

**Chapter 4 TestBank for *Complete A+ Guide to IT Hardware and Software* ISBN 9780135815106**

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## Chapter 4 Introduction to Configuration

### 4.1 True/False Questions

- 1) A virus can infect a flash BIOS.  
Answer: TRUE  
Diff: 2
- 2) All devices must have a separate I/O address.  
Answer: TRUE  
Diff: 2
- 3) The battery on the motherboard keeps information current in RAM.  
Answer: FALSE  
Diff: 2
- 4) Entering the wrong Setup information can cause a POST error.  
Answer: TRUE  
Diff: 2
- 5) CMOS holds POST.  
Answer: FALSE  
Diff: 2
- 6) IRQ6 is normally assigned to the COM2.  
Answer: FALSE  
Diff: 2
- 7) The memory address FE90000 is a higher memory address than AB912345.  
Answer: FALSE  
Diff: 3
- 8) Being able to disable a port on an integrated motherboard is important if the port goes bad.  
Answer: TRUE  
Diff: 1
- 9) An eSATA bracket would have a cable that connects to the motherboard.  
Answer: TRUE  
Diff: 2
- 10) If the BIOS and motherboard support it, additional USB ports can be added by installing an adapter.  
Answer: TRUE  
Diff: 2
- 11) POST checks for hardware based on the saved BIOS settings and displays an error if the hardware check does not match the settings.  
Answer: TRUE  
Diff: 2

12) Shared system memory is when motherboard RAM is used/shared with the video card.

Answer: TRUE

Diff: 2

13) Press F2 to enter Setup on most computers.

Answer: FALSE

Diff: 2

14) System BIOS is held in flash memory.

Answer: TRUE

Diff: 2

15) The information in flash BIOS can be upgraded.

Answer: TRUE

Diff: 2

16) System BIOS can be write-protected.

Answer: TRUE

Diff: 2

17) System BIOS can contains virus protection software.

Answer: TRUE

Diff: 2

18) EMI is a method of upgrading or flashing a system BIOS.

Answer: FALSE

Diff: 2

19) A mouse can be used in some BIOS menus.

Answer: TRUE

Diff: 2

20) Hyper-Threading can be enabled through BIOS.

Answer: TRUE

Diff: 2

21) The Disable Execute Bit, Execute Disable or No Execute prevents unauthorized access to specific screens in System BIOS.

Answer: FALSE

Diff: 2

22) LoJack is a BIOS option that prevents a computer from being stolen.

Answer: False

Diff: 2

23) A computer that has a flash drive, an external hard drive, and an iPod attached to a USB hub would use three interrupts.

Answer: FALSE

Diff: 3

## 4.2 Multiple Choice Questions

1) Which of the following is NOT used to configure a computer?

- A) An IRQ overlay
- B) Jumper
- C) The Setup program
- D) Plug and play

Answer: A

Diff: 2

2) What is the purpose of the Setup program?

- A) Used to reprogram the BIOS
- B) Used to set up hardware that does not use plug and play
- C) Used to configure the system
- D) All of the above

Answer: C

Diff: 2

3) Joseph is assembling a new computer for the first time. After putting together the hardware, what must he do to configure the system?

- A) Remove the write-protect jumper for the BIOS.
- B) Run the Setup program.
- C) Cascade the interrupts.
- D) Run Device Manager.

Answer: B

Diff: 2

4) Most computers display a message stating which keystrokes will launch the Setup program:

- A) When the F1 function key is pressed
- B) During the initial startup process
- C) On the inside of the cover of the computer case
- D) By running Device Manager

Answer: B

Diff: 2

5) What determines what keystroke is used to access Setup?

- A) The manufacturer of the flash memory
- B) The manufacturer of the BIOS
- C) The manufacturer of the computer
- D) The type of RAM installed

Answer: B

Diff: 2

6) Which of the following is NOT indicated by the Setup program?

- A) The order of devices that the system searches for an operating system
- B) The type and number of hard drives installed
- C) The amount of unused hard drive space
- D) How much RAM is in the computer

Answer: C

Diff: 2

- 7) What is the purpose of the System Setup program?
- A) Assign resources to all devices inside the computer.
  - B) Reprogram the flash BIOS.
  - C) Set system parameters.
  - D) Configure Windows users.

Answer: C

Diff: 2

- 8) The most common type of BIOS used today is called
- A) CMOS
  - B) Switch BIOS
  - C) Flash BIOS
  - D) ROM BIOS

Answer: C

Diff: 2

- 9) What is the advantage of using flash BIOS?
- A) It operates at a much faster speed than other types of BIOS.
  - B) It enables changing the BIOS by using an update file instead of having to install a new chip.
  - C) Because all instructions are permanently burned on the chip, it is impervious to infection from viruses.
  - D) All these answers are true.

