

Chapter 2

TRUEFALSE

1. Computers perform all tasks using a combination of arithmetic and logical operations.

(A) True

(B) False

Answer : (B)

2. Fourth-generation languages (4GLs) are also called procedural languages.

(A) True

(B) False

Answer : (B)

3. Extended ASCII is a data code that allows the representation of 1024 characters.

(A) True

(B) False

Answer : (B)

4. Inkjet printers produce characters by projecting onto paper electrically charged droplets of ink that create an image.

(A) True

(B) False

Answer : (A)

5. Spreadsheet software is more powerful than financial planning software.

(A) True

(B) False

Answer : (B)

6. ENIAC is an example of a first-generation computer.

(A) True

(B) False

Answer : (A)

7. An object code must be translated into source code for a computer to read and execute it.

(A) True

(B) False

Answer : (B)

8. The arithmetic logic unit and the control unit are part of the Basic Input/Output System.

(A) True

(B) False

Answer : (B)

9. Very-large-scale integration (VLSI) circuits were introduced in fifth-generation computers.

(A) True

(B) False

Answer : (B)

10. Computers cannot store massive amounts of data in small spaces.

(A) True

(B) False

Answer : (B)

11. The hardware component of a computer system consists of programs written in computer languages.

(A) True

(B) False

Answer : (B)

12. A server is a set of programs for controlling and managing computer hardware and software.

(A) True

(B) False

Answer : (B)

13. A computer with a 32-bit processor can perform calculations with larger numbers better than a 64-bit system.

(A) True

(B) False

Answer : (B)

14. In network-attached storage (NAS), as the number of users increases, its performance increases.

(A) True

(B) False

Answer : (B)

15. A byte is a single value of 0 or 1.

(A) True

(B) False

Answer : (B)

MULTICHOICE

16. A(n) _____, a memory device, uses laser beams to access and store data.

(A) video adapter

(B) memory chip

(C) optical disc

(D) digital card

Answer : (C)

17. The _____ tells the computer what to do, such as instructing the computer which device to read or send output to.

(A) main memory

- (B) motherboard
- (C) operating system
- (D) control unit

Answer : (D)

18. A(n) ____ is a communication interface through which information is transferred one bit at a time.

- (A) serial port
- (B) parallel port
- (C) extended capability port
- (D) enhanced parallel port

Answer : (A)

19. To make a computer understand a program, the source code must be first translated into _____ code.

- (A) ASCII
- (B) object
- (C) ternary
- (D) UTF-8

Answer : (B)

20. Identify the type of computers that has the highest storage capability.

- (A) Subnotebooks
- (B) Notebooks
- (C) Personal computers
- (D) Supercomputers

Answer : (D)

21. ____ allows data to be stored in multiple places to improve a system's reliability.

- (A) A remote access server
- (B) Network-attached storage

- (C) Random access memory
- (D) A redundant array of independent disks

Answer : (D)

22. Corel Quattro Pro is an example of _____.

- (A) word-processing software
- (B) spreadsheet software
- (C) database software
- (D) desktop publishing software

Answer : (B)

23. In a(n) _____ file, each alphabetic, numeric, or special character is represented with a 7-bit binary number.

- (A) Extended Binary Code Decimal Interchange Code (EBCDIC)
- (B) Unicode
- (C) American Standard Code for Information Interchange (ASCII)
- (D) Extended ASCII

Answer : (C)

24. A _____ is an input device for computers.

- (A) mouse
- (B) printer
- (C) monitor
- (D) speaker

Answer : (A)

25. A(n) _____ is an interface between a computer and a printer that enables the computer to transfer multiple bits of information to the printer simultaneously.

- (A) parallel port
- (B) serial port
- (C) arithmetic logic unit

(D) control unit

Answer : (A)

26. Which of the following is true of memory devices?

(A) The contents of flash memory cannot be reprogrammed.

(B) The contents of random access memory cannot be reprogrammed.

(C) The contents of programmable read-only memory cannot be reprogrammed.

(D) The contents of cache random access memory cannot be reprogrammed.

Answer : (C)

27. Which of the following is a difference between read-only memory (ROM) and random access memory (RAM)?

(A) ROM is volatile memory, whereas RAM is nonvolatile memory.

(B) ROM is secondary memory, whereas RAM is main memory.

(C) ROM is nonvolatile memory, whereas RAM is volatile memory.

(D) ROM is main memory, whereas RAM is secondary memory.

Answer : (C)

28. A petabyte is equal to ____ bytes.

(A) 230

(B) 240

(C) 250

(D) 260

Answer : (C)

29. Third-generation computers operated on ____.

(A) integrated circuits

(B) vacuum tube technology

(C) parallel processing

(D) optical discs

Answer : (A)

30. Identify the type of computers that has the highest price.

- (A) Subnotebooks
- (B) Notebooks
- (C) Personal computers
- (D) Supercomputers

Answer : (D)

31. ____ is an example of a secondary memory device.

