CHAPTER 4: SOFTWARE BASICS: THE GHOST IN THE MACHINE

Multiple Choice:

1. A computer system only recognizes:
   A. 0s and 1s.
   B. modem and coaxial cable signals.
   C. ASCII code.
   D. ECDIC code.

   Answer: A  Reference: Software Basics Introduction  Difficulty: Easy

2. A set of computer instructions designed to solve a specific problem is referred to as:
   A. hardware.
   B. a device.
   C. a program.
   D. a hardware concept.

   Answer: C  Reference: Software Basics Introduction  Difficulty: Easy

3. When in use, software is temporarily stored in:
   A. memory or RAM.
   B. ROM.
   C. the BIOS.
   D. the hard disk.

   Answer: A  Reference: Software Basics Introduction  Difficulty: Easy
4. __________ is what allows a computer to function as a word processor, then a browser, then a calculator.

   A. Hardware
   B. Firmware
   C. Software
   D. Drivers

   **Answer:** C  **Reference:** Software Basics Introduction  **Difficulty:** Easy

5. Compilers and translators are one form of:

   A. Software.
   B. ROM.
   C. RAM.
   D. the hard disk.

   **Answer:** A  **Reference:** Software Basics Introduction  **Difficulty:** Easy

6. Errors in a software program are referred to as:

   A. software omissions.
   B. bugs.
   C. viruses.
   D. computer faults.

   **Answer:** B  **Reference:** Food for Thought  **Difficulty:** Easy

7. A set of step-by-step procedures for accomplishing a task is known as a(n):

   A. hardware program.
   B. algorithm.
   C. software bug.
   D. firmware program.

   **Answer:** B  **Reference:** A Fast, Stupid Machine  **Difficulty:** Moderate
8. When a programmer checks to see if a program functions correctly and then corrects errors, it is known as:
   A. debugging.
   B. de-erroring.
   C. default error-checking.
   D. error-proofing a program.

Answer: A  Reference: A Fast, Stupid Machine  Difficulty: Easy

9. For a program to be read by the CPU, it must be loaded into:
   A. memory or Random Access Memory (RAM)
   B. the hard disk.
   C. the CD drive.
   D. the BIOS.

Answer: A  Reference: How It Works: Executing a Program  Difficulty: Moderate

10. When reading a program, the CPU ____________ instructions from the program.
    A. runs and operates
    B. opens and reads
    C. fetches and executes
    D. executes and stores

Answer: C  Reference: How It Works: Executing a Program  Difficulty: Challenging

11. Machine language uses:
    A. numeric code.
    B. English language code.
    C. Java language.
    D. CPU processing code.

Answer: A  Reference: The Language of Computers  Difficulty: Challenging
12. Typical computer programming languages used today include all of the following EXCEPT:

A. Visual Basic.NET.
B. C++.
C. Java.
D. machine language.

**Answer:** D **Reference:** The Language of Computers **Difficulty:** Challenging

13. Java is referred to as a(n):

A. high-level language.
B. low-level language.
C. programming mid-level language.
D. hardware device driver.

**Answer:** A **Reference:** The Language of Computers **Difficulty:** Moderate

14. A compiler is:

A. the same thing as a device driver.
B. physically located in the CPU.
C. hardware.
D. the most common type of translator program.

**Answer:** D **Reference:** The Language of Computers **Difficulty:** Challenging

15. Programs now resemble ____________ much more than in the past.

A. natural language
B. machine language
C. low-level language
D. compiler and translation software

**Answer:** A **Reference:** The Language of Computers **Difficulty:** Moderate
16. __________, common in today’s software, supplement(s) the help files that are available at the user’s request.
   A. Printed manuals
   B. CDs
   C. Help DVDs
   D. Online help

Answer: D  Reference: Documentation  Difficulty: Moderate

17. The process of eliminating problems and errors and improving the software is known as:
   A. software enhancement.
   B. software advancement.
   C. upgrading.
   D. downgrading.