Answer: B

Diff: 2

- 10) To protect the Flash BIOS from virus infection, you should
- A) Keep the BIOS write-protected until the need to update it.
  - B) Remove the BIOS from the system when it is not in use.
  - C) Routinely upgrade the BIOS monthly to replace the code.
  - D) Avoid using flash BIOS on systems that are connected to a network.

Answer: A

Diff: 2

- 11) What is the purpose of a flash update?
- A) Quickly reconfigures the CMOS by resetting to the default condition
  - B) Provides the latest information to users and technicians on system upgrades and fixes
  - C) Scans for and replaces outdated device drivers
  - D) Enables system fixes and upgrades to the BIOS

Answer: D

Diff: 2

- 12) A computer has a write-protected BIOS. What can you do to update the flash BIOS?
- A) Change the setting of a motherboard jumper or switch to remove the write protection.
  - B) Replace the BIOS chip with another containing the latest version.
  - C) Use the **copy** command to transfer the updated information from the CMOS to the BIOS.
  - D) Reverse the chip in the socket to allow it to be updated.

Answer: A

Diff: 2

13) CMOS holds the computer's \_\_\_\_.

- A) Antivirus software
- B) Flash BIOS
- C) startup commands
- D) current BIOS configuration

Answer: D

Diff: 2

14) What is the purpose of the battery on the motherboard?

- A) To keep the information stored in flash BIOS
- B) To keep the information stored in CMOS
- C) To keep the information stored in RAM
- D) To keep the POST software stored so it can execute during startup

Answer: B

Diff: 2

15) After the system Setup configuration is set, where is the information saved?

- A) On the hard disk drive
- B) In the CMOS chip
- C) In ROM
- D) In RAM

Answer: B

Diff: 2

16) What is CMOS?

- A) A type of memory on a card used for input/output processes
- B) A type of BIOS chip that is easily upgraded without installing a new chip
- C) A memory chip dedicated to holding the operating system
- D) A special type of static memory on the motherboard that is used to save the configuration information

Answer: D

Diff: 2

17) What is one result of storing the wrong configuration information in CMOS?

- A) It will cause a faulty flash update of the BIOS.
- B) The computer will appear to operate normally, but all new data will be lost.
- C) Permanent damage to the computer system may occur.
- D) POST error codes or error messages indicating a hardware problem are displayed on startup.

Answer: D

Diff: 2

18) How does POST know which hardware components to test?

- A) POST checks an installed hardware folder on the boot drive to determine what hardware is installed.
- B) A comprehensive list of all possible hardware components is stored in the BIOS.
- C) POST obtains the list of hardware that is supposed to be in the computer from the settings stored in CMOS.

D) On startup, all installed hardware sends a status signal to the BIOS to verify operability.

Answer: C

Diff: 2

19) How does POST work with CMOS?

A) At startup POST obtains settings from CMOS to determine what hardware is supposed to be installed on the computer.

B) POST is used to configure CMOS.

C) POST is used to send messages between CMOS and the CPU.

D) POST acts as a backup of configuration settings stored in CMOS.

Answer: A

Diff: 2

20) What component keeps the information in CMOS memory even when the computer is powered off?

A) Static memory chips

B) The main power supply

C) A small battery

D) A form of ROM where data is burned into the chip at the factory

Answer: C

Diff: 1

21) What happens when the small battery on the motherboard dies?

A) The BIOS must be replaced.

B) Configuration information inside CMOS is lost and must be entered and saved again using System BIOS.

C) All information in RAM is lost.

D) The motherboard should be replaced.

Answer: B

Diff: 2

22) What is the best source of information for finding out how to enter the Setup program?

A) Look at the display during the boot process.

B) Look up the information on the Internet.

C) Look up the information in the computer manual.

D) Try random keys.

Answer: A

Diff: 2

23) A computer has a write-protected BIOS. What can you do to update the flash BIOS?

A) Use a docking station.

B) Boot from an optical disc.

C) Set a jumper on the motherboard, or change a BIOS setting to enable writing to the BIOS.

D) Boot Windows. Use Device Manager to right-click the computer and deselect the *Write-protect BIOS* option.

Answer: C

Diff: 2

24) Which of the following is the most common type of battery found on the desktop motherboard today?

A) Lithium

- B) Cylinder
- C) 9-volt battery
- D) AAA battery

Answer: A

Diff: 2

25) What is the component shown in the figure below?



- A) CMOS
- B) Flash BIOS
- C) Lithium battery
- D) DIP switch

Answer: C

Diff: 2

26) Where is the PC battery normally located?

- A) Inside the processor
- B) Inside flash BIOS
- C) On the motherboard
- D) Inside the hard drive

Answer: C

Diff: 2

27) What is one indication a battery is beginning to fail?

