

Exam: 220-221

Title: A+ Core Hardware

Ver : 12.1.03

QUESTION NO: 1

A service technician is trying to install two IDE drivers as master/slave on the same ATA port. Drive 1 installed first, jumped as a master and the BIOS correctly auto detected it. Drive2 was then jumped as a slave and installed but the BIOS would not auto detect it. Which of the following would be the next logical step to trouble shoot the problem?

- A. Replace drive 1.
- B. Replace drive 2.
- C. Make the CD-ROM drive the slave.
- D. Configure drive 2 as a master with no slave.

Answer: D

Explanation: We should try the 2^{nd} drive as a master with no slaves to check if the drive has some physical defect or not.

Incorrect Answers

- **A:** Drive 1 is already detected; there is no need to replace it.
- **B:** We could troubleshoot drive more before replacing it.
- C: We want to troubleshoot drive 2, not the CD-ROM.-

OUESTION NO: 2

You get an error during POST on a PC. What could this mean? (Choose two)

- A. BIOS needs to be reset.
- B. There is a hardware failure.
- C. HIMEM.SYS is missing or incorrect.
- D. The drivers for the device are incorrect.
- E. The Windows file system is generating an error.

Answer: A, B Explanation:

A: POST errors could disappear after a reset of the BIOS.

B: Errors during POST are hardware-related.

- **C:** Missing files or incorrect files would not generate POST errors.
- **D:** Drivers are software-related. BIOS handles hardware.
- **E:** POST errors are not affected by the operating systems.

QUESTION NO: 3

A workstation has just been installed on the Ethernet LAN but cannot communicate with the network. What should you do first?

- A. Reinstall the network protocols.
- B. Reinstall the network interface card driver.
- C. Verify the IP configuration on the workstation.
- D. Verify the link status on the computer's network card.

Answer: D

Explanation: First we should verify physical connectivity. Link status of the network adapter indicates that the adapter is connected to the network.

Incorrect Answers

A, B; C: Before checking the protocol configuration, device drivers, and the IP configuration we should check if we have physical connectivity.

QUESTION NO: 4

A customer just installed a new CD-RW. The system was working fine before the installation, but now the CD-RW does not work. What should you suggest that the customer should do?

- A. Flash or upgrade the BIOS
- B. Check the CONFIG.SYS setup
- C. Add the CD-RW in the device manager
- D. Check the jumper settings on the CD-RW

Answer: D

Explanation: Most CD-RWs are connected through IDE interface. Modern PCs has two IDE interfaces. Each interface can host two devices: one master and one slave. Each IDE should either be configured as master or as slave through jumper settings. If an IDE device is misconfigured it will not function. This is the most likely cause of the problem in this scenario

- **A:** It is not likely that a BIOS upgrades would affect the IDE interface in any direct way.
- **B:** The CONFIG.SYS command does not contain any device drivers. Furthermore, CONFIG.SYS is only used on legacy operating systems.
- **C:** CD-RWs are not added through the Device Manager.

QUESTION NO: 5

Which events increase the chances of a motherboard failure? (Choose two)

- A. Power being lost while updating the BIOS.
- B. Power being lost while updating the printer.
- C. Connecting a USB device with the power on.
- D. Connecting a PS/2 mouse with the power on.
- E. Connecting a serial mouse with the power on.

Answer: A, E

Explanation:

- **A:** Power loss during the update process of the BIOS could result in a motherboard failure.
- **E:** A serial mouse is directly connected to an adapter on the motherboard. We should avoid connecting a serial mouse to the computer while the power is turned on. If we are unlucky the motherboard might get damaged.

Incorrect Answers

- **B:** Software configuration does not, in general, affect the motherboard in any negative way.
- **C:** USB devices are hot-pluggable. Connecting USB devices with the power on is one of the features of USB:
- **D:** Connecting a PS/2 while the power is on might not be such a good idea, but it is not as critical as connecting a serial mouse.

OUESTION NO: 6

You just installed a Pentium II 800-MHz chip. When you booted up your computer, it only recognized 400-MHz chip. What could be the problem?

- A. Only half of the chip is installed into the socket.
- B. The jumper settings on the chip are not correct.
- C. You do not have enough space on your hard drive.
- D. The BIOS setting is not reflecting a multi-speed setting.

Answer: D

Explanation: The CPU speed on modern PCs is configurable through BIOS. We should adjust the BIOS setting of the CPU speed.

- **A:** If the CPU chip is incorrectly installed the computer would not start.
- **B:** There are no jumper settings on CPU chips.
- **C:** Lack of hard drive space does not affect the CPU speed.