- (A) An inkjet printer
- (B) An optical disc
- (C) Random access memory
- (D) Read-only memory

Answer : (B)

32. _____ include gallium arsenide chips that run at higher speeds and consume less power than silicon chips and optical technologies.

- (A) Second-generation computers
- (B) Third-generation computers
- (C) Fourth-generation computers
- (D) Fifth-generation computers

Answer : (D)

33. Which of the following best defines an operating system (OS)?

- (A) It is a set of programs for controlling and managing computer hardware and software.
- (B) It is a computer and all the software for managing network resources and offering services to a network.
- (C) It is a collection of disk drives used for fault tolerance and is typically found in large network systems.
- (D) It is the main circuit board containing connectors for attaching additional boards.

Answer : (A)

34. Which of the following statements is true of laser printers?

- (A) They are most suitable for home users.
- (B) They use toners to create high-quality outputs.
- (C) They are used to generate three-dimensional outputs.
- (D) They use solid ink to generate two-dimensional outputs.

Answer : (B)

35. Trackballs are ideal for notebook computers because they _____.

- (A) occupy less space than a mouse
- (B) rely on optical scanning of the data on a notebook
- (C) allow faster and more precise cursor positioning than a mouse
- (D) rely on light detection to determine which menu item has been selected

Answer : (A)

36. _____ bits equal one byte.

- (A) Six
- (B) Eight
- (C) Thirty-two
- (D) Sixty-four

Answer : (B)

37. _____ holds data when the computer is off or during the course of a program's operation.

- (A) Random access memory
- (B) Read-only memory
- (C) Secondary memory
- (D) Programmable read-only memory

Answer : (C)

38. Which of the following is true of fifth-generation languages (5GLs)?

- (A) They are the easiest computer languages to use.
- (B) They contain a series of 0s and 1s representing data or instructions.
- (C) They are machine dependent and need to be changed after every use.
- (D) They use artificial intelligence technologies, such as knowledge-based systems.

Answer : (D)

39. Microsoft PowerPoint is the most commonly used _____ software.

- (A) desktop publishing
- (B) presentation
- (C) graphics
- (D) project management

Answer : (B)

40. In the context of storage devices, CD-ROMs and DVDs are examples of _____.

- (A) magnetic tape
- (B) magnetic disks
- (C) optical discs
- (D) main memory devices

Answer : (C)

41. _____ are compatible with the IBM System/360 line introduced in 1965.

- (A) Minicomputers
- (B) Mainframe computers
- (C) Personal computers
- (D) Super computers

Answer : (B)

42. _____ means saving data in computer memory.

- (A) Stream

- (B) Retrieval
- (C) Syndication
- (D) Storage

Answer : (D)

43. Beginning in the 1940s, first-generation computers used _____.

- (A) transistors
- (B) vacuum tube technology
- (C) integrated circuits
- (D) laser technology

Answer : (B)

44. A write once, read many (WORM) disc is a common type of _____.

- (A) magnetic storage
- (B) optical storage
- (C) random access memory
- (D) compact disc read-only memory

Answer : (B)

45. Which of the following statements is true of an inkjet printer?

- (A) It uses multicolor ink cartridges to print digital photographs.
- (B) Its output for a mainframe computer is called soft copy.
- (C) It uses laser-based technology that creates electrical charges on a rotating drum to attract toner.
- (D) It is used in office environments that have high-volume and high-quality printing requirements.

Answer : (A)

46. The most common type of main memory is a semiconductor memory chip made of _____.

- (A) arsenic
- (B) germanium
- (C) silicon

(D) manganese

Answer : (C)

47. _____, which is used for online storage and backup, involves multiple virtual servers that are usually hosted by third parties.

(A) Kernel storage

(B) Buffer storage

(C) Cache storage

(D) Cloud storage

Answer : (D)

48. A(n) _____, made of Mylar, is used for random-access processing of data in a computer.

(A) video adapter

(B) optical disc

(C) cassette tape

(D) magnetic disk

Answer : (D)

49. Which of the following is true of fourth-generation languages (4GLs)?

(A) They are the easiest computer languages to use.

(B) They are composed of rigorous command syntaxes.

(C) They contain a series of 0s and 1s representing data or instructions.

(D) They use artificial intelligence technologies, such as knowledge-based systems.

Answer : (A)

50. _____ consists of a series of 0s and 1s representing data or instructions.

(A) Assembly language

(B) A fourth-generation language

(C) Machine language

(D) A fifth-generation language

Answer : (C)

51. A(n) _____ is an input device used to grade multiple-choice and true/false tests.

- (A) optical character reader
- (B) magnetic character sensor
- (C) magnetic ink character recognition system
- (D) optical mark recognition system

Answer : (D)

52. An Extended ASCII data code allows representation of maximum _____ characters.

- (A) 128
- (B) 256
- (C) 512
- (D) 1024

Answer : (B)

53. Computer designers have concentrated on technology using gallium arsenide instead of silicon because silicon:

- (A) cannot be used for the mass production of electronic devices.
- (B) cannot emit light and has speed limitations.
- (C) is soft and fragile.
- (D) is expensive.