- A) The loss of data on the hard drive
- B) A warning message displays at startup
- C) The system continually resets itself as power begins to fail
- D) The loss of the date or time on the computer

Answer: D

Diff: 2

28) Where would the component shown in the figure below be located?



- A) Inside the processor
- B) Inside flash BIOS
- C) On the motherboard
- D) Inside the hard drive

Answer: C



Diff: 2

- 29) Which of the following is true about replacing a lithium computer battery?
- A) You should replace a lithium battery with another lithium battery having the same or a higher voltage specification.
  - B) You should purchase a battery containing the correct CMOS settings for the computer to prevent loss of configuration information.
  - C) You should replace a lithium battery with another having the exact specifications.
  - D) You should upgrade the lithium battery to a more reliable battery type by snapping a battery holder onto the leads of the existing battery.

Answer: C

Diff: 2

- 30) Which device *Properties* tab would you use to determine the memory addresses, I/O addresses, and interrupt used for a particular device?
- A) Resources
  - B) Management
  - C) Details
  - D) General

Answer: A

Diff: 3

- 31) Which program controls testing hardware during the boot process?
- A) Windows Boot Manager
  - B) POST
  - C) Device Manager
  - D) Task Manager

Answer: B

Diff: 2

- 32) If a computer's video subsystem does not contain a separate video adapter, where would you find the electronic circuits for sending instructions to the monitor?
- A) On the sound card
  - B) On the special RAM chips
  - C) On the motherboard Flash BIOS chip
  - D) On the motherboard

Answer: D

Diff: 2

- 33) What is the difference between a user and a supervisor power-on password?
- A) The user password allows access to a limited number of BIOS settings such as time and date and the boot sequence options, whereas the supervisor password has full access to change all BIOS settings.
  - B) The user password is a Windows password. The supervisor power-on password is a BIOS password.
  - C) The user password is used to configure basic things like hardware installation and software application installation. The supervisor power-on password is used to gain access to the BIOS.
  - D) The user password is used to access Windows configuration parameters. The supervisor password is used to install hardware, configure the BIOS, install applications, and have total control over the hardware and software in the system.

Answer: A

Diff: 2

34) Is it an acceptable practice to replace a computer battery with one that has a lower voltage (but not higher)?

- A) Yes
- B) No

Answer: B

Diff: 2

35) Which of the following should be used to change a jumper?

- A) Ink pen
- B) Small flat-tipped screwdriver
- C) Pair of needle-nose pliers
- D) Pencil

Answer: C

Diff: 2

36) What is the purpose of the Boot Sequence option available in most computers' BIOS Setup?

- A) Enables POST to be disabled
- B) Enables RAM testing above 1MB to be disabled
- C) Enables POST to be executed after the machine boots
- D) Enables changing where the computer looks first for boot files

Answer: D

Diff: 2

37) Which of the following is *not* a flash BIOS recovery method?

- A) Recovery utility
- B) Recovery jumper
- C) Secondary BIOS
- D) Tape backup

Answer: D

Diff: 2

38) What is the purpose of the PCIe Configuration BIOS setting?

- A) Copies the contents of a PCIe adapter's software into RAM for faster access
- B) Enables manual configuration of the PCIe version
- C) Specifies the size of the portion of the PCIe adapter that is to be shut down to save power when not in use
- D) Enables the PCIe memory speed settings to be changed to correspond to the size of the adapter being used

Answer: B

Diff: 2

39) How are power-on passwords normally removed?

- A) Through software
- B) By using a special disk
- C) By booting from a different device
- D) By jumpering two pins together on the motherboard

Answer: D

Diff: 2

- 40) Sergi purchased a box of “as-is” equipment at auction and the box contains a computer. When he tries to start the computer for the first time, the computer prompts him to enter a power-on password. What should he do because he does not know the password?
- A) Salvage what parts he can to use on other systems.
  - B) Remove the battery to clear all the CMOS settings.
  - C) Because power-on passwords are limited to four characters, attempt to guess the password by systematically entering all combinations.
  - D) Replace the CMOS chip with a new one that has not been programmed with a power-on password.
- Answer: B

Diff: 2

- 41) A number assigned to expansion adapters or ports so that the CPU can prioritize between two (or more) devices that need attention is a(n)
- A) IRQ
  - B) I/O address
  - C) DMA channel
  - D) USB enabler
- Answer: A

Diff: 2

- 42) A computer in a research facility needs to have the boot order settings protected. What tool would be used to configure this?
- A) Device Manager
  - B) Configuration Management
  - C) BIOS
  - D) Task Manager
- Answer: C

