS: 1

REF: 494

19. Computers characterized by their use of microprocessors are ____-generation.

a first

c third

.

.

b second

d fourth

.

.

ANS: D

PTS: 1

REF: 494

20. The first commercial microcomputer was the ____.

a Mark 8

c Apple I

.

.

b MITS Altair

d IBM PC

.

.

ANS: B

PTS: 1

REF: 495

21. The first IBM PCs used ____ as an operating system.

a MS-DOS

c Windows

.

.

b PC-DOS

d IBM-DOS

.

.

ANS: B

PTS: 1

REF: 496

22. By the mid-1990s, IBM-compatible computer systems accounted for more than ____ percent of all personal computer sales.

- a 70
- b 80
- c 90
- d 99

ANS: C PTS: 1 REF: 497

23. ____ set another hardware milestone when it introduced the iPad in 2010.

- a Apple
- b Microsoft
- c IBM
- d NASA

ANS: A PTS: 1 REF: 497

24. According to the text, a narrow definition of the term “computer industry” would be those companies that ____.

- a manufacture computers and computer components
- b manufacture computers, components, peripherals, and accessories
- c develop, produce, sell, and support computers
- d both a and c

ANS: A

PTS: 1

REF: 498

25. _____ are a segment of the IT industry.

- a Software publishers
- b Service companies
- c Computer retailers
- d All of the above

ANS: D

PTS: 1

REF: 499

26. Worldwide, consumers spend more than \$_____ on information technology each year.

- a 1 billion
- b 10 billion
- c 1 trillion
- d 10 trillion

ANS: C

PTS: 1

REF: 502

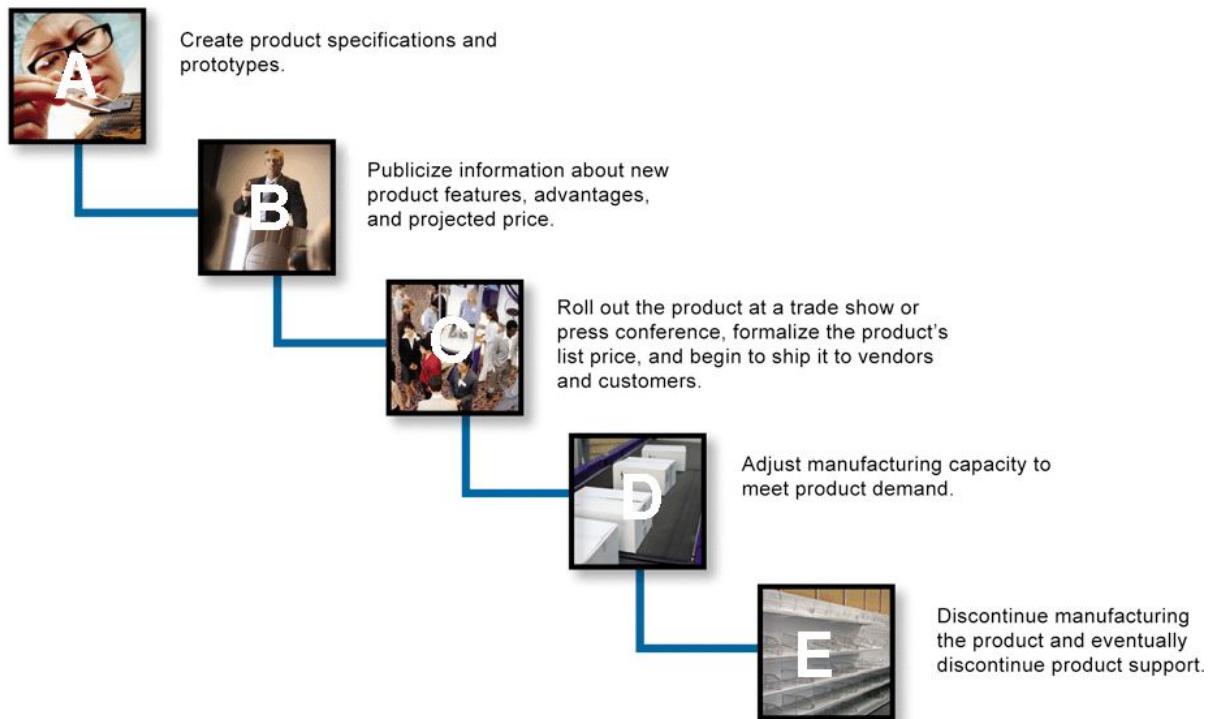
27. Factors affecting the success of the IT industry include: _____.

- a population growth & business globalization
- b declining population & business globalization
- c population growth & interest rate declines
- d Internet declines & business globalization

ANS: A

PTS: 1

REF: 502



28. The life cycle of a new computer product is shown in the accompanying figure, in which box A represents ____.
- a Introduction
 - b Product Announcement
 - c Product Development
 - d Product Design

ANS: C

PTS: 1

REF: 503

29. The life cycle of a new computer product is shown in the accompanying figure, in which box B represents ____.
- a Introduction
 - c Product Development

.
b Product Announcement
.

.
d Product Design
.

ANS: B

PTS: 1

REF: 503

30. The life cycle of a new computer product is shown in the accompanying figure, in which box C represents ____.

a Product Development
.

c Introduction
.

b Product Announcement
.

d Product Design
.

ANS: C

PTS: 1

REF: 503

31. The life cycle of a new computer product is shown in the accompanying figure, in which box D represents ____.

a Introduction
.

c Maintenance
.

b Product Design
.

d Product Announcement
.

ANS: C

PTS: 1

REF: 503

32. The first phase of testing generally carried out by the software publisher's in-house test team is called ____.

a white box testing
.

c alpha testing
.

ANS: D

PTS: 1

REF: 505

36. Worldwide, Hewlett-Packard and _____ lead the pack, each with close to 15% market share.
- a Dell
 - b IBM
 - c Apple
 - d Lenovo

ANS: D

PTS: 1

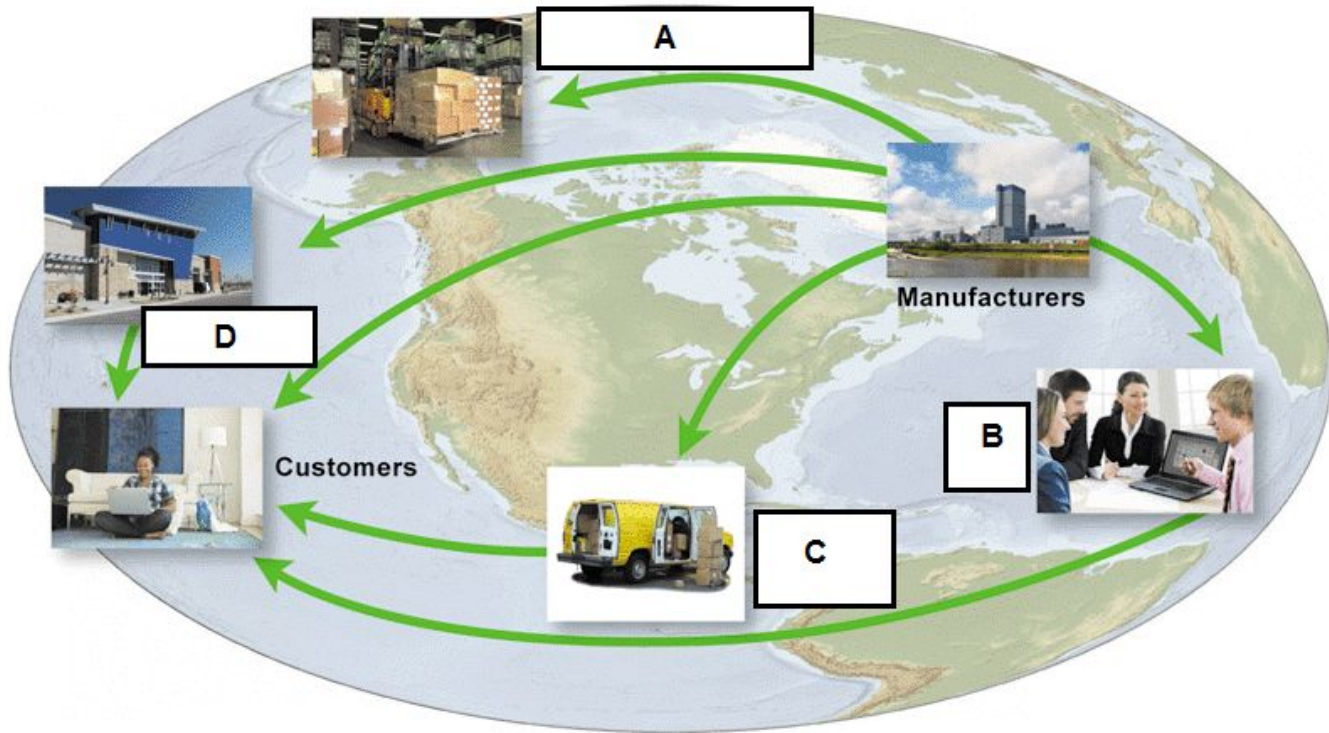
REF: 505

37. The following are marketing channels for computer hardware and software: _____.
- a computer retail stores
 - b mail-order/Internet outlets
 - c value-added resellers
 - d all of the above