Answer : (B)

54. A(n) _____ is the enclosure containing the computer's main components.

- (A) disk drive
- (B) computer chassis
- (C) expansion slot
- (D) parallel port

Answer : (B)

55. In the context of computer operations, division is a(n) _____.

- (A) arithmetic operation
- (B) storage operation
- (C) logical operation
- (D) retrieval operation

Answer : (A)

56. Which of the following is an example of an input device?

- (A) A barcode reader
- (B) A cathode ray tube
- (C) An inkjet printer
- (D) An organic light-emitting diode

Answer : (A)

57. A(n) _____ is a type of server that stores computer software, which users can access from their workstations.

- (A) database server
- (B) Web server
- (C) application server
- (D) file server

Answer : (C)

58. Java and C++ are examples of _____.

- (A) assembly language
- (B) high-level languages
- (C) machine language
- (D) compiler languages

Answer : (B)

59. UNIX is a type of _____.

- (A) storage area network
- (B) application software
- (C) remote access server
- (D) operating system

Answer : (D)

60. In the context of storage measurements, a _____ is the size of a character.

- (A) nibble
- (B) decibel
- (C) byte
- (D) node

Answer : (C)

61. Second-generation computers used _____.

- (A) vacuum tube technology
- (B) transistors
- (C) integrated circuits
- (D) laser technology

Answer : (B)

62. A _____ is a link between devices connected to a computer.

- (A) motherboard
- (B) control unit
- (C) disk drive
- (D) bus

Answer : (D)

63. The _____ is the heart of a computer.

- (A) main memory
- (B) basic input/output system

(C) central processing unit (CPU)

(D) serial port

Answer : (C)

64. Jacob, a data analyst, is working on a project from home and needs to download some data from his office network. Which of the following server platforms will best serve Jacob's purpose?

(A) Remote access servers

(B) Web servers

(C) Application servers

(D) Disk servers

Answer : (A)

65. Every character, number, or symbol on the keyboard is represented as a(n) _____ in computer memory.

(A) decimal number

(B) hexadecimal number

(C) octal number

(D) binary number

Answer : (D)

66. The word computer consists of 64 bits, which is equivalent to _____ bytes.

(A) 6

(B) 8

(C) 16

(D) 32

Answer : (B)

67. Gallium arsenide _____ than silicon.

(A) is more fragile

(B) is more suitable for mass production

(C) emits less light

(D) operates at lower temperatures

Answer : (A)

68. The supervisor program in an operating system (OS) is also known as the _____.

(A) kernel

(B) metadata

(C) applet

(D) cache

Answer : (A)

69. The Clipboard's contents are typically stored in _____.

(A) read-only memory

(B) random access memory

(C) magnetic disks

(D) magnetic tape

Answer : (B)

70. Identify an advantage of a mouse over a trackball.

(A) A mouse processes more information than a trackball.

(B) A mouse is more precise in positioning the pointer than a trackball.

(C) A mouse occupies less space than a trackball.

(D) A mouse is stationary, whereas a trackball has to be moved around.

Answer : (B)

71. A _____ is a peripheral device for recording, storing, and retrieving information.

(A) disk drive

(B) motherboard

(C) control unit

(D) processor

Answer : (A)

72. A(n) _____ is a common output device for soft copy.

(A) liquid crystal display

(B) floppy disk

(C) laser printer

(D) electrostatic plotter

Answer : (A)

73. Which of the following is true of the supervisor program of an operating system (OS)?

(A) It controls compilers in the OS.

(B) It prioritizes tasks performed by the CPU.

(C) It transfers data among other parts of the computer system.

(D) It generates checksums to verify that data is not corrupted.

Answer : (A)

74. _____ is used for drafting and has replaced traditional tools, such as T-squares, triangles, paper, and pencils.

(A) Graphics software

(B) Project management software

(C) Computer-aided design software

(D) Presentation software

Answer : (C)

75. A(n) _____ is a step-by-step direction for performing a specific task, which is written in a language the computer can understand.

(A) array

(B) server

(C) cache

(D) program

Answer : (D)

76. An American Standard Code for Information Interchange (ASCII) file defines up to _____

characters.

- (A) 64
- (B) 128
- (C) 256
- (D) 1024

Answer : (B)

77. Which of the following is true of magnetic tape?

- (A) It is made of metal.
- (B) It stores data sequentially.
- (C) It resembles compact discs.
- (D) It is a main memory device.

Answer : (B)

78. Codes written for one type of computer using _____ do not work on another type of computer.

- (A) assembly language
- (B) structured query language
- (C) a fourth-generation language
- (D) a fifth-generation language

Answer : (A)

79. Computers and communication systems use _____ to represent information between computers and network systems.

- (A) source codes
- (B) nanotubes
- (C) data codes
- (D) servers

Answer : (C)