Diff: 2

- 43) A computer in a research lab requires a password BEFORE the operating system files load (including the boot files). What technology enables this?
- A) BIOS
  - B) AES
  - C) DES
  - D) Windows 7 Professional
- Answer: A

Diff: 2

- 44) Which answer is an updated version of the system BIOS to allow such things as booting without a keyboard attached and antivirus software as part of the BIOS?
- A) eBIOS
  - B) BIOS-X
  - C) uBIOS
  - D) UEFI
- Answer: D

Diff: 2

- 45) A technician notices that the display seems to be dark and bluish in color. The motherboard has both a VGA and an HDMI port. When the technician powers down the system and attaches the HDMI cable instead of the VGA cable, the problem is resolved. What was the problem?
- A) The display was not configured for VGA.
  - B) The correct setting was not chosen in BIOS/UEFI Setup.
  - C) One or more pins on the VGA port is damaged.
  - D) The monitor does not support VGA.
- Answer: C  
Diff: 3
- 46) What is decimal number 14 in hexadecimal?
- A) A
  - B) B
  - C) C
  - D) D
  - E) E
- Answer: E  
Diff: 1
- 47) What is decimal number 8 in hexadecimal?
- A) 1000
  - B) 0100
  - C) A
  - D) 8
- Answer: D  
Diff: 1
- 48) What is the name of the central Windows database that contains hardware information?
- A) UEFI/BIOS
  - B) Registry
  - C) CMOS
  - D) Flash
- Answer: B  
Diff: 2
- 49) Which system configuration feature provides support for increased hard drive capacities and provides computer component monitoring?
- A) Flash BIOS
  - B) CMOS memory
  - C) APICs
  - D) UEFI
- Answer: D  
Diff: 2
- 50) Which of the following is NOT an indication of a resource conflict?
- A) POST error codes are displayed.
  - B) The computer locks up or restarts when performing a specific function.
  - C) The new device is installed and the new device or a device already installed does not work.
  - D) The computer hangs during startup or shutdown.

Answer: A

Diff: 2

51) What function enables multiple PCIe adapters to be mapped to the same IRQ?

- A) Noncascaded interrupts
- B) System resource allocation
- C) IRQ steering
- D) PCI BIOS setup

Answer: C

Diff: 2

52) The \_\_\_\_ enables a device and the processor to exchange data.

- A) IRQ
- B) DMA channel
- C) POST
- D) I/O address

Answer: D

Diff: 2

53) Which of the following is true?

- A) PCs typically have 16 I/O addresses numbered 0 through 15.
- B) Every device must have a unique I/O address.
- C) I/O addresses are used to allow an adapter to bypass the processor and communicate directly with the RAM chips.
- D) Similar adapters and devices are assigned the same I/O address.

Answer: B

Diff: 2

54) What is the decimal number 13 in hexadecimal?

- A) 1110
- B) 4G2
- C) D
- D) 1110

Answer: C

Diff: 1

55) What format is used to show I/O addresses?

- A) Binary
- B) Alphanumeric
- C) Decimal
- D) Hexadecimal

Answer: D

Diff: 2

56) Which of the following statements about I/O addresses is FALSE?

- A) The manufacturer of a computer or an adapter can set the I/O address specifically.
- B) Each type of device is associated with a single I/O address.
- C) Every device must have a separate I/O address.
- D) If an address an adapter uses conflicts with another adapter, a technician can change the I/O address

on one of the two conflicting adapters.

Answer: B

Diff: 2

57) What program can be used to view I/O addresses?

- A) Configuration Manager
- B) Device Manager
- C) I/O Steering Wizard
- D) Memory Mapper

Answer: B

Diff: 2

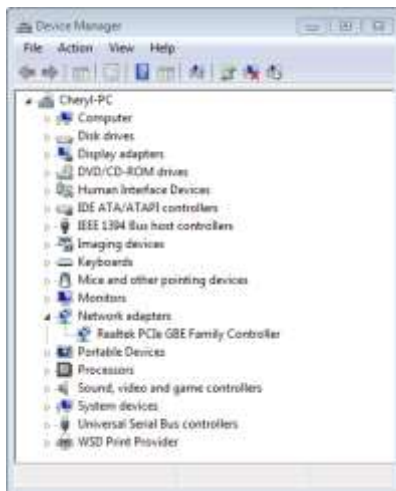
58) A(n) \_\_\_\_\_ technician troubleshoots computer problems using a method that is not logical.

- A) Obnoxious
- B) Delinquent
- C) Deranged
- D) Gun slinger

Answer: D

Diff: 2

59) Refer to the figure below. What program was used to access this information?



- A) Configuration Manager
- B) Device Manager
- C) I/O Steering Wizard
- D) Memory Mapper

Answer: B

Diff: 2

60) Why are memory address ranges shown as 00000 - 9FFFF?

