**Chapter04 :** Computer Software

 **True / False Questions**

 1. Software is considered the variable part of the computer, whereas the hardware is considered the invariable part.

 True False

 2. Unlike hardware, which has several categories, software has only one category—computer applications.

True False

 3. General purpose application programs perform common information processing jobs for end users.

True False

4. COTS software is custom, off-the-shelf software that is purchased and then modified to meet the needs of the customer.

True False

 5. The specifications and functionality of custom software are controlled or retained by the developing organization.

True False

6. System software are programs that manage and support the operation of computer systems and networks.

 True False

 7. An accounting program is an example of application-specific software.

 True False

 8. According to the text, operating systems are a type of general purpose application program.

True False

9. One of the biggest advantages offered by software suites is that all the programs within the suite use a similar graphical user interface (GUI). This gives them the same look and feel, and makes them easier to learn and use.

True False

10. Although Microsoft Office has a large share of the software suite market, Lotus, Corel, and Sun all offer competing productivity suites.

True False

11. Web browsers are the key software interface used to point and click through the hyperlinked resources of the Internet, as well as corporate intranets and extranets.

True False

12. Web browsers are becoming the universal software platform from which end users launch into information searches, multimedia file transfer, discussion groups, and many other Internet, intranet, and extranet applications.

True False

13. Instant messaging is quite popular in today's society, outside of the workplace. It is not yet being used in the business environment.

True False

14. A weblog is a website on which a company advertises its products in a very brief, yet commercial way.

True False

15. Blogs are online diaries from a particular point of view. They are personal in origin, not commercial.

True False

16. Some powerful word processing packages have built-in capabilities that end users can use to convert documents to HTML format for publication as web pages.

True False

17. When a spreadsheet is used to answer "what if" questions, the user must reenter the values and formulas into the cells in order to see the impact of the changes.

True False

18. Presentation graphics packages help end users design and manage computer-generated slide shows that can contain text, graphics, and multimedia displays.

True False

19. Presentation graphics packages have gotten more powerful in recent years, but not even the top-end packages enable end users to publish to the World Wide Web.

True False

20. A personal information manager helps users store, organize, and retrieve information about customers and prospects, and schedule and manage appointments.

True False

 21. Web sites built with collaborative development tools can integrate a wide variety of individual applications in order to increase team productivity. However, they do little to improve individual productivity.

True False

22. A number of large and fast-growing companies are turning to application service providers instead of developing or purchasing the application software they need to run their businesses.

True False

23. Application service providers rely on the Internet to provide their services to customers.

True False

24. A company without enterprise resource planning expertise can call upon an application service provider to deliver, support, and maintain an ERP for a fixed monthly fee.

True False

25. One key disadvantage of an application service provider is that a "pay as you go" structure is often more expensive than what a company would pay if it had purchased the software outright.

True False

26. Regardless of whether a software application is purchased off the shelf or is accessed via an ASP, it must be licensed for use.

True False

27. Software licensing is a complex topic that involves considerations of the special characteristics of software in the context of the underlying intellectual property, including copyright, trademark, and trade secrets.

True False

 28. Contrary to what many believe, when an individual or a company buys a software application, they have actually purchased the rights of ownership.

True False

29. As a software purchaser, the license you agree to typically prohibits reverse engineering or modifying the software.

True False

 30. Purchasing an operating system is an unnecessary expense because off-the-shelf application software packages contain a built-in operating system.

True False

 31. Linux is considered an opensource operating system because it offers unrestricted access to its source code.

True False

32. An advantage of open source software is that programmers can read and modify the source code, so they can improve it, adapt it, and fix bugs.

True False

33. Utility programs are used to perform miscellaneous housekeeping and file conversion functions, including data backup, data recovery, virus protection, data compression, and file defragmentation.

True False

34. Performance monitor programs are designed to monitor the performance and usage of computer systems in order to achieve system and data security.

True False

35. Performance monitor programs are designed to monitor and control the use of computer systems, provide warning messages, and record evidence of unauthorized use of computer resources.

True False

36. Machine languages are high-level languages whose instructions closely resemble human language or the standard notation of mathematics.

True False

37. When high-level programming languages are used, programmers must learn a different language for each type of computer that uses the program.

True False

 38. Most fourth-generation programming languages encourage programmers and users to specify the results they want, while the computer determines the sequence of instructions that will accomplish those results.

True False

 39. A key characteristic of object-oriented programming languages is that they separate the data elements from the procedures or actions that will be performed upon that data.

True False

40. When programming in an object-oriented language, an example of an object would be a set of data about a customer's account and the operations that are performed on the data.