Answer: C  Reference: Upgrading  Difficulty: Easy

18. Minor revisions in software are reflected in the use of:
   A. whole numbers.
   B. decimal numbers.
   C. version letters.
   D. upgrade code letters.

Answer: B  Reference: Upgrading  Difficulty: Moderate

19. A major upgrade or revision of software is reflected in the use of:
   A. whole numbers.
   B. decimal numbers.
   C. version letters.
   D. upgrade code letters.

Answer: A  Reference: Upgrading  Difficulty: Moderate
20. An EULA stands for:
   A. end-use license arrangement.
   B. environmental use licensing agreement.
   C. employee-use legal arrangement.
   D. end-user license agreement.

Answer: D  Reference: Disclaimers  Difficulty: Moderate

21. When a user purchases software, __________ is actually purchased.
   A. a license to use the software
   B. a set-up of CDs, therefore, the software itself,
   C. a software permit
   D. an open agreement allowing the user to copy the software

Answer: A  Reference: Licensing  Difficulty: Moderate

22. A campus or a mid-size company may purchase __________ so all users have legal access to the software.
   A. a standard software license
   B. just one license and copy it to all machines
   C. simultaneous-user licenses
   D. volume licenses

Answer: D  Reference: Licensing  Difficulty: Moderate

23. Nearly all commercial software is:
   A. trademarked.
   B. copyrighted.
   C. free for copying.
   D. shareware.

Answer: B  Reference: Licensing  Difficulty: Easy
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24. Software that is free to everyone is known as:
   A. freeware.
   B. public domain software.
   C. public-access software.
   D. shareware.

   Answer: B  

25. Which software is free to use for a trial period, but requires some minimal payment after the trial period?
   A. Freeware.
   B. Database.
   C. Graphics program.
   D. Shareware.

   Answer: D  

26. An applications designed for a particular business is called a:
   A. vertical-market application.
   B. compiler.
   C. programming languages.
   D. Microsoft Windows.

   Answer: A  

27. Operating systems and utility programs are in a class of software known as:
   A. application software.
   B. system software.
   C. software suites.
   D. BIOS software.

   Answer: B  

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28. Every general-purpose computer must have a(n):
   A. word processor program.
   B. software license agreement.
   C. software suite.
   D. operating system.

   **Answer:** D   **Reference:** What the Operating System Does   **Difficulty:** Moderate

29. If the computer is on and the computer is running properly, the ____________ must be active and running.
   A. BIOS instructions
   B. operating system
   C. large array of utility programs
   D. system software

   **Answer:** B   **Reference:** What the Operating System Does   **Difficulty:** Easy

30. When the operating systems concurrently executes many programs, it is called:
   A. BIOS instructions.
   B. multitasking.
   C. multithreading.
   D. system software.

   **Answer:** B   **Reference:** What the Operating System Does   **Difficulty:** Easy

31. ____________ is having more memory addresses than are physically available.
   A. Applications software
   B. RAM
   C. Virtual Memory
   D. System software

   **Answer:** C   **Reference:** What the Operating System Does   **Difficulty:** Moderate
32. On multi-user systems the ____________ is responsible for authentication.

A. compiler  
B. operating system  
C. large array of utility programs  
D. ROM

Answer: B  Reference: What the Operating System Does  Difficulty: Easy

33. When a computer is off, what is in RAM?

A. The operating system  
B. The BIOS  
C. The software applications  
D. Nothing

Answer: D  Reference: How It Works: The Operating System  Difficulty: Moderate

34. When a computer is turned on, where does it get the first instructions that it loads into RAM?

A. From RAM  
B. From ROM  
C. From the hard disk  
D. From a CD

Answer: B  Reference: How It Works: The Operating System  Difficulty: Challenging

35. What handles communication between the CPU and the disk drive(s)?

A. RAM  
B. The CPU  
C. The operating system  
D. ROM

Answer: C  Reference: How It Works: The Operating System  Difficulty: Challenging
36. Utility programs make it easier to complete all of the following EXCEPT:
   A. writing a letter.
   B. copying files between storage devices.
   C. repairing a damaged disk.
   D. virus protection.