ANS: D

PTS: 1

REF: 506



38. The accompanying figure represents computer and software marketing channels. In that figure, box A represents ____.

- | | | | |
|---|-----------------------|---|----------------------|
| a | distribution centers | c | mail-order suppliers |
| b | value-added resellers | d | retail stores |

ANS: A

PTS: 1

REF: 506

39. The accompanying figure represents computer and software marketing channels. In that figure, box B represents ____.

- | | | | |
|---|-----------------------|---|----------------------|
| a | distribution centers | c | mail-order suppliers |
| b | value-added resellers | d | retail stores |

ANS: B

PTS: 1

REF: 506

40. The accompanying figure represents computer and software marketing channels. In that figure, box C represents ____.

a distribution centers

c mail-order suppliers

b value-added resellers

d retail stores

ANS: C

PTS: 1

REF: 506

41. The accompanying figure represents computer and software marketing channels. In that figure, box D represents ____.

a distribution centers

c mail-order suppliers

b value-added resellers

d retail stores

ANS: D

PTS: 1

REF: 506

42. ____ specialize in the sale and support of microcomputer software and hardware.

a Computer retail stores

c Large box stores

b Computer specialty stores

d None of the above

ANS: A

PTS: 1

REF: 506

43. ____ is a special type of retailing in which a vendor takes orders by phone or from an Internet site, and then ships the product to consumers.

a Manufacturer direct

c VAR

.

.

b Mail order

d all of the above

.

.

ANS: B

PTS: 1

REF: 507

44. ____ refers to hardware manufacturers that sell their products directly to consumers.

a Manufacturer direct

c VAR

.

.

b Mail order

d all of the above

.

.

ANS: A

PTS: 1

REF: 507

45. A ____ combines commercially available products with specialty hardware or software.

a manufacturer direct

c VAR

.

.

b mail order firm

d all of the above

.

.

ANS: C

PTS: 1

REF: 508

46. Most IT departments are headed by a ____.
- a chief information officer
 - b chief operating officer
 - c chief technology officer
 - d chief systems officer

ANS: A PTS: 1 REF: 510

47. A(n) ____ investigates the requirements of a business or organization, its employees, and its customers in order to plan and implement new or improved customer service.
- a system designer
 - b information analyst
 - c systems analyst
 - d programmer

ANS: C PTS: 1 REF: 511

48. A person who designs, codes, and tests computer programs is a ____.
- a computer specialist
 - b computer programmer
 - c computer analyst
 - d computer technician

ANS: B PTS: 1 REF: 511

49. A person who creates documentation for large programming projects is a ____.
- a program documentor
 - c computer specialist

.
b program analyst
.

.
d technical writer
.

ANS: D

PTS: 1

REF: 512

50. A manufacturing ____ participates in the fabrication of computer chips, circuit boards, system units, or peripheral devices.

a auditor
.

c technician
.

b architect
.

d specialist
.

ANS: C

PTS: 1

REF: 512

51. Advantages of telecommuting include all the following EXCEPT ____.

a no commute time
.

c data security
.

b increased productivity
.

d all of these are advantages
.

ANS: C

PTS: 1

REF: 513

52. All of the following are essential for secure business data transmitted over the Internet EXCEPT ____.

a virtual private networks
.

c secure connections
.

b encryption
.

d high-speed connections
.

ANS: D

PTS: 1

REF: 513

53. Careers in computer ____ focus on the design of computer hardware.

a engineering

c design

.

.

b science

d construction

.

.

ANS: A

PTS: 1

REF: 514

54. Careers in computer ____ focus on computer architecture and programming computers to make them work effectively and efficiently.

a engineering

c design

.

.

b science

d construction

.

.

ANS: B

PTS: 1

REF: 514

55. ____ degrees focus on applying computers to business problems.

a Information systems

c Information management

.

.

b Information technology

d Information analysis

.

.

ANS: A

PTS: 1

REF: 514

56. ____ degrees focus on the computer equipment and software used by businesses.

a Information systems

c Information management

.

.

b Information technology

d Information analysis

.

.

ANS: B

PTS: 1

REF: 514

57. When sending a resume by email, the resumes should be in ____ format.

a pdf

c doc

.

.

b rtf

d all of the above are popular formats

.

.

ANS: D

PTS: 1

REF: 518

58. To get maximum exposure for your resume in an online job database, you should focus on ____.

a verbs

c adjectives

.

.

b nouns

d all of the above

.

.

ANS: B

PTS: 1

REF: 519

59. A hypertext version of your resume is called a ____.
- a Web page
 - b Web-based resume
 - c Web portfolio
 - d resume blog

ANS: C PTS: 1 REF: 519

60. The ____ Act enhances the authority of law enforcement agents to prevent various terrorist acts such as monitoring electronic communication without a warrant.
- a Homeland Security
 - b Electronic Communications Privacy
 - c USA Patriot
 - d Computer Fraud and Abuse

ANS: C PTS: 1 REF: 524

61. The ____ Act makes it a criminal offense to knowingly access a computer without authorization.
- a Homeland Security
 - b Electronic Communications Privacy
 - c USA Patriot
 - d Computer Fraud and Abuse

ANS: D PTS: 1 REF: 524

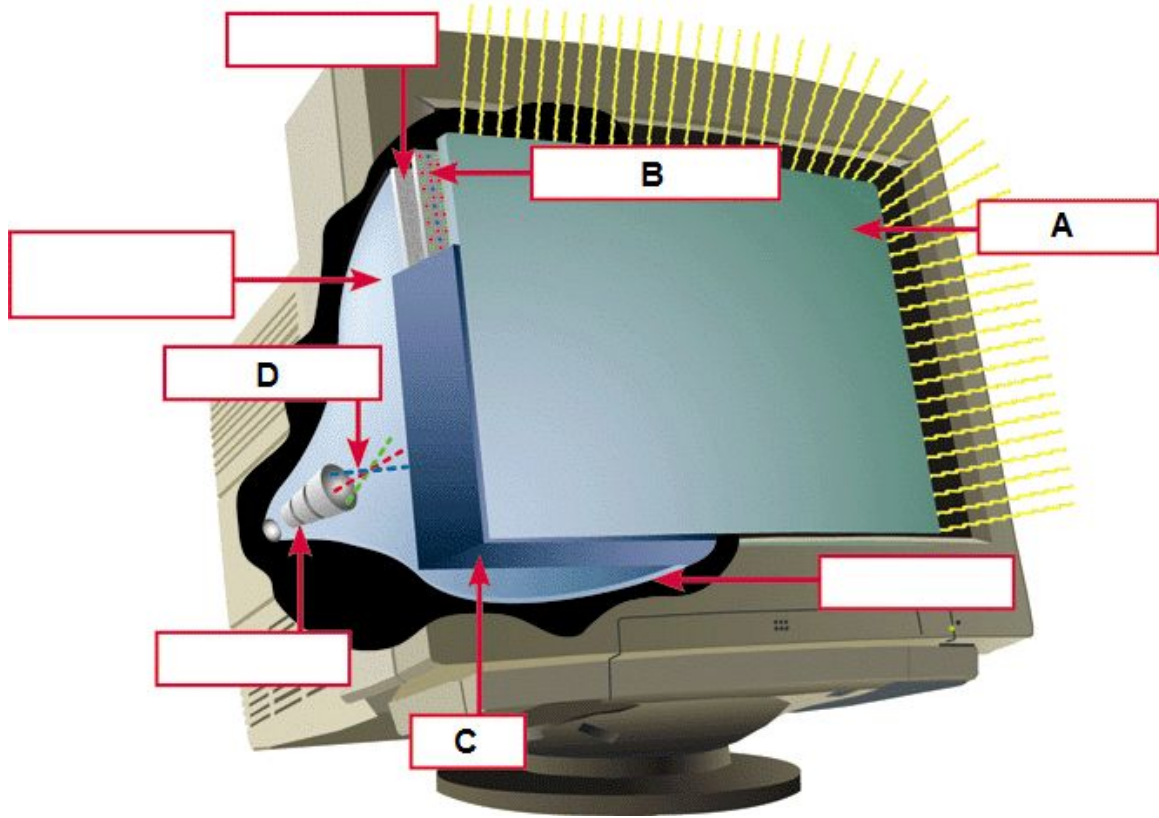
62. The ____ Act extends telephone wiretap laws by restricting government agents and unauthorized third parties from tapping into data transmissions without a search warrant.
- a Homeland Security
 - c USA Patriot Act

- . b Electronic Communications Privacy .
- . d Computer Fraud and Abuse .