QUESTION NO: 7

Your customer calls and reports that her computer shuts down and reboots on its own. What is one possible cause?

- A. The BIOS is set to reboot automatically every day.
- B. Her external SCSI CD-RW is using too much power.
- C. The CMOS is configured to cycle power at a certain time.
- D. The power supply is not providing enough power to the system.

Answer: D

Explanation: One likely cause of sporadic system reboots could a malfunctioning power supply. Fluctuations in the voltage would cause reboots.

Incorrect Answers

- **A:** There is no BIOS setting that reboots the system every day.
- **B:** Most external devices use their own power supply. Furthermore, if an external device needs more power than the system can handle, the external device fails, not the computer.
- **C:** There is no such CMOS configuration.

QUESTION NO: 8

A customer with Windows 9x cannot print even through the printer is online and ready with the print jobs queued. What could be the problem?

- A. Offline printing is enabled.
- B. The printer driver is overloaded.
- C. The printer is in energy-restrict mode.
- D. The printer and CPU frequency don't match.

Answer: A

Explanation: Offline printing could be enabled. The print jobs would then be spooled but not printed until offline printing is disabled.

- **B:** The print driver is just the software interface between the print device and the printer management system. It cannot be overloaded.
 - **Note:** In Microsoft Windows terminology the printer management system is called the printer.
- **C:** Energy-restrict mode would just save energy; it would not prevent print jobs from printing.

D: There is no match between the CPU frequency and the printer.

QUESTION NO: 9

What can be done with a system when its IDE controller fails on the motherboard? (Choose two)

- A. Install a new driver.
- B. Reset the ROM BIOS.
- C. Replace the hard drive.
- D. Replace the motherboard.
- E. Install an IDE add-on card.

Answer: D, E

Explanation: Since the system only has one IDE controller which handles two IDE interfaces you must either replace the motherboard or install an IDE add-on card.

Incorrect Answers

- **A:** Device drivers are not used for the IDE controller.
- **B:** Resetting the BIOS would most likely have not affect on the IDE controller.
- C: The IDE controller is failing, not any hard drives.

OUESTION NO: 10

You have just finished a clean installation of Windows 2000 and removed the installation CD from the drive. When you reboot the system you receive the following error message, "Can't find bootable CD-ROM device." What should you do to correct the problem?

- A. Reinstall the ATAPI driver
- B. Make sure MSCDEX is loaded in CONFIG.BAT
- C. Change the BIIOS boot sequence to A, C, CD-ROM
- D. Replace your hard drive, run FDISK, and re-install the OS

Answer: C

Explanation: The system is trying to boot from the CD-ROM, and it is not trying to boot from the hard drive at all. We must reconfigure the BIOS boot sequence setting to include the hard drive in the boot sequence.

- **A:** ATAPI drivers are low level drivers that are installed by the operating systems, not by the users.
- **B:** MSCDEX is a used in older Windows versions. It has no use in Windows 2000/XP/.NET.
- **D:** The OS was just installed on the computer. So there is most likely not any problem with your hard drive at all.

QUESTION NO: 11

What should you do first if the mouse pointer is not moving correctly across the screen?

- A. Clean the mouse
- B. Reconfigure the system
- C. Plug into a different port
- D. Check the mouse drivers in the operating system

Answer: A

Explanation: The mouse could be dirty. We should clean it first.

Incorrect Answers

B, D: This is most likely not a configuration problem.

C: A faulty port seems unlikely.

QUESTION NO: 12

What does the BIOS do when a plug and play card is installed?

- A. Looks for the manufacturer of the card.
- B. Checks the processor ID for compliance.
- C. Disables the other cards until the new card is installed.
- D. Consults the ESCD to determine which system resources are available and needed for the card.

Answer: D

Explanation: Every PnP BIOS keeps a list of all system resources used, usually on the CMOS or the flash ROM. This storage area is called the ESCD (Extended System Configuration Data). The ESCD provides a computer's BIOS and the operating system with information for communicating with Plug-and-Play (PnP) devices.

Incorrect Answers

A: The BIOS does not look for the manufacturer of the card.

B: The BIOS does not check the processor ID.

C: The BIOS does not disable other cards.

QUESTION NO: 13

Which priority settings are given to the SCSI ID number? (Choose two)

- A. 0 lowest
- B. 0 highest
- C. 1 lowest
- D. 15 lowest
- E. 15 highest

Answer: B, D

Explanation: The highest-priority ID on the SCSI bus is 7. You normally assign this ID to the host adapter. Next in priority, from highest to lowest, are IDs 6-0 and then 15-8. So 0 has higher priority than 15.

