Chapter 1 Test

True/False
Indicate whether the sentence or statement is true or false.

_____ 1. One of the earliest mechanical calculating devices was the Pascaline.

_____ 2. Herman Hollerith invented the tabulating machine in response to a contest sponsored by the U.S. Census Bureau.

_____ 3. Magnetic tape gave computers the ability to read and write data more quickly and reliably than punched cards.

_____ 4. A high-level programming language consists of English-like instructions.

_____ 5. First generation computers had more capabilities than second generation computers.

_____ 6. Ada is a high-level programming language that supports real-time applications.

_____ 7. A CPU can think for itself.

_____ 8. Application is another name for software.

_____ 9. Cache memory is used to store frequently used data so that it can be quickly retrieved by an application.

_____ 10. A printer is a peripheral device.

_____ 11. WANs are used to connect devices over large geographical distances.

_____ 12. Topology refers to the physical arrangement of the nodes on a network.

_____ 13. The OOP approach allows programmers to create modules that can be used over and over again.

_____ 14. The physical components of the personal computer, such as the monitor, are called software.

_____ 15. Unicode is a digital code used to represent letters of the alphabet and symbols.

_____ 16. Historians refer to the present time as the industrial age.

_____ 17. The illegal copying of software is called piracy.

_____ 18. Computers will only do what they have been programmed to do.

Chapter 1 Test (continued)

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

_____ 19. What did Ada Byron mean when she said that the Analytical Engine could never "originate anything"?
- a. A machine could not talk.
- b. A machine could not think.
- c. A machine could not do calculations.
- d. A machine could not make decisions.

_____ 20. The number system used in computers is called
- a. decimal.
- b. hexadecimal.
- c. binary.
- d. base.

_____ 21. A combination of software and hardware that work together to allow computers to exchange data and to share software and devices such as printers is called a
- a. network.
- b. modem.
- c. peripheral device.
- d. hard disk array.

_____ 22. The invention of the transistor was important to the development of computers because it
- a. increased calculating speed.
- b. increased the cost of computers.
- c. decreased reliability.
- d. increased the size of computers.

_____ 23. A mainframe computer
- a. is large and usually used for multi-user applications.
- b. usually stores and processes small amounts of information.
- c. is small enough to fit on a desktop.
- d. is usually used by a single user.

_____ 24. The invention of the microprocessor made possible the
- a. first generation of computers.
- b. second generation of computers.
- c. third generation of computers.
- d. fourth generation of computers.

_____ 25. RAM
- a. is memory where data and instructions are stored permanently.
- b. is memory where data and instructions are stored temporarily.
- c. is a set of circuits that connect the CPU to other components.
- d. is the computer's clock rate.

_____ 26. A program is a list of instructions
- a. that makes the computer think.
- b. written in a special language that the computer understands.
- c. written in English that tells the computer what to do.
- d. written in Basic that makes the computer think.

_____ 27. How many states do the electrical circuits on an IC (integrated circuit) have?
- a. one: on
- b. two: on, off
- c. four: + - * /
- d. three: on, off, wait

Chapter 1 Test (continued)

____ 28. A bit is
    a. a single 0 or 1 in the binary code.   c. a person's name stored in memory.
    b. eight 0s or 1s.   d. equal to 64K of RAM.

____ 29. Computer memory capacity and file size are measured in
    a. bytes.   c. nanoseconds.
    b. inches.   d. codes.

____ 30. Operating system software
    a. is a combination of hardware and software that works together to allow computers to exchange data.
    b. is network security hardware that prevents unauthorized network access.
    c. is software that enables the user to communicate with the computer.
    d. is a series of related Web pages.

____ 31. In which type of network topology is each node attached to a hub?
    a. bus topology   c. ring topology
    b. star topology   d. client topology

____ 32. Which is not a high-level programming language?
    a. Fortran   c. C++
    b. machine language   d. Visual Basic .NET

____ 33. 00000000 01001101 represents the letter M in
    a. decimal.   c. kilobytes.
    b. hexadecimal.   d. binary.

____ 34. Which is not an object-oriented programming language?
    a. C++   c. Visual Basic .NET
    b. Java   d. COBOL

____ 35. A set of circuits that connect the CPU to other components on the motherboard is called a
    a. storage medium.   c. base unit.
    b. bus.   d. transformer.

____ 36. A program that is designed to reproduce itself by copying itself into other programs without the user's knowledge is called
    a. a bug.   c. a reproduction.
    b. a virus.   d. an infection.
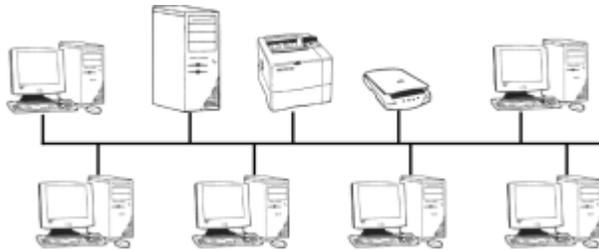
Completion

Complete each sentence or statement.
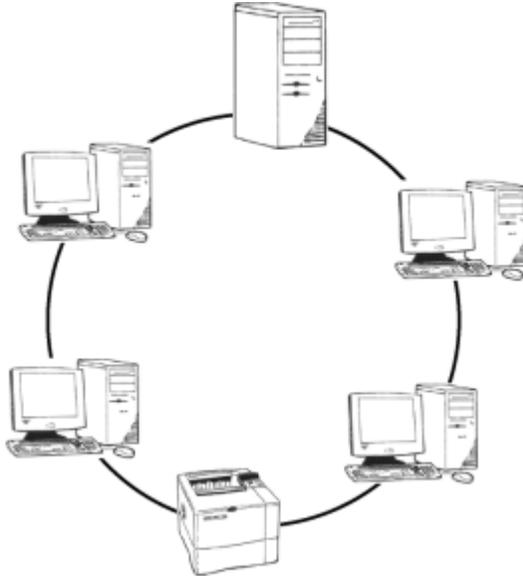

37. Label a above is referring to the _____.

38. Label b above is referring to the _____.

39. Label c above is referring to the _____.

40. Label d above is referring to the _____.

41. Label e above is referring to the _____.

42. Label f above is referring to the _____.

43. Label g above is referring to the _____.

44. The diagram below illustrates a _____ topology.

Chapter 1 Test (continued)

45. The diagram below illustrates a _____ topology.

Matching

Match the law with the corresponding description.
a. Fair Credit Reporting Act of 1970
b. Privacy Act of 1974
c. Electronic Freedom of Information Act of 1996
d. Financial Privacy Act of 1978

____ 46. Requires federal government agencies to make certain agency information available for public inspection.

____ 47. Restricts the way in which personal data can be used by federal agencies.

____ 48. Requires that a government authority have a subpoena, summons, or search warrant to access an individual's financial records.

____ 49. Gives individuals the right to see information maintained about them.

Essay

50. To protect the privacy of individuals, several laws have been passed. Name and describe two of these laws.