ANS: B PTS: 1 REF: 524

63. The ____ Act establishes an agency to monitor threats to the communication infrastructure.
- a Homeland Security c USA Patriot
 - . .
 - b Electronic Communications Privacy d Computer Fraud and Abuse
 - . .

ANS: A PTS: 1 REF: 524



64. The accompanying figure represents a CRT; in this drawing Box A points to the ____.
- | | |
|-------------------|-----------------|
| a panel glass | c magnet shield |
| b phosphor screen | d frame |

ANS: A

PTS: 1

REF: 535

65. The accompanying figure represents a CRT; in this drawing Box B points to the ____.
- | | |
|-------------------|-------------------|
| a panel glass | c magnetic shield |
| b phosphor screen | d frame |

ANS: B

PTS: 1

REF: 535

66. The accompanying figure represents a CRT; in this drawing Box C points to the ____.

a panel glass

c frame

.

.

b phosphor screen

d electron beam

.

.

ANS: C

PTS: 1

REF: 535

67. The accompanying figure represents a CRT; in this drawing Box D points to the ____.

a electron beam

c inner magnetic shield

.

.

b laser

d none of the above

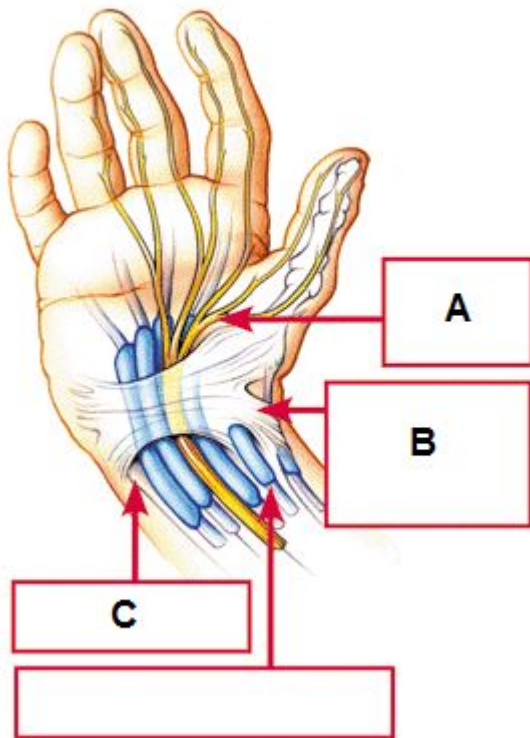
.

.

ANS: A

PTS: 1

REF: 535



68. Carpal tunnel syndrome is a condition whose effects are made worse by keyboard use. The accompanying figure represents a hand. Box A indicates the ____.
- | | | | |
|---|----------------------------|---|---------------------|
| a | median nerve | c | carpal bones |
| . | | . | |
| b | transverse carpal ligament | d | tendons and sheaths |
| . | | . | |

ANS: A

PTS: 1

REF: 536

69. Carpal tunnel syndrome is a condition whose effects are made worse by keyboard use. The accompanying figure represents a hand. Box B indicates the ____.
- | | | | |
|---|----------------------------|---|---------------------|
| a | median nerve | c | carpal bones |
| . | | . | |
| b | transverse carpal ligament | d | tendons and sheaths |
| . | | . | |

ANS: B

PTS: 1

REF: 536

70. Carpal tunnel syndrome is a condition whose effects are made worse by keyboard use. The accompanying figure represents a hand. Box C indicates the ____.

a median nerve

c carpal bones

.

.

b transverse carpal ligament

d tendons and sheaths

.

.

ANS: C

PTS: 1

REF: 536

Chapter 10: Information Systems Analysis and Design

MULTIPLE CHOICE

1. A(n) ____ is a group of people working together to accomplish a goal.

a business

c organization

.

.

b mission

d aggregate

.

.

ANS: C

PTS: 1

REF: 556

2. Every organization has a goal or plan that is often referred to as its ____.
- a Web site
 - b mission
 - c master directive
 - d organizing principle

ANS: B PTS: 1 REF: 557

3. A(n) ____ depicts the hierarchy of employees in a typical organization.
- a mission statement
 - b strategy table
 - c roster
 - d organizational chart

ANS: D PTS: 1 REF: 557

4. ____ are the people who directly carry out an organization's mission by, for example, assembling products, selling merchandise, or answering phones.
- a Managers
 - b CEOs
 - c Workers
 - d Associates

ANS: C PTS: 1 REF: 557

5. The purpose of ____ planning is to set incremental goals that can be achieved in a year or less.
- a tactical
 - c operational

.
b strategic
.

.
d futuristic
.

ANS: A

PTS: 1

REF: 558

6. As a low-level manager at your company, you are responsible for activities that make the day-to-day operation of the business run smoothly, like ordering office supplies and creating work schedules. This is called ____.

a operational planning

c strategic planning

b tactical planning

d analysis

ANS: A

PTS: 1

REF: 558

7. Which of the following best describes the process referred to as tactical planning: ____.

a Setting incremental goals that can be achieved in a year or less.

b Identifying incremental goals that can be achieved in a year or less.

c Completing activities that make day-to-day systems run smoothly.

d Planning an organization's long-range goals for market share.

ANS: A

PTS: 1

REF: 558

11. As a manager, you are responsible for managing inventory. Every month you receive a low inventory report that lists stock items that have fallen below a minimum reorder point. This report is a type of _____.

- a executive report
- b ad hoc report
- c summary report
- d exception report

ANS: D PTS: 1 REF: 561

12. A(n) _____ report is a customized report, generated to supply specific information not available in scheduled reports.

- a additional
- b exception
- c ad hoc
- d detailed

ANS: C PTS: 1 REF: 561

13. A(n) _____ report combines, groups, or totals data.

- a exception
- b aggregate
- c ad hoc
- d summary

ANS: D PTS: 1 REF: 561

14. Ad hoc reports are sometimes referred to as _____ reports.

- a summary
- b exception
- c scheduled
- d demand

ANS: D PTS: 1 REF: 561

15. You are reviewing a cash-flow model of your business, which is designed to provide a numerical representation of a realistic situation. You are using ____ tool.

- a an MIS table
- b a decision query
- c a decision model
- d a neural network

ANS: C PTS: 1 REF: 562

16. A(n) ____ helps people make decisions by directly manipulating data, analyzing data from external sources, generating statistical projections, and creating data models of various scenarios.

- a DSS
- b BPR
- c TPS
- d MIS

ANS: A PTS: 1 REF: 562

17. A ____ is a numerical representation of a realistic situation, such as a cash-flow model of a business that shows how income adds to cash accounts and expenses deplete those accounts.

- a decision master
- c decision model

b decision matrix

d decision index

ANS: C

PTS: 1

REF: 562

18. A ____ is a question or set of instructions describing data that must be gathered to make a decision.

a decision model

c decision scale

b decision query

d decision request

ANS: B

PTS: 1

REF: 562

19. A DSS typically includes modeling tools to help managers create a numerical representation of a situation and explore "what-if" alternatives. A(n) ____ is an example of this type of tool.

a spreadsheet

c expert system

b database

d Web site

ANS: A

PTS: 1

REF: 563

20. In an expert system, a(n) ____ engine analyzes the available data by following the rules in its knowledge base.

a inference

c reference

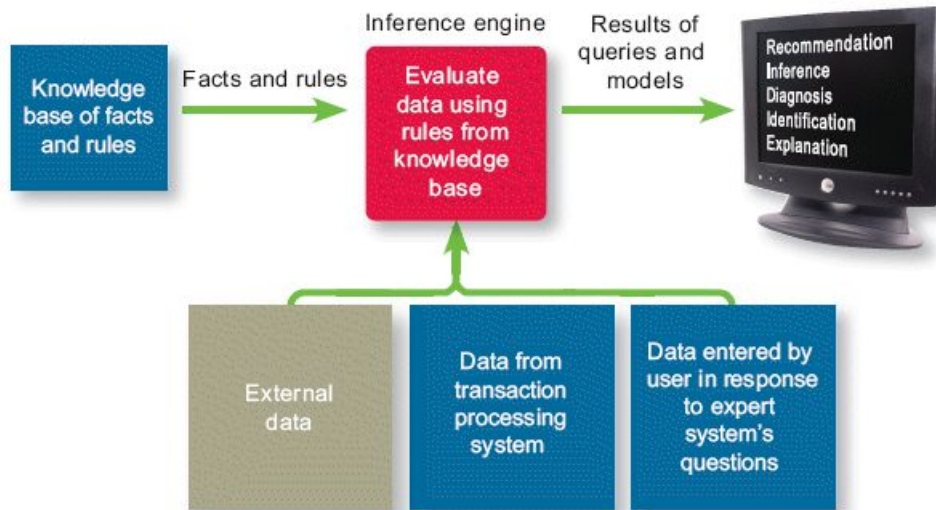
b difference

d expert

ANS: A

PTS: 1

REF: 564



21. A system like the one shown in the accompanying figure is characterized by its ability to ____.
- a list transactions
 - b produce routine reports
 - c replicate the reasoning of a human expert
 - d provide information for structured, routine decisions

ANS: C

PTS: 1

REF: 565

22. A system like the one shown in the accompanying figure is characterized by all of the following EXCEPT ____.
- a its ability to replicate the reasoning of a human expert
 - .
 - b its ability to generate its own programs
 - .
 - c its ability to work with external and internal data
 - .
 - d its ability to produce a recommendation or decision
 - .

