

OPERATING SYSTEM TECHNOLOGIES

This exam simulates the CompTIA A+ Operating System Technologies exam. It is representative of what you should expect on the actual exam. The answers and the explanations for the answers follow the questions. It is strongly suggested that when you take this exam, you treat it just as you would the actual exam. Time yourself, read carefully, and answer all the questions as best you can. There are 80 questions, just as there are on the actual exam. Set a 90-minute time limit for yourself. This is the amount of time you are given to take the real thing. The questions reflect the amount of coverage given to each domain in the exam:

Domain	Percentage of Exam	Number of Questions
1.0 Operating System Fundamentals	28%	22
2.0 Installation, Configuration, and Upgrading	31%	25
3.0 Diagnosing and Troubleshooting	25%	20
4.0 Networks	16%	13

You should take the exam and score it. If you score lower than 75%, you should try rereading the chapters on the domains with which you had trouble.



Practice Exam

EXAM QUESTIONS

1. In Windows XP _____ is the practice through which drivers are preapproved by Microsoft so that they can be loaded automatically by the system.
 - A. DLL signing
 - B. file signing
 - C. WHQL signing
 - D. Driver signing
2. The purpose of a device driver is to _____.
 - A. tell the operating system device how to interface with an external device
 - B. provide more useful memory by moving device control data to extended memory
 - C. improve performance of installed devices by optimizing access patterns
 - D. modify application programs to work correctly with devices attached to the system
3. Which of the following tools is used to back up the system in Windows XP?
 - A. Emergency Repair Backup
 - B. Recovery Console Backup
 - C. ASR Backup
 - D. ERD Backup
4. Memory-manager programs are loaded from _____.
 - A. the AUTOEXEC.BAT file
 - B. BIOS
 - C. the CONFIG.SYS file
 - D. CMOS
5. Which of the following file types cannot be run from the DOS prompt?
 - A. .BAT
 - B. .EXE
 - C. .RUN
 - D. .COM
6. _____ interprets input from the command prompt.
 - A. IO.SYS
 - B. MSDOS.SYS
 - C. COMMAND.COM
 - D. BIO.COM
7. In Windows 2000, which utility would you use to rewrite scattered parts of files into contiguous sectors on a hard disk?
 - A. The Add/Remove Hardware applet
 - B. The Disk Defrag utility
 - C. The Disk Cleanup utility
 - D. The Backup utility
8. The MYFILE.EXE file is located in the C:\Test directory. To execute the file from anywhere, you _____.
 - A. add C:\Test to the Path statement.
 - B. add the line C:\Test\MYFILE.EXE to the CONFIG.SYS file.
 - C. add the line DEVICE=MYFILE.EXE to the AUTOEXEC.BAT file.
 - D. add ;C:\TEST to the Path statement.

9. To configure the file `MYFILE.TXT` as read-only, you use the _____ DOS command.
- A. `ATTRIB +A MYFILE.TXT`
 - B. `ATTRIB -A MYFILE.TXT`
 - C. `ATTRIB +R MYFILE.TXT`
 - D. `ATTRIB-R MYFILE.TXT`
10. What is the primary GUI for Windows operating systems?
- A. the monitor
 - B. the desktop GUI
 - C. the command prompt
 - D. the keyboard
11. You are installing new hardware in a Windows 2000 system that does not use PnP. From where can you install the drivers for the new devices?
- A. the Add/Remove Hardware Wizard
 - B. the System Properties icon
 - C. the Device Manager utility
 - D. the Add New Programs Wizard
12. In Windows 9x, a filename can be up to _____ characters long.
- A. 8
 - B. 16
 - C. 32
 - D. 255
13. When Windows 95 boots up successfully, the Registry files are backed up and given the _____ extension.
- A. `.DAT`
 - B. `.DOC`
 - C. `.DAO`
 - D. `.DMM`
14. The ScanDisk utility runs automatically in a Windows 9x or 2000 system _____.
- A. each time the system is shut down
 - B. once a week
 - C. according to the schedule established in the Computer Management Console
 - D. whenever Windows is shut down incorrectly
15. In Windows 9x the command used to edit the Registry is _____.
- A. `sysEdit`
 - B. `regEdit`
 - C. `autoEdit`
 - D. `winEdit`
16. Where can a startup disk be created in the Windows 9x environment?
- A. In the Add/Remove Programs Wizard
 - B. In the `\System Tools` directory
 - C. In Windows Explorer
 - D. In the Start menu's Run dialog box
17. If an application hangs up in Windows 2000, you should _____.
- A. press `Alt+Tab`, click Applications, and close applications that are not responding
 - B. press `Ctrl+Alt+Del`, click Task Manager, click Applications, and close applications that are not responding
 - C. press `Ctrl+Esc`, click Applications, and select the appropriate application to close
 - D. turn off the power to the system unit and restart