- A) The device requires more than one memory location.
- B) The port has more than one device attached.
- C) The device does not have enough memory installed.
- D) These are the memory options available from which the device can choose.

Answer: A

Diff: 2

- 61) A college student complains to the teacher that the display appears dark. What is the first thing the technician should do?
- A) Use OSD tools.
  - B) Restart the computer.
  - C) Reattach the cable.
  - D) Update the driver.

Answer: A

Diff: 4

- 62) What should a technician do if multiple small dots are on an LCD screen and the user complains that she cannot do her work properly?
- A) Replace the display.
  - B) Replace the cable between the display and the PC.
  - C) Use OSD tools.
  - D) Upgrade the driver.

Answer: A

Diff: 3

- 63) A(n) \_\_\_\_\_ is a unique address assigned to the flash BIOS, any other ROM chips installed in the system, and RAM chips installed in the system.

- A) Memory address
- B) I/O address
- C) DMA channel
- D) IRQ

Answer: A

Diff: 2

- 64) Device Manager is useful in showing current assignments for

- A) IRQs
- B) I/O addresses
- C) DMA channels
- D) All of these assignments.

Answer: D

Diff: 2

- 65) What does an X or a little down arrow mean in Device Manager?

- A) The device is disabled.
- B) There is a conflict.
- C) The driver is missing.
- D) The *Use Automatic Settings* feature is not being used, and resources were manually configured.

Answer: A

Diff: 3

- 66) What does an ! usually mean when seen beside a device in Windows Device Manager?

- A) The device is disabled.
- B) There is a conflict or the driver is missing.
- C) The driver is working.

D) The *Use Automatic Settings* feature is not being used, and resources were manually configured.

Answer: B

Diff: 3

67) Melissa is installing a device that the system does not automatically recognize. She discovers that the configuration disk for the adapter has been misplaced or thrown away. What should she do?

A) Discard the adapter and purchase another.

B) Systematically adjust the jumpers and switches on the adapter until the correct configuration is found.

C) Use the MSD program or another utility to determine the settings for the adapter.

D) Use the Internet to download documentation, support files, and software drivers needed.

Answer: D

Diff: 2

68) What is the purpose of the following command: `devmgmt.msc`?

A) It starts the diagnostics (if installed) for a particular piece of hardware.

B) It shows the resources for one particular piece of hardware.

C) It brings up Device Manager.

D) It brings up a particular piece of hardware's control panel.

Answer: C

Diff: 3

69) What are system resources?

A) RAM allocated to applications

B) Windows threads allocated to hardware

C) Processes that slow the computer down in times of high activity such as when a virus scan is occurring

D) Description of IRQs, I/O addresses, and memory addresses assigned to a device

Answer: D

Diff: 2

70) What do you do if a red X appears over the device icon in Device Manager after a PC Card has been installed?

A) Enable the device.

B) Replace the PC Card with another one.

C) Use another expansion slot.

D) Resolve the resource conflict.

Answer: A

Diff: 3

71) What step should be taken if a resource conflict occurs?

A) Replace the motherboard battery.

B) Reboot the computer.

C) Use the System Restore tool.

D) Use Task Manager to reorder the conflicting addresses.

Answer: B

Diff: 2

72) Which hexadecimal number has the greater value?



- A) 10
- B) C5
- C) 9F
- D) 47
- E) AE

Answer: B

Diff: 2

- 73) A motherboard manual shows two PCIe x16 adapters listed under the same interrupt, PCI interrupt A. What does this mean?
- A) The two adapters use the same system resources.
  - B) The two adapters can share resources with USB devices.
  - C) The two adapters are using interrupt 10 (A in hexadecimal).
  - D) The two adapters are sharing the same interrupt.

Answer: D

Diff: 2

- 74) Aleks is having trouble getting the system to boot from an external hard drive. What BIOS/UEFI setting should Aleks check?
- A) Disable execute bit
  - B) LoJack
  - C) Secure boot
  - D) Drive encryption

Answer: C

Diff: 3

- 75) A technician is trying to install Hyper-V, but is getting an error. What BIOS setting should the technician check first?
- A) LoJack
  - B) Virtualization support
  - C) Disable execute bit
  - D) Passwords

Answer: B

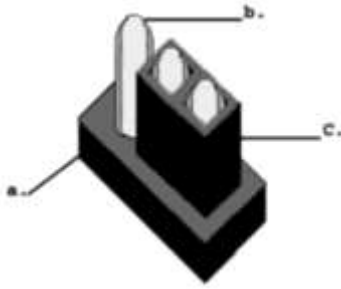
Diff: 2

- 76) Memory addresses are shown in \_\_\_\_ .
- A) Binary
  - B) Decimal
  - C) Hexadecimal
  - D) Octal

Answer: C

Diff: 2

77) In the figure below, the item labeled c is the \_\_\_\_\_.