ANS: B PTS: 1 REF: 565

23. A systems analyst is responsible for all of the following EXCEPT ____.
- a analyzing information requirements
 - .
 - b supervising the implementation of new information systems
 - .
 - c creating a development methodology
 - .
 - d creating specifications for application software
 - .

ANS: C PTS: 1 REF: 567

24. A Project Development Plan includes all of the following EXCEPT ____.
- a description of project scope
 - .
 - b justification for the project
 - .
 - c performance reviews of all project team participants
 - .
 - d schedule for the project

ANS: C

PTS: 1

REF: 567

25. The ____ technique is based on the idea that the best information systems are designed when end users and systems analysts work together as equal partners.

a MRP

c RFP

b EID

d JAD

ANS: D

PTS: 1

REF: 567

26. In a JAD ____, users and analysts jointly identify problems and look for solutions.

a session

c mission

b group

d department

ANS: A

PTS: 1

REF: 567

27. In the planning phase of the SDLC, a(n) ____ is assigned to analyze and develop the information system.

a RFP team

c mission team

b project team

d beta team

ANS: B

PTS: 1

REF: 567

28. In the PIECES framework, a ____ exists when an information system does not respond quickly enough to users or takes too long to complete processing tasks.
- a response problem
 - b processing problem
 - c control problem
 - d performance problem

ANS: D

PTS: 1

REF: 569

29. ____ is a method for analyzing the time needed to complete each project task and identifying the minimum amount of time needed to complete the total project.
- a Just in Time (JIT)
 - b Work Breakdown Structure (WBS)
 - c Program Evaluation Review Technique (PERT)
 - d Manufacturing Resource Planning (MRP)

ANS: C

PTS: 1

REF: 570

30. A ____ breaks a complex task into a series of subtasks.
- a work breakdown structure (WBS)
 - b PERT diagram
 - c legend
 - d Gantt chart

ANS: A

PTS: 1

REF: 570

31. A ____ uses bars to show the timing of development tasks as they occur over time.

a progress chart

c WBS chart

.

.

b Gantt chart

d PERT chart

.

.

ANS: B

PTS: 1

REF: 570

32. ____ elements are arranged to show which tasks must be completed before subsequent dependent tasks can begin.

a PERT chart

c Gantt chart

.

.

b WBS chart

d Beta chart

.

.

ANS: A

PTS: 1

REF: 570

33. The goal of the ____ of the SDLC is to produce a list of requirements for a new or revised information system.

a planning phase

c design phase

.

.

b analysis phase

d implementation phase

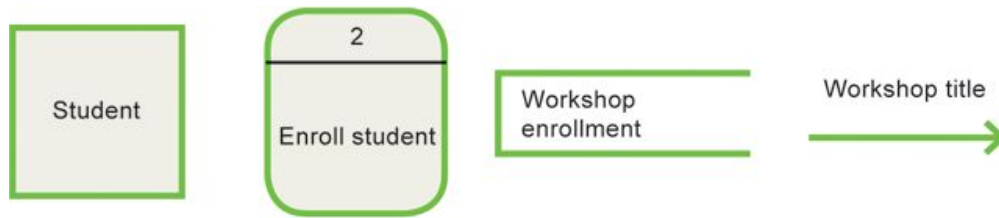
.

.

ANS: B

PTS: 1

REF: 571



34. In the accompanying figure, the ____ item represents a filing cabinet, disk, or tape that holds data.

- a first
- b second
- c third
- d fourth

ANS: C

PTS: 1

REF: 572

35. In the ____ of the SDLC, the project team must decide how the new system will fulfill the requirements specified in the System Requirements Report.

- a design phase
- b planning phase
- c analysis phase
- d implementation phase

ANS: A

PTS: 1

REF: 576

36. With ____, processing tasks are shared by servers and workstations.

- a automated processing
- c amortized processing

b turnkey processing

d distributed processing

.

.

ANS: D

PTS: 1

REF: 577

37. A ____ processing model is one in which data is processed on a centrally located computer.

a fundamental

c main

.

.

b distributed

d centralized

.

.

ANS: D

PTS: 1

REF: 577

38. Which of the following is TRUE with regard to turnkey systems?

a They require maximum effort to select and set up equipment and software.

.

b They require time and expertise to evaluate.

.

c They require more time than programming languages.

.

d They can be exactly tailored to meet system requirements.

.

ANS: B

PTS: 1

REF: 578

39. A(n) ____ is a request for a formal price quotation on a list of hardware and software.

a RFP

c RFQ

.

.

b BDG

d SDLC

.

.

ANS: C

PTS: 1

REF: 580

40. A project team submits an RFQ to vendors when it knows all of the following EXCEPT _____.

a make of the equipment needed

c titles of the software packages needed

.

.

b model of the equipment needed

d price of the software needed

.

.

ANS: D

PTS: 1

REF: 580

41. A(n) _____ is issued by a project team when it wants vendors to recommend hardware and software for the solution they have chosen.

a RFP

c RFD

.

.

b RFQ

d RFT

.

.

ANS: A

PTS: 1

REF: 580

42. When reviewing a vendor's RFP you should consider _____.

a the vendor's reliability

c the vendor's financial stability

.

.

b the vendor's expertise

d all of the above

.

.

ANS: D

PTS: 1

REF: 581

```
BEGIN
FIND item in INVENTORY with matching inventory-ID
IF record cannot be found
    DISPLAY "No inventory item matches the Inventory ID."
ELSE
    READ item record
    SET discontinued-item to YES
    WRITE item record
    DISPLAY "Item [inventory-ID] is now marked as
    discontinued."
ENDIF
END
```

43. The accompanying figure shows an excerpt from a project team's ____.
- | | |
|------------------------------|------------------------|
| a application mapping | c application index |
| b application specifications | d application glossary |

ANS: B

PTS: 1

REF: 581

44. In terms of software, ____ serve as a blueprint for the new system.
- | | |
|-------------------------|------------------------------|
| a hardware requirements | c turnkey systems |
| b custom software | d application specifications |

ANS: D

PTS: 1

REF: 581

45. In the design phase of the SDLC, the project team ____.
- a chooses a solution
 - .
 - b selects hardware and software
 - .
 - c designs detailed application specifications
 - .
 - d all of the above
 - .

ANS: D

PTS: 1

REF: 582

46. Many projects fail because of constant, unmanaged demand for changes, even before the system is implemented. This failure to constrain change is often referred to as ____.
- a concatenation
 - .
 - b preapproval
 - .
 - c feature creep
 - .
 - d redevelopment
 - .

ANS: C

PTS: 1

REF: 582

47. During the ____ phase of the SDLC, the project team supervises the tasks necessary to construct the new information system.
- a concatenation
 - .
 - b preapproval
 - .
 - c implementation
 - .
 - d design
 - .

ANS: C

PTS: 1

REF: 583

48. Software testing might reveal ____ (errors) in the software, which must be corrected by the software developer.

a blings

c blips

.

.

b bumps

d bugs

.

.

ANS: D

PTS: 1

REF: 583

49. ____ is the process of modifying a commercial application to reflect the needs of a particular organization.

a Software customization

c Software tailoring

.

.

b Software regeneration

d Software alteration

.

.

ANS: A

PTS: 1

REF: 584

50. ____ testing is performed to ensure that software modules operate together correctly.

a Incorporation

c Integration

.

.

b Assimilation

d Amalgamation

.

.

ANS: C

PTS: 1

REF: 584

54. A ____ metric is a technique for measuring a specific characteristic by monitoring system performance and analyzing responses to user satisfaction surveys.

- a PIECES
- b quality-of-service (QoS)
- c programming
- d satisfaction

ANS: B PTS: 1 REF: 587

55. The three key concepts that ensure good quality of service from a computer system include all of the following EXCEPT ____.

- a reliability
- b cost
- c availability
- d serviceability

ANS: B PTS: 1 REF: 587

56. Computer systems are ____ when they can be counted on to function correctly.

- a available
- b serviceable
- c reliable
- d high-performing

ANS: C PTS: 1 REF: 587

57. ____ refers to the ability of the system to be continuously accessible to all the people who use it.