18. A customer cannot find the file `QUESTIONPOOL.DOC` while searching in MS-DOS mode. The customer should _____.
A. look for an abbreviated name for the file, such as `QUESTI-1.DOC`
B. assume that the file has been deleted
C. look for the file in Windows 95 instead
D. look for an abbreviated name for the file, such as `QUESTION.DOC`
19. ScanDisk does all the following except _____.
A. relocate data into sequential sectors
B. check the FAT
C. review the filenames
D. locate cross-referenced sectors
20. Which Windows 2000 command starts a new instance of the Windows 2000 command-prompt interpreter?
A. `Run`
B. `Execute`
C. `Start`
D. `CMD`
21. In Windows 95, which command-line utility can be used to convert FAT16 partitions into FAT32 partitions?
A. `CONVERT`
B. `CNVT1632`
C. `CVT.EXE`
D. `PARTCHNG`
22. `PAGEFILE.SYS` is _____.
A. the Windows 98 virtual memory swap file
B. the Windows 98 expanded memory manager
C. the Windows 2000 virtual memory swap file
D. the Windows 2000 expanded memory manager
23. Which file is responsible for loading Windows 2000?
A. `BOOT.INI`
B. `KERNEL32.EXE`
C. `WIN.COM`
D. `NTLDR`
24. Windows 2000 is based on which file-management system?
A. NTFS3
B. NTFS4
C. NTFS5
D. HPFS
25. How do upper memory and high memory differ?
A. There is no difference.
B. Upper memory is any memory above 1MB.
C. High memory is the memory between 640KB and 1MB.
D. High memory is the first 64KB area of memory above 1MB.
26. The Windows 9x System Monitor can be used to _____.
A. view monochromatic graphics in color
B. input TV signals directly
C. reproduce U.S. currency
D. detect major system bottlenecks
27. What is the purpose of `HIMEM.SYS`?
A. It controls the shadow RAM operations.

- B. It loads programs into expanded memory.
- C. It loads the ROM BIOS into the high memory area.
- D. It loads programs into extended memory.
28. Memory from 0KB to 640KB is called _____ memory.
- A. enhanced
- B. conventional
- C. expanded
- D. extended
29. What are the minimum hardware requirements for installing Windows 2000 Professional?
- A. 133MHz Pentium processor with 64MB RAM installed
- B. 150MHz Pentium processor with 32MB RAM installed
- C. 166MHz Pentium processor with 24MB RAM installed
- D. 266MHz Pentium processor with 32MB RAM installed
30. To install Windows 9x on the system's D: drive, you _____.
- A. disconnect the C: drive from the system before installing Windows
- B. copy the `Windows` directory to the D: drive after Windows has been installed
- C. click the Other Directory option during the setup routine and change the install path
- D. use the Move function in Windows Explorer to move the Windows directory to the D: drive after Windows has been installed
31. To install a network printer from Windows 9x, you _____.
- A. select File, Print from the application, and then click the Printer button and select the printer
- B. select Start, Settings, Printers, and then select the printer to install
- C. click the My Computer icon, click the Printers folder, and select the printer
- D. click the Network Neighborhood icon, computer name, printer name, and then right-click Install
32. Which startup mode is not a Windows 9x mode?
- A. Normal mode
- B. Safe mode
- C. Standard mode
- D. MS-DOS mode
33. Identify the correct sequence of events that occur when Windows 2000 is started?
- A. `NTLDR`, `NTDETECT.COM`, `BOOT.INI`
- B. `BOOT.INI`, `NTDETECT.COM`, `NTLDR`
- C. `NTDETECT.COM`, `NTLDR`, `BOOT.INI`
- D. `NTLDR`, `BOOT.INI`, `NTDETECT.COM`
34. The purpose of Safe mode in Windows is to _____.
- A. start Windows with minimal drivers loaded
- B. single-step through the Windows startup process
- C. skip all the Windows configuration steps
- D. start Windows with an MS-DOS command line

