True/False

Indicate whether the statement is true or false.

____ 1. The microprocessor is the most important component of a computer and usually the most expensive single component.

____ 2. RAM capacity is often expressed in nanoseconds (ns).

____ 3. To minimize virtual memory use, load up your computer with as much EEPROM as possible.

____ 4. RAM circuitry holds “hard-wired” instructions that are a permanent part of the circuitry.

____ 5. Sequential access is the ability of a device to “jump” directly to requested data.

____ 6. Storage mass is the amount of data that can be stored in a given area of a storage medium.

____ 7. EIDE, ATA, SCSI, and DMA refer to the different types of circuitry used to transfer data between the hard disk and other components.

____ 8. CDs and DVDs are examples of magnetic storage media.

____ 9. Internal drive bays are designed for hard disk drives.

____ 10. The number of horizontal and vertical pixels that a device displays on a screen is referred to as its screen resolution.

____ 11. The system unit is the case that holds a computer’s main circuit boards, microprocessor, memory, power supply, and storage devices.

____ 12. The term “form factor” refers to the size and dimensions of a component, such as a system board.

____ 13. Currently, there are three personal computer platforms: PC, Mac, and Linux.

____ 14. You can usually identify the microprocessor when looking inside a computer, as it is the only chip on the motherboard.

____ 15. A microprocessor’s clock speed is equal to the number of instructions it can execute in one second.

____ 16. A fast front side bus moves data quickly and allows the processor to work at full capacity.

____ 17. The Intel i7 1.6 GHz processor is faster than the i5 2.4 GHz processor.

____ 18. Processors with a smaller word size can process more data during each processor cycle.

____ 19. A RISC processor has complex instruction sets, each requiring several clock cycles for execution.

____ 20. Most processors in today’s personal computers use RISC technology.

____ 21. RAM is volatile, which means it must constantly receive electric power to hold data.
22. Storage capacity usually is measured in gigabytes (GB) or terabytes (TB).

23. The speeds of CD, DVD, and Blu-ray drives are all measured on the same scale, based upon the original 1.2 megabits per second data transfer rate of the first CD drives.

24. DVD-RW technology allows you to write data to a disc and then later change that data.

25. A card reader is a storage device that is used to read from and write to solid state storage cards, like Secure Digital (SD) and CompactFlash cards.

26. A keyboard is an example of a pointing device.

27. The most commonly used touch screen technology is a transparent panel coated with a thin layer of electrically conductive material that senses a change in the electrical current when touched.

Multiple Choice
Identify the choice that best completes the statement or answers the question.

28. At normal reading distance, a resolution of about ________ dpi appears solid to the human eye, but a close examination reveals a dot pattern.
   a. 250   c. 1200
   b. 900   d. 2400

29. Which one of the following devices would typically have the fastest access time?
   a. Hard disk drive   c. DVD drive
   b. CD drive   d. USB flash drive

30. ________ computers are small, portable devices that allow you to install application software, usually referred to as apps.
   a. Micro   c. Enhanced
   b. Handheld   d. Cellular

31. A netbook ________.
   a. is a small version of a slate computer   c. is smaller than a tower unit and sometimes sports a handle
   b. is a small version of a notebook computer   d. features a touch screen that's controlled by finger gestures

32. Because of the typically complex instruction sets used today, most processors in personal computers use ______ technology.
   a. Hyper-Threading   c. overclocking
   b. RISC   d. CISC

33. There are three types of storage technologies commonly used for personal and handheld computers: ________, optical, and solid state.
   a. fiber optic   c. electronic
   b. magnetic   d. random access

34. Storage ________ is the amount of data that can be stored in a given area of a storage medium, such as the surface of a disk.
   a. access time   c. transfer rate
   b. density   d. capacity
35. The following are all examples of pointing devices EXCEPT ________.
   a. a trackpad  
c. a local bus  
b. a mouse  
d. a joystick

36. A(n) ________ printer uses the same technology as a photocopier to paint dots of light onto a light-sensitive drum.
   a. dot matrix  
c. laser  
b. ink jet  
d. duplex

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

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

39. ____ 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  
c. Tower units  
b. Base units  
d. Minicases

40. The term ____ refers to the size and dimensions of a computer component.
   a. form factor  
c. disk header  
b. system specification  
d. peripheral metric

41. A(n) ____ computer is a small, lightweight personal computer with screen, keyboard, storage, and processing components integrated into a single unit.
   a. tower  
c. desktop  
b. all-in-one  
d. portable

42. A ____ offers more portability than a standard notebook.
   a. digital deskbook  
c. netbook  
b. mini-notebook  
d. microtablet

43. A ____ computer is also referred to as a laptop computer.
   a. desktop  
c. notebook  
b. tablet  
d. PDA

44. Gaming computers typically include ____.
   a. very fast processors  
c. state-of-the-art sound capabilities  
b. lots of memory  
d. all answers are correct

45. A ____ computer is a handheld computer that is essentially a large version of an enhanced media player.
   a. tower  
c. desktop  
b. tablet  
d. microcomputer

46. A(n) ____ media player is a handheld device designed for playing music and videos, which offers a camera, access to the Internet, and a variety of apps.
   a. convertible  
c. ultra-mobile  
b. enhanced  
d. smart
47. On which of the following devices do Windows Phone apps run?
   a. iPhones
   b. Palm
   c. BlackBerry
   d. no answers are correct

48. _____ means a billion cycles per second.
   a. Gigahertz
   b. Megahertz
   c. Terahertz
   d. Nanohertz

49. In an advertisement, a speed specification, such as 2.66 GHz, indicates the speed of the microprocessor _____.
   a. control unit
   b. register
   c. clock
   d. no answers are correct