True False

41. Of the different programming languages, third-generation COBOL is the most widely used today.

True False

42. HTML, XML, and COBOL are all popular programming languages for building multimedia web pages, websites, and web-based applications.

True False

43. Extensible Markup Language (XML) classifies data in such a way that it makes website information easier to search, sort, and analyze.

True False

44. XML-enabled search software can easily find the exact product you specify if the product data at a website is labeled with identifying HTML tags.

True False

45. The ease of creating Java applets and distributing them from network servers to client PCs and network computers is one of the major reasons for Java's popularity.

True False

46. Microsoft's .NET is a relatively new collection of programming support for what are known as Web services, the ability to use the Web without limit.

True False

47. Web services can link key business functions for the exchange of data in real time within the Web-based applications a business might share with its customers, suppliers, and other business partners.

True False

48. A language compiler translates computer programs written in another programming language into the computer's own machine language instruction codes.

True False

49. In programming packages, a compiler is used to translate high-level language statements into machine language instructions.

True False

50. Software developers can use CASE tools at different stages of the software development processes.

True False

51. Open source software is typically not encumbered by licensing restrictions.

True False

52. Whatever a person builds using open-source software, he or she must provide the same capabilities to anyone else under the same open-source license terms.

True False

**Multiple Choice Questions**

53. Which of the following is true of off-the-shelf software?

1. It is developed with the intent to sell multiple copies
2. The company buying the software has no control over the specifications, schedule, or evolution of the software
3. The company that develops the software is not the intended audience
4. All of the choices are correct.

54. Software is considered the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ part of the computer, whereas the hardware is considered the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ part.

1. expensive, inexpensive
2. inexpensive, expensive
3. variable, invariable
4. invariable, variable

55. The two general classifications of software are:

1. Systems and application
2. Programming and CASE
3. Commercial and custom
4. Programming languages and development tools

56. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ application programs perform common information processing jobs for end users.

1. Systems
2. CASE
3. Commercial
4. General purpose

57. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ software are programs that manage and support the operation of computer systems and networks.

1. System
2. CASE
3. Commercial
4. General purpose

58. An accounting program is an example of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ software.

1. System
2. CASE
3. Application-specific
4. General purpose

59. According to the text, operating systems are a type of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ program.

1. CASE
2. System management
3. Application-specific
4. General purpose

60. Application software can be subdivided into two categories:

1. COTS and POTS
2. First generation and second generation
3. Custom and commercial
4. General purpose and function specific

61. COTS software stands for:

1. Custom off-the-shelf software
2. Commercial off-the-shelf software
3. Combined off-the-shelf software
4. Contaminated on-the-surface software

62. According to the Real World Case, GE spends $150 million each year to purchase all of its desktop and laptop computers from how many vendors?

1. Two
2. One
3. Ten
4. Nobody is certain

63. According to the Real World Case, GE spends $150 million each year to purchase all of its desktop and laptop computers from which vendor?

1. Dell
2. Hewlett-Packard
3. Gateway
4. None of the above

64. According to the Real World Case, GE's Global Supplier Library lacked which of the following?

1. A central repository
2. Multi-language capabilities
3. Self-management of data
4. All the above

65. According to the Real World Case, which of the following is a problem with SaaS?

1. SaaS is open-source software.
2. GE owns the software and is responsible for making it work daily.
3. GE does not own the software, it's on lease. If the vendor goes bankrupt, everything shuts down.
4. SaaS refuses to license its software to GE.

66. Which of the following are considered application software packages?

1. Word processing programs
2. Operating systems
3. System utilities
4. System development programs

67. Which of the following are considered general purpose application software packages?

1. Education and entertainment
2. Electronic mail
3. System utilities
4. Programming languages

68. Which of the following are considered application specific software packages?

1. Education and entertainment
2. Electronic mail
3. System utilities
4. Programming languages

69. Which of the following is not considered a system management software packages?

1. Database management
2. CASE tools
3. System utilities
4. Application servers

70. According to the text, which of the following describes system software?

1. Used for developing new systems as required for business purposes
2. Performs information processing tasks for end users
3. Allows anyone to contribute to the development of a specific application
4. Manages and supports operations of computer systems and networks

71. According to the text, function-specific application software does which of the following?

1. It supports specific applications of end users in business and other fields
2. Provides CASE tools for developing new applications
3. Allows anyone to contribute to the development of a specific application
4. Manages and supports operations of computer systems and networks