- a Serviceability
- b Availability
- c Reliability
- d Performance

ANS: B PTS: 1 REF: 587

58. Systems exhibit ____ when they are easily upgraded or repaired.
- a availability
 - b serviceability
 - c accessibility
 - d reliability

ANS: B PTS: 1 REF: 587

59. The ____ quality of service (QoS) metric is defined as the amount of data processed in a particular time interval.
- a throughput
 - b accuracy
 - c downtime
 - d capacity

ANS: A PTS: 1 REF: 587

60. A(n) ____ installs new versions of operating system software and modifies operating system settings to ensure maximum performance.
- a applications programmer
 - c systems programmer

b system operator

d database analyst

ANS: C

PTS: 1

REF: 588

61. Many organizations establish a ____ to handle end-user problems.

a user desk

c system desk

b help desk

d processing desk

ANS: B

PTS: 1

REF: 588

62. A common threat to the data stored on a corporate information system is an act of war, which includes all of the following EXCEPT ____.

a worms

c cyberterrorism

b viruses

d human error

ANS: D

PTS: 1

REF: 591

63. Multi-level authentication is an example of a security measure in the ____ category.

a corrective procedure

c preventative countermeasure

b deterrent

d detection activity

ANS: B

PTS: 1

REF: 592

64. Antivirus software is an example of a security measure in the ____ category.
- a detection activity
 - b deterrent
 - c preventative countermeasure
 - d corrective procedure

ANS: A

PTS: 1

REF: 592

65. To avoid downtime, one of the most basic requirements for a data center is a ____.
- a UPS
 - b power grid
 - c detection system
 - d security sampler

ANS: B

PTS: 1

REF: 593

66. The key to a ____ is an e-mail that looks like it originated from a legitimate company.
- a pharming scam
 - b phishing scam
 - c thieving scam
 - d mining scam

ANS: B

PTS: 1

REF: 594

70. With current ____ technologies, corporations have no way to lock down their branding elements.

- a HTTP
- b FTP
- c URI
- d UML

ANS: A

PTS: 1

REF: 595

Chapter 11: Databases

MULTIPLE CHOICE

1. In the broadest definition, a(n) ____ is a collection of information.

- a index
- b database
- c hierarchy
- d field

ANS: B

PTS: 1

REF: 610

2. Data ____ refers to computer algorithms that analyze information to discover previously unknown and potentially useful information.

- a leading
- b mining
- c tracking
- d warehousing

ANS: B

PTS: 1

REF: 612

3. The data accessed by data mining and other analysis techniques is often stored in a data ____.

a cellar

c warehouse

b stockyard

d silo

ANS: C

PTS: 1

REF: 612

The image shows a screenshot of a web browser window. The address bar contains the URL 'https://popmusicsearch.com'. The search engine is set to Google. The page has a red navigation bar with links for 'ROCK', 'JAZZ', 'R&B', 'COUNTRY', 'RAP', 'BLUES', and 'WORLD'. Below this is a yellow section titled 'POP MUSIC SEARCH'. The search form consists of five rows, each with a label on the left and a text input field on the right. The labels are 'ARTIST OR GROUP', 'ALBUM TITLE', 'SONG TITLE', 'YEAR', and 'STYLE'. The 'ARTIST OR GROUP' field contains the text 'Elvis'. The other fields are empty.

4. You can query by ____ using a fill-in form, like the one shown in the accompanying figure.

a example

c format

b model

d function

.

.

ANS: A

PTS: 1

REF: 612

5. ____ refers to a branch of data mining that analyzes current and historical data to predict future trends.

a Future-oriented analytics

c Predictive analytics

.

.

b Linked analytics

d Forecasting analytics

.

.

ANS: C

PTS: 1

REF: 613

6. ____ allows decision makers to quickly get answers to complex queries that encompass multiple factors.

a Database modeling

c Predictive analytics

.

.

b Flat file

d OLAP

.

.

ANS: D

PTS: 1

REF: 613

7. A(n) ____ file uses a uniform format to store data for each person or thing in the file.

a structured

c variable-length

.

.

b indexed

d fixed-length

.

.

ANS: A

PTS: 1

REF: 614

8. A fixed-length field contains a predetermined number of ____.

a letters

c pixels

.

.

b units

d bytes

.

.

ANS: D

PTS: 1

REF: 615

9. In the world of databases, a(n) ____ refers to a collection of data fields.

a record

c structure

.

.

b format

d index

.

.

ANS: A

PTS: 1

REF: 615

10. A record that contains data is referred to as a record ____.

a type

c stock

.

.

b occurrence

d catalog

.

.

ANS: B

PTS: 1

REF: 615

11. ____ refers to the number of associations that can exist between two record types.

- a Ordinality
- b Referentiality
- c Relating
- d Cardinality

ANS: D

PTS: 1

REF: 616

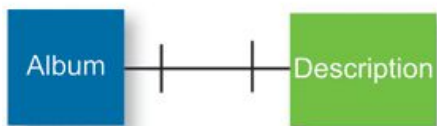
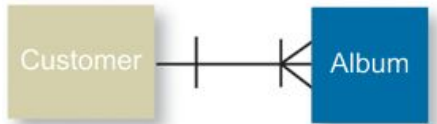
12. Relationships between record types can be graphically depicted using a(n) ____.

- a DRE
- b ERD
- c EDR
- d GRD

ANS: B

PTS: 1

REF: 616



13. In the relationship in the ____ row of the accompanying figure, one record in a particular record type can be related to many records in another record type, and vice versa.
- a top
 - .
 - b middle
 - .
 - c bottom
 - .
 - d No such relationship is shown in the accompanying figure
 - .

ANS: B

PTS: 1

REF: 616

14. A(n) ____ is an association between data that is stored in different record types.
- a method
 - .
 - b table
 - .
 - c relationship
 - .
 - d attribute

ANS: C PTS: 1 REF: 616

15. The ____ database model uses a mesh-like structure, which allows for the definition of many-to-many relationships.
- a hierarchical
 - b network
 - c parent-child
 - d duplex

ANS: B PTS: 1 REF: 617

16. In an object database, an attribute is ____.
- a equivalent to a record
 - b a group of objects
 - c equivalent to a field in a relational database
 - d any behavior that an object is capable of performing

ANS: C PTS: 1 REF: 620

17. It is possible to enter data as a(n) ____ text file and then use a programming language to write routines to access that data.
- a binary
 - c relational

.
b primary key
.

.
d ASCII
.

ANS: D

PTS: 1

REF: 623

18. Which of the following has the least versatility?

a database software

c spreadsheet software

b custom software

d dedicated software

ANS: D

PTS: 1

REF: 624

19. Data ____ means that data are separate from the programs used to manipulate the data.

a dependence

c reliance

b independence

d autonomy

ANS: B

PTS: 1

REF: 624

20. If a single data management tool can be used to maintain many different files and databases, it must support data ____.

a dependence

c networks

b independence

d relationships

ANS: B

PTS: 1

REF: 624

21. A(n) ____ allows you to create, update, and administer a relational database.

a XML DBMS

c OODBMS

.

.

b RDBMS

d ERD

.

.

ANS: B

PTS: 1

REF: 625

22. Database ____ software allows a remote computer or network workstation to access data in a database.

a client

c distribution

.

.

b server

d management

.

.

ANS: A

PTS: 1

REF: 626

23. With a(n) ____ database, the database is stored on several different computers, on multiple networks, or in different geographical locations.

a distributed

c network

.

.

b object

d relational

.

.

ANS: A

PTS: 1

REF: 626

24. Database ____ software is designed to manage billions of records and several hundred transactions per second.

a server

c distribution

.

.

b client

d system

.

.

ANS: A

PTS: 1

REF: 626

25. A technique called ____ Web publishing is a simple way to display the data in a database by converting a database report into an HTML document, which can be displayed as a Web page by a browser.

a dynamic

c static

.

.

b flexible

d entry

.

.

ANS: C

PTS: 1

REF: 627

26. The ____ Web publishing process generates customized Web pages as needed.

a server-side

c static

.