50. _____ refers to the number of bits that a microprocessor can manipulate at one time.
   a. Processor speed
   b. Word size
   c. Register space
   d. ALU

51. A processor that includes circuitry for two or more processing units is called a _____ processor.
   a. HyperTransport
   b. pipelined
   c. multi-core
   d. serial

52. A technology called _____ allows the processor to begin executing another instruction before it completes the previous instruction.
   a. pipelining
   b. serial processing
   c. benchmarking
   d. HyperTransport

53. A microprocessor whose instruction set includes a limited set of simple instructions uses _____ technology.
   a. HyperTransport
   b. RISC
   c. CISC
   d. benchmarked

54. _____ is used to enhance processor performance.
   a. Pipelining
   b. A benchmark
   c. Parallel processing
   d. Both pipelining and parallel processing

55. 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

56. _____ 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

57. 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 answers are correct

58. _____ is a temporary holding area for data, application program instructions, and the operating system.
   a. ROM
   b. EEPROM
   c. Disk storage
   d. RAM
59. RAM can be thought of as the ____ for the computer's processor.
   a. factory  
   b. operating room  
   c. waiting room  
   d. planning room

60. Unlike disk storage, most RAM is ____.
   a. virtual  
   b. integrated  
   c. non-volatile  
   d. volatile

61. 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  
   b. capacitor memory  
   c. virtual memory  
   d. integrated memory

62. For good basic performance, a computer running Windows 7 should have at least ____ of RAM.
   a. 100 MB  
   b. 250 MB  
   c. 500 MB  
   d. 1 GB

63. ____ is used by most of today's personal computers because it is fast and relatively inexpensive.
   a. RDRAM  
   b. EEPROM  
   c. SDRAM  
   d. no answers are correct

64. ____ is a type of memory circuitry that holds the computer's startup routine.
   a. RIM (Read initial memory)  
   b. RAM (Random access memory)  
   c. ROM (Read only memory)  
   d. REM (Ready ever memory)

65. 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

66. A(n) ____ chip is a type of non-volatile memory chip that does not require power to hold data.
   a. RAM  
   b. EEPROM  
   c. SDRAM  
   d. all answers are correct

67. ____ time is the average time it takes a computer to locate and read data on the storage medium.
   a. Identification  
   b. Isolation  
   c. Access  
   d. Find

68. ____ is the ability of a device to "jump" directly to the requested data.
   a. Sequential access  
   b. Quick access  
   c. Random access  
   d. all answers are correct

69. 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

70. Storage capacity usually is measured in ____.
   a. milliseconds (ms)  
   b. gigabytes or terabytes  
   c. gigabits or terabits per second  
   d. no answers are correct
71. Hard disk storage technology can be classified as ____ storage.
   a. optical  
   b. magnetic  
   c. fluid-state  
   d. pipelined

72. 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

73. 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

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

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

76. 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  
   b. USB drive  
   c. U3 drive  
   d. MP3 media player

77. 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 answers are correct

78. A ____ is an example of a pointing device.
   a. joystick  
   b. trackpad  
   c. mouse  
   d. all answers are correct

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

80. Tablet computers, handheld devices, retail store self checkouts, and information kiosks collect input from a ____.
   a. pointing stick  
   b. joystick  
   c. trackball  
   d. touch screen

81. A(n) ____ display is standard equipment on notebook computers.
   a. PDA  
   b. HTML  
   c. LCD  
   d. URL

82. Dot pitch is the distance in millimeters between like-colored ____ —the small dots of light that form an image.
   a. pixels  
   b. picas  
   c. points  
   d. icons
83. For gaming systems, a response rate of ____ or less is desirable.
   a. 5 ms  
   b. 7 ms  
   c. 11 ms  
   d. 12 ms

84. The number of colors a monitor can display is referred to as ____.
   a. resolution  
   b. color depth  
   c. veracity  
   d. GPU

85. Which is the highest resolution?
   a. SXGA  
   b. VGA  
   c. WQXGA  
   d. SVGA

86. A printer's ____ determines how many pages a printer is able to churn out.
   a. resolution  
   b. duplex index  
   c. duty cycle  
   d. PCL

87. A(n) ____ printer can print on both sides of the paper.
   a. duplex  
   b. remastered  
   c. dot-matrix  
   d. ink-jet

88. ____ is the most widely used language for communication between computers and printers.
   a. Linux  
   b. PostScript  
   c. PCL  
   d. USB

89. Hot plugging is allowed with what kind of devices?
   a. PCI  
   b. USB  
   c. FireWire  
   d. Both USB and FireWire

90. The ____ is a security mechanism that is factory-installed on many personal computers.
   a. STOP plate  
   b. EPA  
   c. Kensington Security Slot  
   d. slate tablet

91. A ____ is a sudden increase or spike in electrical energy, affecting the current that flows to electrical outlets.
   a. brownout  
   b. UPS  
   c. power surge  
   d. battery blast

92. ____ plates leave an indelible tattoo on your computer equipment, which contains a unique ID number registered in an international database.
   a. power  
   b. STOP  
   c. StealthSignal  
   d. Computrace

93. Which of the following is tracking and recovery software?
   a. Lojack for Laptops  
   b. Laptop Location System  
   c. WebAngel  
   d. STOP

94. 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  
   b. surges  
   c. cycles  
   d. portages
95. 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               c. UPS
   b. USB                      d. battery strip

96. A(n) ____ strip monitors the electrical current that passes from the outlet to all the devices plugged into the strip.
   a. outlet                   c. backup
   b. surge                    d. battery

97. 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                     c. RISC
   b. blue screen of death     d. HTTP

98. 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 answers are correct

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

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