72. One of the biggest advantages offered by software suites is that:

1. All the programs within the suite use a similar graphical user interface (GUI)
2. The packages take up a lot of disk space
3. There is a custom graphical user interface for each application in the suite
4. They cost more than the total cost of buying the individual packages separately

73. Which of the following statements is not a characteristic of software suites?

1. They contain software tools that can help increase productivity, collaborate with colleagues, and access intranets, extranets, and the Internet
2. All components of the software use a similar graphical user interface
3. There is a custom graphical user interface for each application in the suite
4. They cost less than the total cost of buying the individual packages separately

74. Which of the following software suites is an open-source product?

1. Microsoft Office
2. Lotus Smartsuite
3. WordPerfect Office
4. OpenOffice

75. One disadvantage of software suites is that:

1. Users may be paying for features that they never use
2. The packages take up a lot of disk space
3. Upgrade costs are often expensive
4. All of the choices are correct.

76. Which of the following, according to the text, are the basic components found in a comprehensive software suite?

1. Word processing, spreadsheet, and accounting
2. Word processing, spreadsheet, and email
3. Word processing, spreadsheet, database manager, and presentation graphics
4. Word processing, database manager, presentation graphics, and email

77. According to the text, the most important software component for many computer users today is the once simple and limited, but now powerful and feature rich, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

1. word processing application
2. presentation graphics package
3. web browser
4. database management system

78. According to the text, Web browsers are sometimes called the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

1. HTML client
2. communication tool of the future
3. universal client
4. online collaboration client

79. According to the text, which of the following is true of integrated packages?

1. They have more features than software suites
2. They are more powerful than software suites
3. They are cheaper than software suites
4. They require more disk space than software suites

80. According to the text, which of the following is not true of integrated packages?

1. They require less disk space than software suites
2. They have fewer features than software suites
3. They are more powerful than software suites
4. They are cheaper than software suites

81. According to the text, experts predict the Web browser will be the model for:

1. Internet development tools for the future
2. How most people use networked computers in the future
3. New graphical user interfaces in the future
4. Cloud computing

82. According to the text, e-mail:

1. Is a fad that will soon disappear
2. Will be replaced by instant messaging
3. Works best in cloud computing
4. Has changed the way people work and communicate

83. All of these statements regarding web logs or blogs are false except:

1. Blogs are websites of personal origin, not commercial.
2. Each blog is a developing commentary on a particular theme that uses a dated log format.
3. Blogs are declining in popularity because they are difficult to update.
4. The information on a blog can only be written by the site owner.

84. All of the following are considered characteristics of a word processing package except:

1. Spell checker and thesaurus
2. Grammar and punctuation correction
3. Instant messaging
4. Web page design capability

85. All of the following are considered characteristics of a desktop publishing package except:

1. Used to print newsletters and brochures
2. Imports text and graphic files from other programs
3. Used for business analysis and modeling
4. Used to print books and manuals

86. According to the text, spreadsheet packages are used by virtually every business for \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

1. analysis, planning, and modeling
2. maintaining accounting records, such as a general ledger
3. keeping up-to-the-minute inventory records
4. tracking human resources

87. When using a spreadsheet package to answer "what if" questions, the user must change:

1. Only a selected variable to see the impact of that change
2. A number of variables to make a single change to the spreadsheet output
3. All the formulas in order to calculate new values
4. Nothing - spreadsheets cannot be used to answer "what if" questions

88. Which one of the following would typically not be accomplished with presentation graphics software?

1. Converting numerical data into graphics and displays
2. Incorporating multimedia files into presentations
3. Preparing a computerized slideshow to accompany an oral presentation
4. Preparing a text report for management

89. Presentation graphics have become more powerful in recent years and can now:

1. Calculate formulas for business planning
2. Enable collaboration within teams
3. Organize appointments and calendars
4. Prepare graphics and presentations for transfer to Web sites in HTML format

90. Groupware aids collaboration by providing users with \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

1. electronic mail, scheduling, and task management
2. electronic mail and spreadsheet software
3. electronic mail and word processing software
4. All of the choices are correct.

91. Groupware is best described as a(n) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ program.

1. general purpose application
2. application specific
3. system management
4. system development

92. Cloud computing is best described as:

1. Grid computing
2. A style of computing where applications are provided by unknown sources "hidden in the clouds"
3. A style of computing where resources are provided as a service over the Internet
4. A style of computing where a network is not connected to the Internet

93. Cloud computing is not:

1. Grid computing
2. A style of computing users need not have knowledge, expertise, or control over the technological infrastructure
3. A style of computing where resources are provided as a service over the Internet
4. A metaphor for the Internet

94. When a company purchases software, it has:

1. Purchased the rights of ownership
2. Purchased a license to use the software under the terms of the agreement
3. A difficult time obtaining a license because of legality issues
4. None of the choices are correct.