.

b flexible

d dynamic

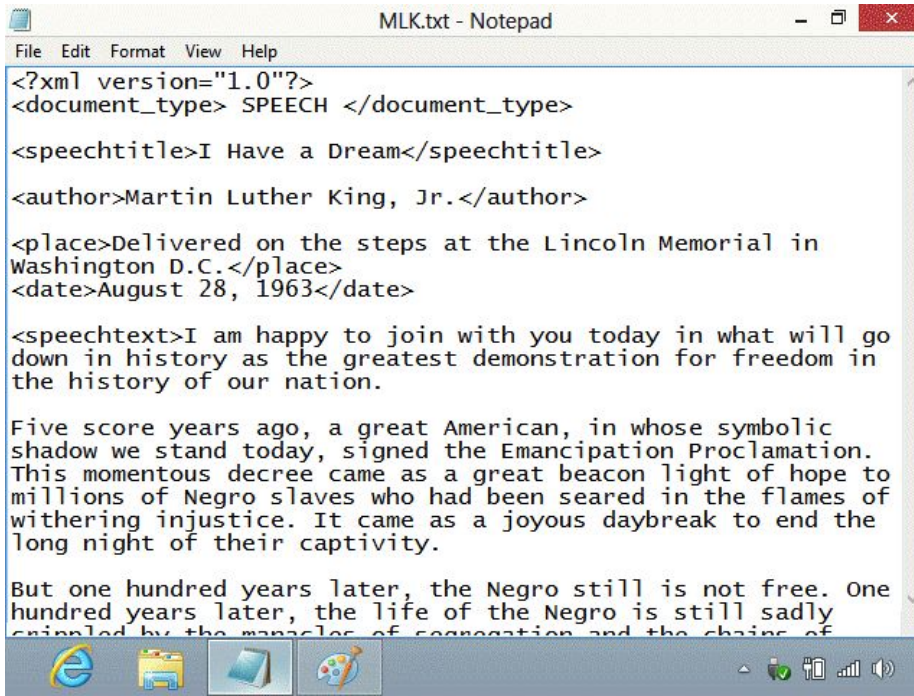
.

.

ANS: D

PTS: 1

REF: 628



30. The accompanying figure shows a(n) _____ document.
- a HTML
 - b XML
 - c JavaScript
 - d Perl

ANS: B PTS: 1 REF: 630

31. _____ is a markup language that allows field tags, data, and tables to be incorporated into a Web document.
- a HTML
 - b XML
 - c Java
 - d ASP

ANS: B

PTS: 1

REF: 630

32. Which of the following is NOT true of XML?
- a It exists as a document in human-readable format.
.
 - b It is portable so that it can be easily accessed from virtually any platform.
.
 - c XML documents are optimized for many operations you customarily associate with
. databases such as fast sorts and updates.
 - d All that is required to view an XML document is an XML-enabled browser.
.

ANS: C

PTS: 1

REF: 631

33. The ____ data type is used to store true/false or yes/no data using minimal storage space.
- a yes
 - b logical
 - c memo
 - d true
- .

ANS: B

PTS: 1

REF: 634

34. A ____ data type usually provides a variable-length field into which users can enter comments.
- a text
 - b character
 - c memo
 - d string
- .

ANS: C

PTS: 1

REF: 634

35. The ____ data type would be appropriate for a fixed-length field designed to hold a person's name.

a memo

c text

.

.

b real

d logical

.

.

ANS: C

PTS: 1

REF: 634

36. The ____ data type would be the right choice for a field designed to hold an MP3 file.

a music

c logical

.

.

b computed field

d BLOB

.

.

ANS: D

PTS: 1

REF: 635

37. A field ____ is a template that adds the correct formatting as data is entered.

a format

c validation

.

.

b roster

d screen

.

.

ANS: A

PTS: 1

REF: 636

- . b catalog
- . d roster
- .

ANS: C PTS: 1 REF: 639

44. To provide a quality database interface, a designer might ____.
- a arrange fields in a logical order
 - . b minimize on-screen instructions to save space
 - . c position entry areas randomly
 - . d use only one type of control on the interface
 - .

ANS: A PTS: 1 REF: 641

45. A(n) ____ can be used to delineate the data entry area in a user interface.
- a box
 - c shaded area
 - . b line
 - d all of the above
 - .

ANS: D PTS: 1 REF: 641

46. A ____ contains the outline or general specifications for a report, including such elements as the report title, fields to include, fields to subtotal/total, and report format specifications.

- a report matrix
- b report generator
- c report converter
- d report template

ANS: D PTS: 1 REF: 642

47. The following is NOT a guideline for creating a template for reports: ____
- a Present as much information as possible
 - b Present information in a usable format
 - c Present information in the format most appropriate for the audience
 - d Present information in a clear, unambiguous format

ANS: A PTS: 1 REF: 643

48. A(n) ____ copies data out of a software package, such as spreadsheet software, and into a database.
- a export routine
 - b copy routine
 - c import routine
 - d paste routine

ANS: A PTS: 1 REF: 644

49. ____ is a query language.

- a Java
- b SQL
- c HTML
- d XML

ANS: B PTS: 1 REF: 645

50. Database ____ provides users with an easy-to-use interface for entering search specifications, new records, data updates, and so on.

- a query software
- b server software
- c client software
- d distribution software

ANS: C PTS: 1 REF: 645

51. ____ is the SQL command used to introduce a brand-new database or table.

- a BUILD
- b NEW
- c CREATE
- d START

ANS: C PTS: 1 REF: 646

52. ____ is the SQL command used to remove a record from a table.

- a REMOVE
- b DELETE
- c PURGE
- d CUT

ANS: B

PTS: 1

REF: 646

53. In an SQL query, a ____ clause is used to specify the table you want to access.

a SELECT

c FROM

b WHICH

d JOIN

ANS: C

PTS: 1

REF: 646

54. ____ are detailed specifications for an SQL command.

a Perimeters

c Boundaries

b Parameters

d Limits

ANS: B

PTS: 1

REF: 647

55. One of the most common database operations is to query for a particular record or group of records using the ____ command.

a FIND

c GET

b SELECT

d INSERT

ANS: B

PTS: 1

REF: 648

56. The ____ operator specifies that both of the search criteria must be true for the record to be selected.

a ALL

c NOT

.

.

b NONE

d AND

.

.

ANS: D

PTS: 1

REF: 648

57. SQL uses search operators such as ____ to form complex queries.

a AND

c NOT

.

.

b OR

d all of the above

.

.

ANS: D

PTS: 1

REF: 648

58. The inclusive and exclusive ____ SQL operators designate records that meet either one of a set of two criteria or both.

a OR

c ALL

.

.

b AND

d NOT

.

.

ANS: A

PTS: 1

REF: 649

59. The following SQL operator can be used to omit records from a search by specifying a not-equal relationship: ____.

- | | |
|-------|-------|
| a ALL | c OR |
| . | . |
| b AND | d NOT |
| . | . |

ANS: D PTS: 1 REF: 649

60. A ____ update changes data in more than one record at a time.

- | | |
|----------|-----------|
| a mass | c primary |
| . | . |
| b global | d key |
| . | . |

ANS: B PTS: 1 REF: 650

61. In SQL terminology, creating a relationship between tables is referred to as ____ tables.

- | | |
|------------|------------|
| a joining | c matching |
| . | . |
| b aligning | d keying |
| . | . |

ANS: A PTS: 1 REF: 651

```
SELECT Albums.AlbumTitle,  
Albums.AlbumCover,  
Albums.DiscountPrice,  
Tracks.TrackTitle  
FROM Albums JOIN Tracks on  
Albums.Cat# = Tracks.Cat#  
WHERE Album.Cat# = 'LPM-2256'
```

62. In the SQL query in the accompanying figure, ____ tables will be accessed.
- a zero
 - b one
 - c two
 - d four

ANS: C PTS: 1 REF: 652

63. Databases are vulnerable to ____.
- a theft
 - b hacking
 - c unauthorized access
 - d All of the above

ANS: D PTS: 1 REF: 653

64. A(n) ____ limits access to systems, such as computer databases.
- a web control
 - b encryption control
 - c data control
 - d access control

ANS: D

PTS: 1

REF: 655

65. Criminals have become sophisticated in the use of all of the following EXCEPT _____ to access data stored on personal computers.

a bots

c ATMs

b redirection

d keyloggers

ANS: C

PTS: 1

REF: 654

66. Database data that is transmitted over the Web can be encrypted using encryption technologies such as _____.

a SSL

c FTP

b Telnet

d all of the above

ANS: A

PTS: 1

REF: 655

67. _____ can block unauthorized users and limit activities of authorized users.

a Activity controls

c Monitoring controls

b Access controls

d Keystroke controls

ANS: B

PTS: 1

REF: 655

68. Surveys show that as many as ____ of businesses never change the standard administrator password for a DBMS.

a 5%

c 15%

.

.

b 10%

d 25%

.

.

ANS: D

PTS: 1

REF: 655

69. A ____ establishes which fields and records a particular user may access.

a dataset

c user privilege

.

.

b data view

d user view

.

.

ANS: B

PTS: 1

REF: 656

70. A database audit can ____.

a maintain accountability

c make comprehensive corrections

.

.

b trace the source of errors

d all of the above

.

.