35. What partition must be on the hard-disk drive to install Windows 95?
- A. CDFS
 - B. NTFS
 - C. FAT
 - D. HPFS
36. The boot sequence for Windows 9x is _____.
- A. POST, Bootstrap Loader, IO.SYS, MSDOS.SYS, COMMAND.COM, CONFIG.SYS
 - B. POST, Bootstrap Loader, IO.SYS, CONFIG.SYS, COMMAND.COM, MSDOS.SYS, AUTOEXEC.BAT
 - C. POST, Bootstrap Loader, IO.SYS, CONFIG.SYS, MSDOS.SYS, COMMAND.COM, AUTOEXEC.BAT
 - D. POST, Bootstrap Loader, IO.SYS, CONFIG.SYS, MSDOS.SYS, AUTOEXEC.BAT, COMMAND.COM
37. Which Windows 2000 administrative tool can you use to view several administrative tools, such as Event Viewer and Device Manager, in one window?
- A. Tool Viewer
 - B. Services and Applications
 - C. Computer Management Console
 - D. Performance Meter
38. To single-step through the Windows 9x boot process, you press _____ while the Starting Windows message is onscreen.
- A. F3
 - B. F4
 - C. F5
 - D. F8
39. To boot directly into Safe mode, you press _____ while the Starting Windows 9x message is onscreen.
- A. F3
 - B. F4
 - C. F5
 - D. F8
40. If PnP is not working in Windows 2000, from where can you install a device driver?
- A. the Start menu
 - B. the My Computer window
 - C. the Add/Remove Programs Wizard
 - D. the Add New Hardware Wizard
41. Which is not an acceptable way to install a device driver in Windows 9x?
- A. Let the PnP function install it.
 - B. Use the Device Manager to install it.
 - C. Use the Add New Hardware Wizard to install it.
 - D. Use the Add/Remove Programs Wizard to install it.
42. You suspect that a program is causing errors in a Windows 2000 system, but the system is not reporting any errors. What tool would you use to view errors in the system?
- A. Event Viewer
 - B. Local Security Policy
 - C. Services
 - D. Component Services

43. The main reason to encrypt a file is to _____.
- A. reduce its size
 - B. protect it from unauthorized access
 - C. prepare it for backup
 - D. include it in the startup sequence
44. Which of the following is not true regarding the boot sector?
- A. It contains the MBR.
 - B. It contains the disk's partition table.
 - C. It resides on each disk partition.
 - D. It contains information about the drive and disk.
45. You can enter Boot logging mode by pressing ____ during the Windows 2000 or XP startup.
- A. F1
 - B. Ctrl
 - C. F8
 - D. Esc+F4
46. Which of the following protocols was designed to be used with a Novell network?
- A. TCP/IP
 - B. IrLAN
 - C. IPX/SPX
 - D. NetBEUI
47. VxDs for Windows 9x are designed for _____ operation.
- A. 8-bit
 - B. 16-bit
 - C. 32-bit
 - D. 64-bit
48. What type of networking is included as the default in Windows 9x?
- A. None
 - B. Peer-to-peer
 - C. Client-based
 - D. Workstation
49. A customer has asked you to install a 5GB hard drive in his Windows 95b machine. He wants to use the entire drive but does not want to change his operating system. What's the minimum number of partitions you must have to be able to utilize the whole drive?
- A. 1
 - B. 2
 - C. 3
 - D. 4
50. Which protocol enables a network server to assign an IP address to a network node?
- A. RAS
 - B. DNS
 - C. DHCP
 - D. WINS
51. Which of the following presents the least likely cause of computer virus infections?
- A. Shareware programs
 - B. Bulletin board software
 - C. User-copied software
 - D. Shrink-wrapped original software