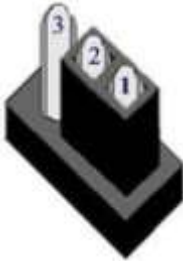


- A) Pin
- B) Jumper block
- C) Jumper
- D) Heat sink

Answer: C

Diff: 1

78) In the figure below, the jumper setting on pin 1 and pin 2 is \_\_\_\_\_.



- A) Disabled
- B) Enabled
- C) Parallel
- D) Shockproof

Answer: B

Diff: 1

79) In the figure below, the jumper setting on pin 1 and 2 is \_\_\_\_\_.



- A) Disabled
- B) Connected
- C) Enabled
- D) On

Answer: A

Diff: 2

80) In the figure below, the jumper is \_\_\_\_\_.



- A) Enabled
- B) Disabled
- C) Hanging around, waiting to be used
- D) Both B and C

Answer: D

Diff: 2 [[Note that these answers need to be pinned.]]

81) John powers up the computer by pushing the computer startup button to the On position. This procedure is called a

- A) Cold boot
- B) Black boot
- C) Warm boot
- D) Electric boot

Answer: A

Diff: 1

82) What statement is true regarding a cold boot?

- A) A cold boot occurs when the PC boots from an internal hard drive.
- B) A cold boot occurs when the PC boots from an external hard drive.
- C) A cold boot occurs when you first turn on a computer.
- D) A cold boot occurs when you press Ctrl+Alt+Del.

Answer: C

Diff: 1

83) Which option would a technician use to enable Hyper-Threading technology?

- A) System Setup
- B) Device Manager
- C) Configuration Manager
- D) Windows Firewall

Answer: A

Diff: 2

84) Why would a technician disable an integrated port through System Setup rather than through Device Manager?

- A) Device Manager has the capability to change the state of the port depending on other Windows Control Panel settings.
- B) A person with the Windows administrator password could not re-enable it.
- C) Other Windows configuration programs have the capability to re-enable the port.
- D) The setting cannot be reset unless the motherboard is sent back to the manufacturer for reset purposes.

Answer: B

Diff: 2

85) Which option would *not* be part of the System Setup Hardware Monitor views?

- A) Radio frequency
- B) Fan speed
- C) Operating temperature
- D) Chassis intrusion detection
- E) CPU status

Answer: A

Diff: 3

86) Which technician task is more likely to cause a POST error?

- A) Poorly written application
- B) Firewall compromise
- C) Virus
- D) Hardware removal or installation

Answer: D

Diff: 3

87) Jane decides to restart her computer by pressing the Ctrl+Alt+Delete combination keys. This procedure is called a

- A) Shut down
- B) Warm boot
- C) Quick start
- D) Mistake

Answer: B

Diff: 1

88) After you power up a computer, it performs a basic test of the individual hardware components. The test is called a

- A) PREP
- B) BIOS
- C) POST
- D) RAM

Answer: C

Diff: 2

89) What is the problem if a user leaves the computer power on over a weekend and now there is some discoloration on the screen?

- A) Failing backlight
- B) Burn in
- C) Refresh settings
- D) Horizontal pitch

Answer: B

Diff: 3

90) A technician is called into a conference room where the projector is showing a message of "No video signal." What should the technician do first?

- A) Replace the projector bulb.
- B) Perform degaussing.

- C) Adjust the lumens.
- D) Verify the cable securely attaches to the computer.

Answer: D

Diff: 3

91) How can the resolution of an LCD screen be changed?

- A) It cannot.
- B) Operating system
- C) Multipixelation
- D) By using the software that comes with a PCI, AGP, or mini-PCIe video card

Answer: B

Diff: 2

92) Which computer upgrade might result in a power supply upgrade?

- A) Installing dual monitors
- B) Maximizing the refresh rate
- C) Increasing the resolution
- D) Installing a video card

Answer: D

Diff: 3

93) A technician is installing a video card into a computer that did not previously have a card installed. After installing a new video card, the computer displays no video output. Which of the following is the most likely cause?

- A) The video card does not have enough video RAM installed.
- B) The video card is in the wrong slot.
- C) The video card is incompatible with the system.
- D) The integrated video port is still enabled.

Answer: D

Diff: 2

94) After installing a new video card, the computer displays no video output. Which of the following is the most likely cause?

- A) The video cable must be upgraded to accommodate the new capabilities of the video card.
- B) The video card is defective.
- C) The video card is incompatible with the system.
- D) The video card does not have the power connector attached.

Answer: D

Diff: 3

95) After installing a new video card, the text is so large that some parts of the browser cannot be seen. What is the most likely problem?