ANS: D

PTS: 1

REF: 656

Chapter 12: Computer Programming

MULTIPLE CHOICE

1. A computer program is typically stored as a file and transferred into ____ when needed.

- | | |
|-------|-------|
| a RAM | c RUM |
| . | . |
| b ROM | d REM |
| . | . |

ANS: A

PTS: 1

REF: 675

2. A single programmer can, on average, write, test, and document only ____ lines of code per day.

- | | |
|------|------|
| a 10 | c 20 |
| . | . |
| b 15 | d 25 |
| . | . |

ANS: C

PTS: 1

REF: 675

3. Software engineers tend to focus on ____.

- | | |
|-------------|---------------|
| a designing | c developing |
| . | . |
| b coding | d engineering |
| . | . |

ANS: A

PTS: 1

REF: 675

4. Software engineering is a development process that uses ____ techniques to reduce cost and complexity of a computer program.

a mathematical

c management

b engineering

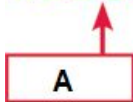
d all of the above

ANS: D

PTS: 1

REF: 675

```
write('The length is ', feet:1:2);
```



5. In the instruction in the accompanying figure, Box A points to a(n) ____.

a instruction

c parameter

b keyword

d detail

ANS: B

PTS: 1

REF: 676

6. In the instruction in the accompanying figure, Box B points to ____.
- a instructions
 - b keywords
 - c parameters
 - d commands

ANS: C

PTS: 1

REF: 676

7. A ____ language uses command words and grammar based on human language.
- a high-level
 - b low-level
 - c machine
 - d modular programming

ANS: A

PTS: 1

REF: 676

8. A ____ language typically includes commands specific to a particular CPU or microprocessor family.
- a high-level
 - b low-level
 - c third-generation
 - d modular programming

ANS: B

PTS: 1

REF: 676

9. The first computers were programmed using ____.
- a low-level languages
 - b high-level languages
 - c rewired circuitry
 - d assembler language

ANS: C

PTS: 1

REF: 677

10. Assembly languages are considered ____-generation languages.

a first

c third

b second

d fourth

ANS: B

PTS: 1

REF: 677

11. When high-level languages were originally conceived in the 1950s, they were dubbed ____-generation languages.

a first

c third

b second

d fourth

ANS: C

PTS: 1

REF: 677

12. Languages which most closely resemble natural human languages are ____-generation languages.

a second

c fourth

b third

d fifth

ANS: C

PTS: 1

REF: 678

13. A computer programming language based on a declarative programming paradigm is a ____-generation language.

a second

c fourth

.

.

b third

d fifth

.

.

ANS: D

PTS: 1

REF: 678

14. Software specially designed for entering code for computer programs is a(n) ____.

a text editor

c interpolator

.

.

b program editor

d VDE

.

.

ANS: B

PTS: 1

REF: 682

15. A ____ provides programmers with tools to build substantial sections of a program by pointing and clicking.

a text editor

c code editor

.

.

b program editor

d VDE

.

.

ANS: D

PTS: 1

REF: 683

19. A ____ error occurs when a program fails to perform as intended due to an error in the design of the program.
- a syntax
 - b logic
 - c runtime
 - d programming

ANS: B PTS: 1 REF: 685

20. A logic error is a type of ____ error.
- a syntax
 - b compile-time
 - c runtime
 - d interpolator

ANS: C PTS: 1 REF: 685

21. A collection of language-specific programming tools that enable a programmer to develop applications for a specific computer platform is a(n) ____.
- a SDK
 - b IDK
 - c API
 - d LPT

ANS: A PTS: 1 REF: 686

22. In gaming programming, explosions, flares, and fairy dust are accomplished by a(n) ____.
- a FX subroutine
 - c pathfinder

.
b particle renderer
.

.
d animatron
.

ANS: B

PTS: 1

REF: 688

23. The traditional approach to programming uses a(n) ____ paradigm.
- | | |
|---------------|-------------------|
| a procedural | c multi-paradigm |
| b programming | d object-oriented |
- .

ANS: A

PTS: 1

REF: 689

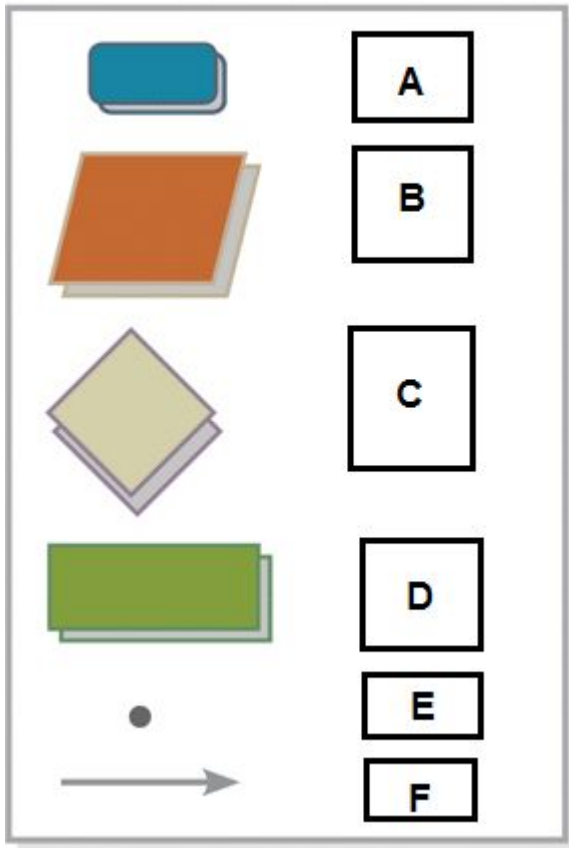
24. ____ is a subset of the English language with a limited selection of sentence structures that reflect processing activities.
- | | |
|----------------------|---------------|
| a Pseudocode | c Sub English |
| b Structured English | d Sub code |
- .

ANS: B

PTS: 1

REF: 692

Key to Flowchart Symbols



25. In the accompanying figure, A represents ____.
- a start or end
 - b input or output
 - c calculation
 - d connector

ANS: A

PTS: 1

REF: 693

26. In the accompanying figure, B represents ____.
- a start or end
 - b input or output
 - c calculation
 - d connector

ANS: B

PTS: 1

REF: 693

27. In the accompanying figure, C represents ____.
- | | |
|-------------------|---------------|
| a input or output | c calculation |
| b decision | d connector |

ANS: B

PTS: 1

REF: 693

28. In the accompanying figure, D represents ____.
- | | |
|-------------------|---------------|
| a input or output | c calculation |
| b decision | d connector |

ANS: C

PTS: 1

REF: 693

29. In the accompanying figure, E represents ____.
- | | |
|-------------|---------------|
| a flow line | c calculation |
| b decision | d connector |

ANS: D

PTS: 1

REF: 693

30. In the accompanying figure, F represents ____.
- | | |
|-------------|---------------|
| a decision | c calculation |
| b flow line | d connector |

ANS: B

PTS: 1

REF: 693

31. During ____ execution, the first instruction in the program is executed first, followed by the second.
- | | |
|---------------|--------------|
| a conjunctive | c parallel |
| b sequential | d functional |

ANS: B

PTS: 1

REF: 695

32. A ____ control structure changes the order in which instructions are carried out by directing the computer to execute an instruction elsewhere in the program.
- | | |
|-------------|--------------|
| a sequence | c repetition |
| b selection | d directing |

ANS: A

PTS: 1

REF: 695

33. A ____ control structure tells a computer what to do based on whether a condition is true or false.
- a sequence
 - b selection
 - c repetition
 - d directing

ANS: B PTS: 1 REF: 697

34. The first widely used, standardized procedural computer language was ____.
- a BASIC
 - b C
 - c Fortran
 - d C++

ANS: C PTS: 1 REF: 700

35. A(n) ____ paradigm is based on the idea that the solution for a program can be visualized in terms of objects that interact with each other.
- a procedural
 - b object-oriented
 - c objective
 - d declarative

ANS: B PTS: 1 REF: 702

36. A(n) ____ is a unit of data that represents an abstraction or a real-world entity such as person, place, or thing.

- a class
- .
- b object
- .
- c attribute
- .
- d variable
- .

ANS: B PTS: 1 REF: 702

37. ____ attributes define the characteristics of a set of objects.
- a Class
 - .
 - b Public
 - .
 - c Private
 - .
 - d Object
 - .

ANS: A PTS: 1 REF: 703

38. A(n) ____ attribute is available for use by any routine in the program.
- a class
 - .
 - b public
 - .
 - c private
 - .
 - d object
 - .

ANS: B PTS: 1 REF: 703

39. A(n) ____ attribute is available only to the routine in which it is defined.
- a class
 - .
 - b public
 - .
 - c private
 - .
 - d object
 - .

ANS: C

PTS: 1

REF: 703

40. ____ refers to passing certain characteristics from one class to another class.