52. To replace a missing or corrupt Windows 9x file from the Windows 9x CD-ROM, you use _____.
A. SUBTRACT.EXE
B. COMPACT.EXE
C. EXTRACT.EXE
D. LOCATE.EXE
53. A system is running in Windows 9x and then stops. Restarting the system is unsuccessful. What is the problem?
A. The power supply is bad.
B. The virtual memory function is enabled.
C. The virtual memory function is disabled.
D. The hard-drive controller is defective.
54. If an application freezes in Windows 9x, you can press _____ to remove the offending task.
A. Alt+Tab
B. Ctrl+Alt+Del
C. Esc
D. Alt+Esc
55. What TCP/IP utility is commonly used to test a remote network node to see whether it is active?
A. IPCONFIG
B. ARP
C. PING
D. WinIPCFG
56. When you are comparing thorough ScanDisk operation with standard ScanDisk operation, _____.
A. thorough operation checks the files and folders on the drive that you specify
B. standard operation checks the disk surface on the drive that you specify
C. thorough operation checks the disk surface, files, and folders on the drive that you specify
D. standard operation checks the disk surface, files, and folders on the drive that you specify
57. To share a printer in Windows 9x, you _____.
A. double-click its icon, select Printer, Properties, Sharing, and choose the configuration
B. right-click its icon, select Sharing, and choose the configuration
C. right-click its icon, select Properties, Sharing, and choose the configuration
D. perform any of the first three choices, A–C
58. If a printer attached to a Windows computer is not producing any output, even though pages are being sent to the printer, what should you do?
A. Check the printer driver.
B. Check the print spooler.
C. Check the printer pool.
D. Check file and print sharing.
59. Device Manager can do all the following except _____.
A. update drivers
B. change peripheral I/O settings
C. check for viruses
D. identify installed ports
60. The Device Manager displays a red X symbol when _____.
A. a device is disabled due to some type of user-selection conflict

- B. a device is experiencing a direct hardware conflict with another device
 - C. the selected device is not present on the system
 - D. the selected device is not operating properly and requires repair
61. In Windows 9x, where do you go to correct any conflicting IRQs?
- A. Print Manager
 - B. Device Manager
 - C. File Manager
 - D. System Manager
62. Which of the following is the correct UNC network pathname format?
- A. \\server_name\computer_name\user_name
 - B. \\computer_name\share_name
 - C. \\user_name\computer_name\share_name
 - D. \\computer_name\user_name\share_name
63. How can you see hidden files in Windows 2000?
- A. Edit the appropriate Registry entry.
 - B. Right-click My Computer, select Properties, click the View tab, and change to the appropriate setting.
 - C. Run Explorer, click the Tools menu, select Folder Options, click the View tab, and change to the appropriate setting.
 - D. Right-click the desktop, click Properties, click the View tab, and change to the appropriate setting.
64. ISPs ____.
- A. install modems
 - B. provide Internet addresses
 - C. install cable
 - D. create Internet browsers
65. A customer wants to use an installed modem for Internet operation. You should ____.
- A. install another modem and get the ISP information
 - B. get the ISP information
 - C. install dial-up networking and enter the ISP information
 - D. install dial-up networking
66. In Windows 2000 Professional, where are TCP/IP utility programs run?
- A. at the MS-DOS command prompt
 - B. at the TCP/IP Properties window
 - C. at the window that appears when you double-click the file `TCP/IP.COM`
 - D. at the Run window, which is accessed via the Start menu
67. What condition causes other network users to not be able to see any files on your local machine?
- A. You have not enabled the File and Print Sharing option on the local computer.
 - B. The remote computers have not enabled the File and Print Sharing option for your computer.
 - C. The local computer is password protected, and the users have not entered the correct password to gain access.
 - D. The remote computers do not have their directories shared.
68. What file type is not associated with the Internet?
- A. HTML
 - B. FTP