95. System management programs:

1. Manage the hardware, software, networking, and data resources of computer systems during the execution of information processing jobs
2. Manage e-mail and CASE tools for both end users and developers
3. Help users develop information system programs and procedures
4. All of the choices are correct.

96. Which of the following is a basic function that an operating system performs in the operation of a computer system?

1. User interface and support services
2. Resource and task management
3. File management and utilities
4. It performs all of the functions above.

97. The user interface function of an operating system typically:

1. Allows end users to communicate with it so they can load programs, access files, and accomplish other tasks
2. Manages the hardware resources of a computer system
3. Controls the creation, deletion, and access of files of data and programs
4. Manages the accomplishment of the computing tasks of end users

98. Which of the following is the most popular type of user interface?

1. Graphical
2. Command-driven
3. Menu-driven
4. Voice

99. Which statement best describes open source software?

1. The primary enhancements are made by teenagers
2. It is a very insecure operating system because of its huge security holes
3. It is more reliable than traditional software because it is subject to more rigorous code review
4. It is more costly than propriety software

100. Open-source licensing is defined by all of the following except:

1. The license must not discriminate against any person or group of persons
2. The license must not contaminate other software by placing restrictions on any software distributed along with the licensed software
3. The license must allow modifications and derived works, and must allow them to be distributed under the same terms as the license of the original software
4. The license must be specific to a product

101. According to the text, Linux' popularity is due to all the following except:

1. Performance and price
2. Flexibility and reliability
3. It is Open Source software
4. All of the choices are correct.

102. Machine languages are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

1. first-generation programming languages
2. written using binary codes
3. difficult languages in which to program compared to more recent languages
4. All of the choices are correct.

103. The text outlines four levels of languages that allow a programmer to develop the sets of instructions that constitute a computer program. Which of the following is not one of those languages?

1. Machine languages
2. Graphical languages
3. Assembler languages
4. High-level languages

104. Which of the following characteristics does a high-level language possess?

1. They are also known as machine or assembler languages
2. They are designed to be utilized by specific types of computers
3. High-level instructions resemble mathematical expressions
4. They are more efficient than assembler language programs

105. Which of the following is not considered a high-level language?

1. BASIC
2. COBOL
3. FORTRAN
4. Ruby on Rails

106. Fifth generation languages, which are designed to be as much as possible like spoken languages, are referred to as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ languages.

1. natural
2. macro
3. generator
4. syntax

107. Object-oriented programming languages:

1. Are a type of assembler language
2. Separate data elements from the procedures that will be performed on them
3. Use programming statements that tell objects to perform actions on themselves
4. Are useful for numerical processing, but not for graphics-oriented applications

108. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is a major benefit of object-oriented programming.

1. Reusability of objects
2. Conformity of objects
3. A simplified programmer interface
4. Faster compilation time

109. All of the following are popular programming languages for developing multimedia web pages, websites, and web-based applications except:

1. XML
2. HTML
3. Java
4. COBOL

110. The acronym HTML stands for:

1. High Transfer Machine Language
2. High Transmission Markup Language
3. Hypertext Markup Language
4. Hypermedia Markup Language

111. Which of the following statements is applicable to the Java programming language?

1. It is a page description language that creates hypertext or hypermedia documents
2. It inserts control codes within a document that create links to other parts of the document or to other documents anywhere on the World Wide Web
3. It embeds control codes in the ASCII text of a document, which designates titles, headings, graphics, and multimedia components, as well as hyperlinks within the document
4. It consists of small application programs called applets that can be executed by any computer and any operating system anywhere in a network

112. Linux, an open source product, is a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_-like operating system that is rapidly gaining market share as a high-performance operating system for network and Web servers.

1. Unix
2. BASIC
3. COBOL
4. Windows

113. Program editors, debuggers, and code analyzers are types of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

1. Unix tools
2. Programming languages
3. CASE tools
4. Operating Systems

114. Those CASE tools that support activities early in the life cycle of a software project (e.g., requirements, design support tools) are sometimes called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

1. Pre-CASE tools
2. Post-CASE tools
3. Front-end or Upper CASE tools
4. Back-end or Lower CASE tools

115. Those CASE tools that are used later in the life cycle (e.g., compilers, test support tools) are sometimes called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

1. Pre-CASE tools
2. Post-CASE tools
3. Front-end or Upper CASE tools
4. Back-end or Lower CASE tools