- | | | | |
|---|-----------------|---|---------------|
| a | Extensibility | c | Inheritance |
| . | . | . | . |
| b | Objectification | d | Encapsulation |
| . | . | . | . |

ANS: C

PTS: 1

REF: 704

41. A method is activated by a message which is included as a line of program code also referred to as a(n)

- _____.
- | | | | |
|---|-------|---|---------|
| a | get | c | call |
| . | . | . | . |
| b | fetch | d | include |
| . | . | . | . |

ANS: C

PTS: 1

REF: 706

42. The ability to redefine a method in a subclass is called _____.

- | | | | |
|---|---------------|---|---------------|
| a | encapsulation | c | inheritance |
| . | . | . | . |
| b | polymorphism | d | instantiation |
| . | . | . | . |

ANS: B

PTS: 1

REF: 707

43. The advantages of polymorphism include ____.
- a easy extensibility
 - .
 - b simplifying program code
 - .
 - c the ability to dispense with procedural languages
 - .
 - d both a and b
 - .

ANS: D

PTS: 1

REF: 708

44. The computer begins executing a Java program by locating a standard method called ____.
- a start()
 - .
 - b begin()
 - .
 - c initiate()
 - .
 - d main()
 - .

ANS: D

PTS: 1

REF: 710

45. The first computer language to work with objects, classes, inheritance, and methods was ____.
- a Java
 - .
 - b C++
 - .
 - c SIMULA
 - .
 - d Smalltalk
 - .

ANS: C

PTS: 1

REF: 711

46. Object-oriented languages that are popular today include all of the following EXCEPT ____.

a Ada

c C#

.

.

b C++

d Pascal

.

.

ANS: D

PTS: 1

REF: 711-712

47. ____ refers to the process of hiding the internal details of objects and their methods.

a Encapsulation

c Inheritance

.

.

b Polymorphism

d None of the above

.

.

ANS: A

PTS: 1

REF: 712

48. The ____ paradigm focuses on an algorithm that describes a solution.

a functional

c procedural

.

.

b declarative

d object-oriented

.

.

ANS: C

PTS: 1

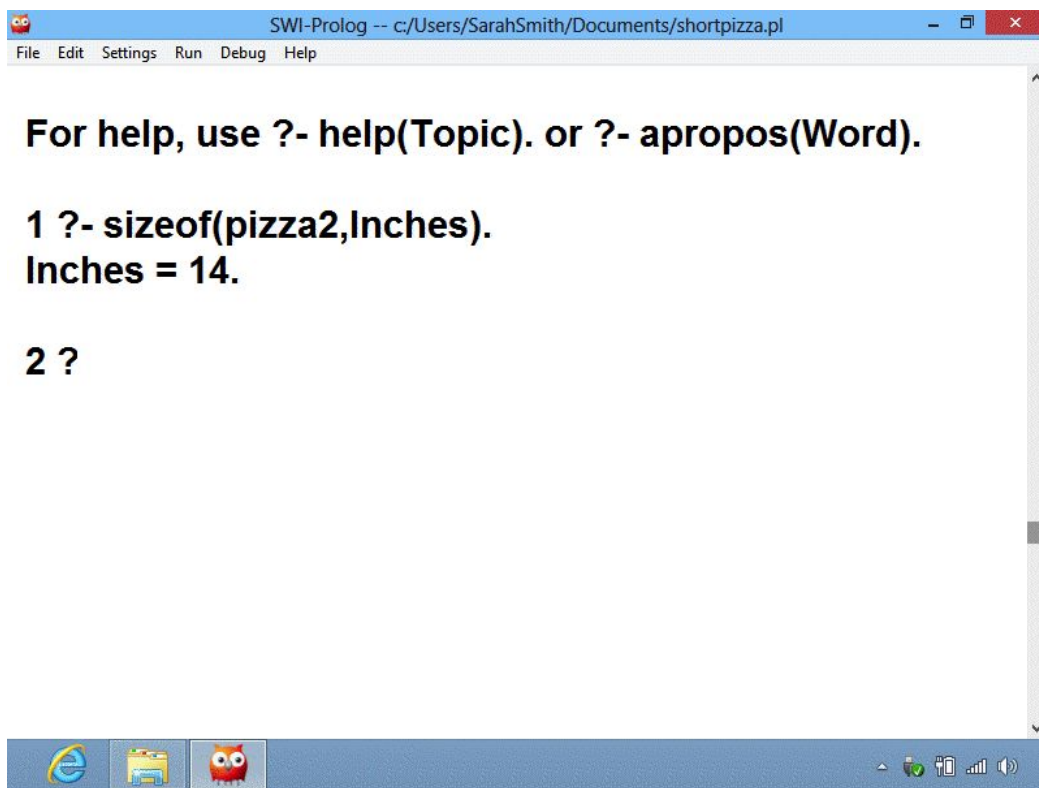
REF: 713

49. The ____ paradigm attempts to describe a problem without specifying exactly how to arrive at a solution.
- a functional
 - b declarative
 - c procedural
 - d object-oriented

ANS: B

PTS: 1

REF: 713



50. In the context of a program like the one in the accompanying figure, a(n) ____ is a statement that provides the computer with basic information for solving a problem.
- a fact
 - b rule
 - c known
 - d assumption

ANS: A

PTS: 1

REF: 713

51. In the context of a program like the one in the accompanying figure, a(n) ____ is a general statement about the relationship between facts.

a known

c rule

.

.

b assumption

d inheritance

.

.

ANS: C

PTS: 1

REF: 713

52. When programming in the language shown in the accompanying figure, the word outside the parentheses, called the ____, describes the relationship between arguments.

a variable

c predicate

.

.

b relationship

d none of the above

.

.

ANS: C

PTS: 1

REF: 714

53. In the jargon associated with the language in the accompanying figure, when you ask a question, it is a(n) ____.

a query

c inquiry

.

.

b goal

d predicate

.

.

ANS: B

PTS: 1

REF: 715

54. In the accompanying figure, when a question is asked, which prompt is used?

a ?

c !

.

.

b ?-

d ??

.

.

ANS: B

PTS: 1

REF: 716

55. In the language shown in the accompanying figure, finding a value for a variable is referred to as ____.

a instantiation

c goal finding

.

.

b querying

d assignment

.

.

ANS: A

PTS: 1

REF: 717

56. A(n) ____ table is a tabular method for visualizing and specifying rules based on multiple factors.

a rules

c assumptions

.

.

b truth

d decision

.

.

ANS: D

PTS: 1

REF: 714

57. The kinds of problems best suited to the declarative approach involve ____.
- a simple calculations
 - b complex calculations
 - c words and concepts
 - d routines

ANS: C

PTS: 1

REF: 722

58. One of the first exploits to take advantage of buffer overflows was the ____.
- a love virus
 - b Michelangelo virus
 - c Morris worm
 - d Phillip worm

ANS: C

PTS: 1

REF: 724

59. The language that offers little protection from buffer overflows is ____.
- a C++
 - b Java
 - c C#
 - d D

ANS: A

PTS: 1

REF: 724

60. In addition to buffer overflows, hackers can use ____ to find vulnerabilities.
- a verbose error messages
 - b variable typing
 - c code reuse
 - d all of the above

ANS: A

PTS: 1

REF: 724

61. ____ help(s) programmers apply rigorous logical and mathematical models to software design.

a Threat modeling

c Formal methods

b Secure programming

d all of the above

ANS: C

PTS: 1

REF: 725

62. In the threat model STRIDE, the S stands for ____ or pretending to be someone else.

a spoofing

c sabotage

b simulating

d none of the above

ANS: A

PTS: 1

REF: 725

63. In the threat model STRIDE, the T stands for ____ or changing, adding, or deleting data.

a transforming

c tampering

b trading

d none of the above

ANS: C

PTS: 1

REF: 725

64. In the threat model STRIDE, the R stands for ____ or covering tracks to make attacks difficult to trace.
- a reimage
 - b retracing
 - c repudiation
 - d reputation

ANS: C

PTS: 1

REF: 725

65. In the threat model STRIDE, the I stands for ____ or gaining unauthorized access.
- a information disclosure
 - b intrusion
 - c information detection
 - d information discovery

ANS: A

PTS: 1

REF: 725

66. In the threat model STRIDE, the D stands for ____ or making a system unavailable to legitimate users.
- a denial of service
 - b denial
 - c deauthorization
 - d detection

ANS: A

PTS: 1

REF: 725

67. In the threat model STRIDE, the E stands for ____ or modifying user rights to gain access to data.
- a elevation of service
 - b edification
 - c elevation of privilege
 - d electrification

ANS: C PTS: 1 REF: 725

68. Microsoft's ____ technology uses Internet Explorer as the verification client.
- a code wrapping
 - b Authenticode
 - c VeriSign
 - d DigiSign

ANS: B PTS: 1 REF: 727

69. Patches can be supplied as complete files or as ____ code segments.
- a entire
 - b partial
 - c in-line
 - d partial-line

ANS: C PTS: 1 REF: 728

70. Among the steps you can take to avoid security problems is ____.
- a use freeware
 - b be selective of the patches you choose to apply

- .
- c keep your firewall deployed
- .
- d all of the above
- .

ANS: C

PTS: 1

REF: 729