- C. X.40
D. POP3
69. What could cause a properly mapped drive to disappear when the system is rebooted?
- A. The installed network protocol has been corrupted.
 - B. The network interface card is bad.
 - C. The Reconnect at Logon option has not been selected.
 - D. Mapped drives must always be reentered when the system is rebooted.
70. Which TCP/IP utility traces the connection path from your terminal to a remote Internet address?
- A. NBTSTAT
 - B. NETVIEW
 - C. TRACERT
 - D. PING
71. What is the Windows XP bootstrap loader filename that is equivalent to the Windows 9x IO.SYS file?
- A. XPLDR
 - B. NTLDR
 - C. IO.LDR
 - D. LDR.SYS
72. Which user configuration file in Windows XP is stored in `\Documents_and_Settings\username`?
- A. `user.profiles\Winnt`
 - B. `Xpuser.dat`
 - C. `Ntuser.pro`
 - D. `Ntuser.dat`
73. Which subfolder in Windows XP contains the configuration information about every user who has logged on?
- A. `\Winnt\Profiles`
 - B. `\WinXP\Profiles`
 - C. `\Winsys\DAT`
 - D. `\Xpuser.Dat`
74. What Windows XP function qualifies threads of any process to be addressed to any available processor in the system?
- A. PMA
 - B. PMS
 - C. AMP
 - D. SMP
75. What type of installation process do administrators run to perform multiple Windows XP installations across a network at one time?
- A. disk cloning
 - B. attended
 - C. unattended
 - D. client
76. Microsoft releases its operating system updates in collections that include additional features or new drivers. These collections are referred to as _____.
- A. bug fixes
 - B. service patches
 - C. service packs
 - D. update services

77. What is the minimum hard-drive space required for installing Windows XP?
- A. 2MB
 - B. 650GB
 - C. 2GB
 - D. 650MB
78. The Windows XP _____ is a command-line interface that provides access to the hard disks and utilities when the operating system will not operate.
- A. Registry mode
 - B. Recovery Console
 - C. Recovery mode
 - D. Repair Console
79. Which of the following is the primary use of the Recovery Console in Windows XP?
- A. installing hardware
 - B. copying hard-drive files to floppy disk
 - C. repairing the Registry
 - D. recovering Web pages
80. Which Windows XP utility enables administrators to roll back the operating system to a previous operational state in which the system was functioning properly?
- A. Recovery Console
 - B. System Restore
 - C. Safe Mode
 - D. System Reset

ANSWERS TO EXAM QUESTIONS

1. **D.** Microsoft works with hardware vendors to certify their drivers. These drivers are digitally signed so that they can be loaded automatically by the system.
2. **A.** The device driver is a piece of interfacing software that tells the operating system how to communicate with and manage an external device. Applications use the driver, through the operating system, to address devices, but the driver does not alter the application.
3. **C.** The ASR tool can be used to back up and restore the system state information, along with all the files stored on the system volume.
4. **C.** The `CONFIG.SYS` file's statements are responsible for loading the system's memory managers. This normally involves the `HIMEM.SYS` and `EMM386` lines.
5. **C.** There is no system extension `.RUN`. All the other file types can be executed directly from the DOS command line.
6. **C.** The `COMMAND.COM` command interpreter is responsible for accepting input from the DOS command line and interpreting it for the system.
7. **B.** The Defrag utility rearranges files and unused space on the hard disk into contiguous blocks so that the drive can operate more efficiently.
8. **D.** The `Path` statement in the `AUTOEXEC.BAT` file sets up the system with an automatic search order for executing files. To make a file, such as `MYFILE.EXE`, able to be executed from anywhere, you must add the filename to the `Path` statement (with a semicolon at the beginning).