- A) The resolution is set too low.
- B) The card is incompatible with the operating system installed on the system.
- C) The cable needs to be upgraded.
- D) The integrated video port needs to be disabled.

Answer: A

Diff: 3

96) How would you get rid of dead pixels?

- A) Do a virus scan.
- B) Replace the monitor.
- C) Degauss the monitor.
- D) Add more video RAM.

Answer: B

Diff: 3

97) You have determined that a video problem is hardware related. The system does not have a separate video adapter card. All cables and the monitor test good. Where is the most likely source of the problem?

- A) On the motherboard
- B) On the sound card
- C) In RAM
- D) In the power supply

Answer: A

Diff: 2

98) You have just installed a video adapter and nothing outputs after the computer powers on.

Which of the following is NOT a logical thing to check?

- A) Card inserts fully into expansion slot
- B) Monitor cable attaches correctly to adapter
- C) Screensaver setting in Display Control Panel
- D) Video driver for the operating system
- E) Video card power connection

Answer: C

Diff: 3

99) A friend of yours just bought a new computer. Now she wants a new video card. Which expansion slot technology will most likely be installed and available for the video card?

- A) AGP
- B) PCI
- C) PCIe
- D) PCI-X

Answer: C

Diff: 2

100) What can a technician do if a display has bright spots?

- A) Update the driver.
- B) Replace the display.
- C) Decrease the refresh rate.
- D) Lower the resolution.

Answer: B

Diff: 3

101) What should you do if video performance has always seemed to be slow or dragging?

- A) Run Windows Memory Diagnostics.
- B) Replace the video memory.
- C) Reduce the number of colors.

D) If an integrated port, buy a video card. If a video card is already installed, replace it.

Answer: C

Diff: 3

102) A flat panel monitor does not always come out of power saver mode. What is one thing that might help?

A) Update the video driver.

B) Replace the video cable.

C) If the video port is an integrated port, replace the motherboard. If an adapter, replace the video card.

D) Check power supply output voltages.

Answer: A

Diff: 2

103) A user wants to expand his normal Windows desktop work area across two monitors. What would be the best solution for this user?

A) Use an integrated VGA port and a DVI port on an adapter.

B) Install a video card with two ports if two ports are not available on the motherboard.

C) Use a KVM switch.

D) Use a video splitter.

Answer: B

Diff: 2

104) What should a technician try first if a display shows a dim image on every screen?

A) Swap the display with another one.

B) Update the video driver.

C) Reset the display to factory default settings and try adjusting brightness and contrast.

D) Replace the inverter.

Answer: C

Diff: 3

105) What is shared system memory?

A) Memory used by the processor and the chipset simultaneously

B) RAM used as storage space

C) Storage space used as RAM

D) Memory shared between the motherboard and the video adapter

Answer: D

Diff: 2

106) A display flickers and is driving the user crazy and giving him headaches. What should the technician adjust first?

A) Refresh rate

B) Resolution

C) Orientation

D) Position

Answer: A

Diff: 2

107) A monitor that will not come out of power saver mode might

- A) Need degaussing
- B) Need more RAM
- C) Need a driver update
- D) Be bad

Answer: C

Diff: 2

108) A desktop computer user has a USB hub and has used all USB ports, but wants more and the best performance possible. What should the technician recommend in this situation?

- A) Install another USB hub that connects to the one already installed.
- B) Replace the motherboard with one that has more USB ports.
- C) Use a USB port splitter.
- D) Install a USB expansion card.

Answer: D

Diff: 3

109) Which type of adapter can provide power at varying levels?

- A) eSATA
- B) Video
- C) USB
- D) NIC

Answer: C

Diff: 2

110) A computer for a non-profit organization took a power hit that took out many of the motherboard ports. Rather than replace the motherboard, a volunteer with technical skills has decided to just add inexpensive cards instead. Which type of card would the technician need to reconnect the computer to the wired network?

- A) NIC
- B) eSATA
- C) USB
- D) Video

Answer: A

Diff: 2

111) Which type of card would a technician have to connect a cable to motherboard header pins?

- A) NIC
- B) eSATA
- C) USB
- D) Video

Answer: C

Diff: 3



### 4.3 Multiple Answer Questions

1) A BIOS update goes awry due to a power outage that occurred in the middle of the update. What are two solutions? (Select two.)

- A) Use the backup BIOS installed on the motherboard.
- B) Boot from an optical disc, external hard drive, or flash drive.
- C) Replace the motherboard BIOS.
- D) Re-image the computer.
- E) Replace the motherboard.

Answer: A, E

Diff: 2

2) What are two things that can be done when a resource conflict is detected between two adapters? (Select two.)