   Answer: A  Reference: Utility Programs and Device Drivers  Difficulty: Easy

37. The program that allows I/O devices to communicate with the computer is known as a(n):
   A. device driver.
   B. utility program.
   C. operating device file.
   D. software device file.

   Answer: A  Reference: Utility Programs and Device Drivers  Difficulty: Moderate

38. ___________ is when the operating system is loaded into RAM.
   A. Copying
   B. Device driving
   C. Booting
   D. Multitasking

   Answer: C  Reference: Where the Operating System Lives  Difficulty: Easy

39. The ___________ is the front-end of a program and how a user works with the software.
   A. RAM resident portion
   B. device driver
   C. application
   D. user interface

   Answer: D  Reference: Where the Operating System Lives  Difficulty: Easy
40. GUI refers to:
   A. graphical use interaction.
   B. guaranteed user interface.
   C. graphical user interface.
   D. graphics utilized internally.

Answer: C  Reference: Desktop Operating Systems  Difficulty: Moderate

41. The ___________ operating system has a character-based interface.
   A. Windows
   B. MS-DOS
   C. Mac OS
   D. ROM

Answer: B  Reference: Desktop Operating Systems  Difficulty: Easy

42. Who owns the Windows operating system?
   A. Intel
   B. IBM
   C. Apple
   D. Microsoft

Answer: D  Reference: Desktop Operating Systems  Difficulty: Easy

43. What is the name of the operating system that is rarely found on personal computers or laptop but is used in
    servers and high-end workstations?
   A. UNIX
   B. Windows
   C. MS-DOS
   D. Mac OS

Answer: A  Reference: Multiple User Operating Systems: UNIX and Linux  Difficulty: Easy
44. What is the most recent version of Windows?
   A. Windows NT
   B. Windows XP
   C. Windows 2000
   D. Windows 2004

   **Answer:** B  **Reference:** Hardware and Software Platforms  **Difficulty:** Easy

45. What will the next version of Windows be called?
   A. Windows NT
   B. Windows XP
   C. Windows Vista
   D. Windows 2004

   **Answer:** C  **Reference:** Hardware and Software Platforms  **Difficulty:** Easy

46. What is the platform-neutral programming language that can run on Windows, Macintosh, or UNIX?
   A. Machine language
   B. Java
   C. Microsoft Office language
   D. Software.NET

   **Answer:** B  **Reference:** Hardware and Software Platforms  **Difficulty:** Moderate

47. Electronic marks put on a disk as tracks and sectors are known as:
   A. clustering.
   B. defragmenting.
   C. copying.
   D. formatting.

   **Answer:** D  **Reference:** Defragmentation: The Cure for Fragmented Files  **Difficulty:** Easy
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48. A group of sectors is known as a:
   A. block.
   B. track.
   C. system space.
   D. hard disk space.

   Answer: A  Reference: Defragmentation: The Cure for Fragmented Files  Difficulty: Challenging

49. What is the name of the music-sharing service that was shut down in 2001?
   A. Napster
   B. KaZaA
   C. Netscape
   D. Windows Media Player

   Answer: A  Reference: Intellectual Property and the Law  Difficulty: Moderate

Fill in the Blank:

50. When you discover a problem or mistake within a software program, you have found a(n) ____________.

   Answer: bug  Reference: Food for Thought  Difficulty: Easy

51. The process of the CPU accessing an instruction of a program is known as ____________.

   Answer: fetch  Reference: How It Works: Executing a Program  Difficulty: Challenging

52. At the most basic level, a computer processes software instructions in a native ____________ language.

   Answer: machine  Reference: The Language of Computers  Difficulty: Challenging

53. Languages such as C# and C++ are known as ____________.

   Answer: high-level languages  Reference: The Language of Computers  Difficulty: Challenging

54. ____________ refers to the usability of software based on the operating system and the computer resources.

   Answer: Compatibility  Reference: Compatibility  Difficulty: Challenging
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55. ____________ is software that is initially free with eventual payment of a fee at a later date if the user chooses to continue using the software.