9. **C.** The `+R` switch modifies the `ATTRIB` command to mark the specified file as read-only. The `-R` switch is used to remove such a specification from the file.
10. **B.** The desktop is the primary GUI for Windows 9x. Within the desktop, the My Computer icon is the primary navigation tool for the system, and Windows Explorer serves as the primary file-management tool. The Start menu is the secondary user interface for navigation.
11. **A.** The Add/Remove Hardware Wizard is used to install and configure hardware devices.
12. **D.** The file-management system in Windows 9x can accommodate filenames up to 255 characters in length. This allows for very descriptive filenames to be used to represent the contents of a file.
13. **C.** The Windows 95 startup procedure produces a backup copy of `SYSTEM.DAT` and `USER.DAT` each time the system successfully boots up. Before storing these copies, the system renames the old `SYSTEM` and `USER` files with the `.DAO` extension and saves them.
14. **D.** ScanDisk is scheduled to run only when Windows 2000 does not shut down correctly. It runs in DOS mode before Windows boots up.
15. **B.** The utility for directly modifying the Windows 9x Registry is `regedit`. You can start this utility from the command line by executing the `REGEDIT.EXE` file.
16. **A.** An emergency startup disk for Windows 9x can be created in the setup process during installation. Alternatively, it can be created at any time via the Add/Remove Programs utility.
17. **B.** These are the steps for entering Task Manager: Press `Ctrl+Alt+Del`, click the Task Manager, click Applications, and close the applications that are not responding. You can use Task Manager to view applications, processes, and system performance, and to shut down anything that is not responding.
18. **A.** If the file was saved with a Windows 9x long filename, a directory listing does not display the name in its entirety. Instead, the name is truncated (shortened) and displayed with a tilde character (`~`) in the seventh position of the filename. A numeric character, beginning with 1, is inserted into the eighth character position, to show that it is the first iteration of the truncated filename (for example, `QUESTI~1.DOC`). If other filenames are created with the same first six characters, they are labeled as the second, third, and so on iterations.
19. **A.** The ScanDisk utility does not relocate blocks of data into sequential sectors. This is the function of the Disk Defrag utility.
20. **D.** The `CMD` command is used to start the Windows 2000 command interpreter. It can be used to set the environment variables of the new interpreter.
21. **C.** In Windows 9x, it is possible to convert partitions created on a FAT16 drive into a FAT32 file system by using the `CVT.EXE` command-line utility. This operation can also be performed by accessing the Drive Converter (FAT32) utility; to do so, select Start, Programs, Accessories, System Tools, Drive Converter.
22. **C.** `PAGEFILE.SYS` is a swap filename used in Windows NT or 2000. When a computer is running low on memory, Windows NT or 2000 can use hard-drive space, `PAGEFILE.SYS`, to simulate RAM.
23. **D.** The `NTLDR` file, along with `NTDETECT`, loads the Windows NT/2000 operating system into memory.
24. **C.** The newest NTFS file system (NTFS5) is included in Windows 2000. It has some

encryption and administrative enhancements over its predecessors.

25. **D.** Upper memory is the area of RAM in the PC memory map between 640KB and 1MB. It has existed since the original PC design. High memory is the 64KB area just above the 1MB mark that is created by the segmented offset addressing style of the Intel microprocessor. The high memory area comes into existence when the `HIMEM.SYS` driver is loaded in the `CONFIG.SYS` file.
26. **D.** The Windows 9x System Monitor is designed to monitor the operation of key system resources and graphically identify processing bottlenecks that occur.
27. **D.** `HIMEM.SYS` has two functions. It is the memory manager responsible for controlling any other memory managers in the system. It also provides access to the extended memory area and creates the high memory area.
28. **B.** Memory between 0KB and 640KB was originally referred to as base memory in the original PC. When additional memory became available in the PC-AT, however, in the form of expanded and then extended memory, this area of memory began to be called conventional memory.
29. **A.** These are the requirements set by Microsoft for installation of the Windows 2000 Professional operating system: 133MHz processor with 64MB RAM installed.
30. **C.** Even if the Typical option is selected for the installation, the Windows 9x Setup utility enables the user to specify a new directory where the Windows 9x files are to be placed. This new directory can be located on a different drive.
31. **D.** You install a network printer in Windows 9x by accessing the Network Neighborhood through its desktop icon, selecting the remote computer's network name, and then selecting the remote printer's name. From this point, you right-click the Install option to install the printer in the local system.
32. **C.** There is no standard mode in the Windows 9x world. Normal mode is just the normal Windows 9x startup. Safe mode is a special troubleshooting mode that loads only the minimum number of device drivers required to get the basic parts of the system operational. MS-DOS mode is a command-prompt-only mode that simulates the DOS environment.
33. **A.** The correct sequence is `NTLDR`, `NTDETECT.COM`, `BOOT.INI`, `BOOT.INI` next passes control to `OSLOADER.EXE`.
34. **A.** Safe mode is a special troubleshooting mode that loads only the minimum number of device drivers required to make the basic parts of the system operational. This includes a reduced version of the Windows GUI environment. If the system does not function in this mode, a command-prompt-only mode is available to remove even these few drivers. Safe mode startup also provides a step-by-step bootup mode that you can use to single-step through the bootup process and identify steps that cause the system to crash.
35. **C.** The Windows 95 Setup routine must find a copy of a FAT16 partition running on the intended drive where it is supposed to install Windows 95.
36. **C.** When Windows 9x boots, the system initialization occurs and `POST` tests are performed. The Bootstrap Loader finds the MBR and loads the Windows version of the `IO.SYS` file. `IO.SYS` checks the `CONFIG.SYS` file for system configuration parameters. `IO.SYS` then loads the `MSDOS.SYS` file and checks its information. `IO.SYS` then looks for and executes the `COMMAND.COM` file, which in turn looks for and executes the `AUTOEXEC.BAT` file if it finds one. Be aware that in a pure Windows 9x installation, no `CONFIG.SYS` or `AUTOEXEC.BAT`