- A) Reboot the computer.
- B) Move one of the adapters to a different expansion slot.
- C) Flash the BIOS.
- D) Update the operating system.
- E) Use Device Manager to reorder addresses.

Answer: A, B

Diff: 3

3) Which two adapters would have a cable that attaches to the motherboard? (Select two.)

- A) Video
- B) NIC
- C) USB
- D) eSATA
- E) Sound

Answer: C, D

Diff: 2

4) A computer customer is wanting some additional storage provided by an external device. Which two adapters provide additional ports for external storage? (Choose two.)

- A) Video
- B) NIC
- C) USB
- D) eSATA
- E) Sound

Answer: C, D

Diff: 1

## 4.4 Matching Questions

1) Match the BIOS Setup option with the description.

Boot Sequence \_\_\_\_\_

USB Configuration \_\_\_\_\_

ACPI \_\_\_\_\_

Numlock On/Off \_\_\_\_\_

Hardware Monitor \_\_\_\_\_

Answer: C, E, D, A, B

Diff: 2

A. Keyboard option

B. Motherboard temperature

C. Prioritized list of devices to boot system

D. Power options

E. Place to enable port used for thumb drive

2) Match the system resource with the description.

I/O address \_\_\_\_\_

IRQ \_\_\_\_\_

Memory address \_\_\_\_\_

A. Assigned to BIOS and other chips on cards

B. A method of prioritizing between devices

C. Like a mailbox number for devices

Answer: C, B, A

Diff: 2

## 4.5 Fill-in-the-Blank Questions

- 1) The chip that contains software to start the computer is the \_\_\_\_\_. Note: Use the acronym (the letters) commonly used for this part.  
Answer: BIOS  
Diff: 2
- 2) To set the configuration for today's computers, go into the \_\_\_\_\_ program.  
Answer: Setup, BIOS Setup  
Diff: 2
- 3) The \_\_\_\_\_ holds the Setup program.  
Answer: BIOS, system BIOS  
Diff: 2
- 4) The \_\_\_\_\_ holds the POST program.  
Answer: BIOS, system BIOS  
Diff: 2
- 5) The type of BIOS used today is \_\_\_\_\_.  
Answer: Flash, UEFI, EFI  
Diff: 2
- 6) A special type of memory where system Setup configuration information is saved is \_\_\_\_\_.  
Answer: CMOS  
Diff: 1
- 7) \_\_\_\_\_ batteries are the most common type used on motherboards.  
Answer: lithium  
Diff: 1
- 8) \_\_\_\_\_ is the name given when collectively referring to IRQs, I/O addresses, DMA channels, and memory addresses assigned to a device, adapter, or port.  
Answer: system resources  
Diff: 2
- 9) A(n) \_\_\_\_\_ is a number assigned to an adapter or device so that the processor can recognize higher priority devices quicker.  
Answer: IRQ  
Diff: 2
- 10) Two types of APICs are \_\_\_\_\_ and \_\_\_\_\_.  
Answer: LAPIC and I/O APIC  
Diff: 3

11) \_\_\_\_\_ is used within the Windows environment to view system resources such as IRQs.

Answer: Device Manager

Diff: 1

12) An I/O address is normally shown using the \_\_\_\_\_ numbering system.

Answer: hexadecimal

Diff: 1

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## 4.6 Essay Questions

- 1) Using good grammar, explain the difference between CMOS and BIOS.

Answer: Answers will vary, but a sample answer follows: CMOS holds saved BIOS settings. BIOS holds the Setup program, POST, and software to get the computer started including the capability to look for an operating system from several locations.

Diff: 2

- 2) Using good grammar, describe three BIOS options and a situation in which a technician would use the specific option.

Answer: Answers will vary, but a sample answer follows: A technician would use the boot order BIOS option to place the optical drive as the first search device when the technician needs to load or reload an operating system. A technician would use BIOS to disable the integrated sound ports if a sound card were being installed. A technician would use the supervisor BIOS password to prevent users from changing options that would affect corporate support such as being able to install Windows updates during off hours.

Diff: 2

- 3) Using good grammar, describe one way to flash a BIOS.

Answer: Answers will vary, but a sample answer follows: Download the BIOS upgrade from the Internet. If a laptop device is being used, ensure the laptop has the power brick attached. Double-click the downloaded file and install the BIOS upgrade. You might need to jumper two motherboard pins to remove the BIOS write-protection.

Diff: 2

- 4) Using good grammar, describe specific steps a technician should take when installing an adapter.

Answer: Answers will vary, but a sample answer follows: A technician should always ensure power is removed when installing an adapter. Other recommendations include using good antistatic practices, make a backup before making any changes to the operating system, documenting any changes, and providing the user with the documentation that comes with the adapter.

Diff: 2