**Answer:** Shareware  **Reference:** Distribution  **Difficulty:** Moderate

56. A program that lets a user copy, move, and rename files is called a(n) ____________ utility.

**Answer:** file-management  **Reference:** File-Management Utilities  **Difficulty:** Easy

57. In order to save a previously saved file to a different location or with a different name, use the ____________ menu option.

**Answer:** Save As  **Reference:** Managing Files from Applications  **Difficulty:** Easy

58. Specialized software such as medical billing, library cataloging, or auto parts purchasing are applications known as ____________.

**Answer:** vertical-market or custom applications  **Reference:** Vertical-Market and Custom Software  **Difficulty:** Moderate

59. System software is a type of software that includes the operating system and ____________ programs.

**Answer:** utility  **Reference:** System Software: the Hardware-Software Connection  **Difficulty:** Challenging

60. Interaction between the software and the hardware of a computer is handled by the ____________.

**Answer:** operating system  **Reference:** What the Operating System Does  **Difficulty:** Challenging

61. ____________ is the process of determining that users are who they say they are.

**Answer:** Authentication  **Reference:** What the Operating System Does  **Difficulty:** Challenging

62. The process of printing a term paper while entering data into a spreadsheet while downloading clipart from the Internet is known as ____________.

**Answer:** multitasking  **Reference:** What the Operating System Does  **Difficulty:** Easy

63. Virtual memory is broken into same-sized blocks called ____________.

**Answer:** pages  **Reference:** What the Operating System Does  **Difficulty:** Challenging

64. Ensuring that users have permission to perform particular actions is known as ____________.

**Answer:** authorization  **Reference:** What the Operating System Does  **Difficulty:** Easy

65. When the operating system requests an application program to be executed, it is temporarily stored in ____________.

**Answer:** RAM or memory  **Reference:** How It Works: The Operating System  **Difficulty:** Moderate
66. Special-purpose computers, games, and handheld computers usually have the operating system stored in ___________.

Answer: ROM  
Reference: Where the Operating System Lives  
Difficulty: Challenging

67. MS-DOS stands for ___________.

Answer: Microsoft Disk Operating System  
Reference: Desktop Operating Systems  
Difficulty: Easy

68. The multiuser operating system historically used by academic and government institutions is ___________.

Answer: UNIX  
Reference: Multiple User Operating Systems: UNIX and Linux  
Difficulty: Moderate

69. Microsoft Office and Adobe Photoshop are examples of ___________ software, which can be used on both Windows PCs and Macintoshes.

Answer: cross-platform  
Reference: Hardware and Software Platforms  
Difficulty: Moderate

70. The next Windows operating system is called ______________.

Answer: Vista  
Reference: Hardware and Software Platforms  
Difficulty: Moderate

71. The operating system used by Palm devices is called ___________.

Answer: Palm OS  
Reference: Hardware and Software Platforms  
Difficulty: Moderate

72. ___________ law protects symbols, pictures and sounds.

Answer: Trademark  
Reference: Intellectual Property and the Law  
Difficulty: Moderate
Matching:

73. Match the following terms to their meanings:

I. Windows task bar A. organization into compact submenus
II. hierarchical menus B. operating system by Apple Computers
III. document C. provides one-click access to open applications
IV. Mac OS D. virtual workspace on the monitor
V. window E. file
VI. desktop F. choices depend on the onscreen object currently selected
VII. directory G. also referred to as a folder
VIII. context-sensitive menus H. framed rectangle that can be opened, closed, or resized
IX. Windows Vista I. innovative task-based user interface

Difficulty: Challenging
74. Match the following terms to their meanings:

I. Microsoft Windows XP   A. new Windows OS
II. Windows Server 2003   B. runs only on a Mac
III. Windows Vista        C. server-based Windows version
IV. Windows CE            D. free operating system
V. BlackBerry OS          E. multiuser operating system popular in academic institutions
VI. Platform              F. the hardware and the operating system
VII. Palm OS              G. most recent version of Windows
VIII. UNIX                H. OS for special PDAs
IX. Mac OS X              I. used for handhelds
X. Linux                  J. stripped-down Windows version