- file is present. The order of events in all the other possible answers is incorrect.
37. **C.** The Computer Management Console combines many of the tools, including System Information, Performance Logs, Shared Folders, Local Users, Disk Management and Defragmenter, Logical Drives, and Services and Applications.
 38. **D.** You can access the Step-by-Step Startup option by pressing the F8 key while the Starting Windows message is onscreen. This action brings up the Start menu, from which you can select any of the various Windows startup modes.
 39. **C.** Pressing the F5 key while the system is starting up boots the system directly into Safe mode. The system also defaults to Safe mode if it detects a configuration problem that the PnP function cannot sort out.
 40. **D.** The Control Panel's Add New Hardware Wizard must be used to manually install a device driver in the Windows system.
 41. **D.** The Add/Remove Programs Wizard cannot be used to install a device driver. All the other methods can be used to install a device driver.
 42. **A.** The Event Viewer administrative tool is used to view and manage the logs of system, program, and security events that occur in the computer.
 43. **B.** You encrypt files to protect them from access by other users. You can encrypt files by using different cipher strengths. The files can be decrypted after they are sent to the user.
 44. **B.** The boot sector does not contain information about the size and layout of the disk. That is the function of the partition table.
 45. **C.** Pressing the F8 key during startup causes Windows 2000 to display the Bootup Options menu, which includes options such as Safe mode.
 46. **C.** IPX/SPX was designed for use with Novell NetWare networks.
 47. **C.** VxDs are designed for 32-bit virtual-mode operations under Windows 9x.
 48. **B.** By default, Windows 9x provides easy-to-use peer-to-peer networking software. It can be set up as a client or a workstation for Windows NT, Windows 2000, Unix, or Novell NetWare networks, but this is not its default networking scheme.
 49. **A.** Windows 95b allows the use of the FAT32 file system. FAT32 allows partitions of up to 2TB in size.
 50. **C.** DHCP enables the host server to automatically assign IP addresses and subnet masks every time a client computer begins a network session.
 51. **D.** The least likely (but not foolproof) source of virus infections is original manufacturer, shrink-wrapped software. Most reputable software manufacturers test their software and systems for viruses before placing them in the marketplace. All the other sources of software listed provide a much higher possibility for viruses to have been attached to the software.
 52. **C.** In Windows 9x the installation files are stored on the distribution disks, or disc, in a compressed .CAB format. These files can be moved and expanded into the system by using the Windows EXTRACT.EXE command in MS-DOS mode.
 53. **C.** If the Virtual Memory function is disabled in Windows 9x, the system stops running at some point, and you are unable to restart it.
 54. **B.** Because Windows 9x employs preemptive multitasking, it is possible to exit to the Windows task list, remove the offending task, and continue processing. You access the Windows 9x task list by pressing the Ctrl+Alt+Del key combination.

55. **C.** The `PING` command is one of the key tools for troubleshooting TCP/IP. `PING` causes a data packet to be sent to a specified IP address and returned to your machine.
56. **C.** The thorough ScanDisk option checks the system's files and folders only for cross-linked files to repair, and it also examines the disk surface for physical defects.
57. **D.** All the answers provided for this question can be used to share a printer with the system.
58. **B.** If a printer is not producing anything in a Windows 9x/NT/2000/XP environment, even though print jobs have been sent to it, you should check the print spooler to see whether any particular type of error has occurred. To view documents waiting to be printed, double-click the desired printer's icon. Return to the Printer folder, right-click the printer's icon, click Properties, and then select Details. From this point, select Spool Settings and select the Print Directly to the Printer option. If the print job goes through, there is a spooler problem. If it does not, the hardware and printer driver are suspect.
59. **C.** There is no virus-checking function in the Device Manager. In Windows 9x, there is no integrated virus detection or correction; this feature must be added from a third-party supplier.
60. **A.** An X associated with a device listed in the Device Manager indicates that the device has been disabled by a user-selection conflict.
61. **B.** The Device Manager lists all the hardware installed in the system, along with the resources that the hardware has been allotted. By selecting the device from the list and clicking its driver, you can enter the device's Resources tab and change its IRQ settings.
62. **B.** The correct UNC path begins with two slashes and has both the computer name and the share name for the device.
63. **C.** In Windows 2000, the appearance of file extensions is controlled through the View tab in Folder Options.
64. **B.** ISPs provide Internet addresses for their users. ISPs purchase blocks of IP addresses that they rent to their customers so that they can have access to the Internet and identities on the Web.
65. **C.** If a working modem is already installed in the system, only two things need to occur: Windows needs to have its dial-up networking feature operational, and it needs to be loaded with the ISP's contact and configuration information.
66. **A.** All TCP/IP utilities are controlled by commands entered at the MS-DOS command prompt (for instance, `c:>ipconfig`).
67. **A.** The File and Print Sharing option on the local computer must be enabled for other network locations to see these resources on your system. If the options were not enabled, others would not be able to see or access your resources.
68. **C.** There is no X.40 file format. HTML is the format used to create Internet documents and pages. FTP is used to transfer files across the Internet, and POP3 is an email protocol format.
69. **C.** The Reconnect at Logon box is often overlooked when someone is mapping a drive. When the user logs off, the drive map disappears and must be reentered at the next logon.
70. **C.** The command `TRACERT hostname`, where `hostname` is the IP address or DNS name of a host, traces the path of a network connection to that remote host.

71. **B.** Windows XP/NT startup processes are similar to MS-DOS/9x systems. The main differences are found in the terminology and filenames that Windows XP/NT versions employ. In the case of a Windows XP/NT partition, the bootstrap loader is the XP/NT loader file named `NTLDR`. This file is the Windows XP/NT equivalent of the DOS `IO.SYS` file and is responsible for loading the XP/NT operating system into memory.
72. **D.** Configuration information about every user who has logged in to the system is maintained in a named subfolder under the `\Winnt\Profiles` directory. The actual user configuration file is named `NTUSER.DAT` (for example, `\Winnt\Profiles\Charles\Ntuser.dat`). In Windows 2000 and XP, the `NTUSER.DAT` file is stored in `\Documents_and_Settings\username`.
73. **A.** Configuration information about every user who has logged in to the system is maintained in a named subfolder under the `\Winnt\Profiles` directory. The actual user configuration file is named `NTUSER.DAT` (for example, `\Winnt\Profiles\Charles\Ntuser.dat`). In Windows 2000 and XP, the `NTUSER.DAT` file is stored in `\Documents_and_Settings\username`.
74. **D.** The Symmetrical Multiprocessing (SMP) function enables threads of any process to be applied to any available processor in the system. The SMP function also enables microprocessors within a system to share memory space with and assign threads to the next available microprocessor.
75. **C.** In an unattended installation using answer files, administrators run scripted answer files that have been created to provide automatic answers to all the questions normally asked by the Setup/Install routine.
76. **C.** Microsoft typically releases its patches in the form of updates or in collections that include additional functionality or new device drivers. Microsoft refers to these collections as service packs.
77. **D.** The maximum hard-drive space is 2GB with 650MB of free space required; 2GB of free hard-disk space is recommended. A 1.5GB partition size is required, with 2GB recommended. Additional disk space is required for installing over a network. The maximum hard-disk space supported for a partition is 2TB.
78. **B.** The Recovery Console available in Windows 2000 and Windows XP is a command-line interface that provides access to the hard disks and many command-line utilities when the operating system will not boot (that is, after you've tried the Last Known Good Configuration and Safe Mode options).
79. **C.** One of the primary uses of the Recovery Console is to restore the Registry. Every time you back up the System State data with the Windows 2000 or Windows XP Backup utilities, a copy of the Registry is placed in the `\Repair\RegBack` folder.
80. **B.** The Windows XP System Restore utility enables administrators to roll back the Windows XP Professional operating system to a previous operational state and configuration without affecting any user's personal data.