QUESTION NO: 14

What does memory mapped I/O do?

- A. Maps IRQ's to PCI interface cards.
- B. Acquires a unique ID for each memory module.
- C. Duplicates the contents of the ROM BIOS into RAM.
- D. Uses the same address space for memory locations and peripheral devices.

Answer: D

Explanation: Memory mapped I/O uses memory locations to communicate with peripherals.

QUESTION NO: 15

Which device would you plug into an AGP slot?

- A. Hard drive
- B. Serial port
- C. Video card
- D. External storage device

Answer: C

Explanation: The AGP port is used for video cards.

Incorrect Answers

A: Hard drives are most often connected through the IDE or the SCSI interface.

B: A serial port is not plugged into any slot.

D: External storage devices use the USB, SCSI, parallel interfaces, not the AGP slot.

QUESTION NO: 16

You want to upgrade your slot1 motherboard. Which of the following chips are available in the slot1 package? (Choose three)

A. P 233

B. PII 233

C. PIII 333

D. PIII 800

E. AMD Athlon

Answer: B, C, D

Explanation: Slot 1 motherboards are used for Celeron, Pentium II and Pentium III processors, not for Pentium or Athlon processors.

OUESTION NO: 17

What must you do to attach a new IDE hard drive? (Choose three)

- A. Select a unique ID
- B. Set the termination jumpers
- C. Set the master/slave jumper
- D. Ensure proper cable orientation
- E. Install drive bay and secure it properly

Answer: C, D, E

Explanation: The new IDE drive must be set to master or slave. It should then be physically installed in the drive bay and secured. Finally the cable orientation must be appropriate.

Incorrect Answers

A: IDE drives do not use unique IDs like SCSI devices do.

B: No terminations are used on IDE cabling. SCSI use termination.

QUESTION NO: 18

A video resolution of 800 into 600 would constitute which video mode?

- A. EGA
- B. VGA
- C. CGA
- D. SVGA

Answers: D

Explanation: 800x600 is SVGA mode.

Incorrect Answers

A, C: EGA and CGA are older standards with lower resolutions. These standards are

not in use any more.

B: 640x480 is VGA mode.

QUESTION NO: 19

Which type of motherboard standard accepts the 5 pin DIN keyboard connector? (Choose two)

- A. AT
- B. XT
- C. LT
- D. ATX

Answer: A, D

Explanation: AT and ATX can supply the new 5-pin DIN keyboard connector.

Incorrect Answers

B, C: Older motherboards, like XT and LT, does not support the 5-pin DIN keyboard connector.

QUESTION NO: 20

You would have to enable int 13h support on an SCSI controller card in order to use which device?

- A. Scanner
- B. Bernoulli

- C. Tape device
- D. Bootable CD-ROM

Answer: D

Explanation: The boot loader can use interrupt Int 13h calls to find and load the kernel of the system and any other files needed to boot on SCSI hard drives.

Note: When the operating system or an application wants to access a hard disk in real-address mode, it normally does it via the BIOS (BASIC Input/Output > System) via the INT 13h services. The BIOS provides a standard interface to the hard disk. This INT 13h interface allows the operating system and applications to access the hard disk without the need for the applications to understand the complexities of accessing the hard disk.

QUESTION NO: 22

Which type of connector do analogue modems use?

- A. AUI
- B. BNC
- C. RJ-11
- D. RJ-45

Answer: C

Explanation: Analog modems use the RJ-11 connector. This is also known as the common telephone connector.

Incorrect Answers

A, B; D: AUI (thicknet), BNC (thinnet), and RJ-45 (UTP/STP) are used for network cables. Analog modems are connected to the phone line, not the directly to Ethernet networks.

QUESTION NO: 22

What best describes the time it takes CRT's electrons beam to paint the screen from top to bottom in a monitor?

- A. Dot pitch
- B. Interlacing
- C. Video RAM
- D. Refresh Rate

Answer: D

Explanation: The refresh rate is the frequency of the Cathode Ray Tube's (CRT) beam to crossing the monitor.

Incorrect Answers

- **A:** Dot pitch is a measure of the resolution.
- **B:** Interlacing is a technique where a single frame of screen does not correspond to a single instant in time.
- **C:** The Video RAM is used to store the screen image.

QUESTION NO: 23

Which ports are most often used to connect a digital camera to a computer? (Choose two)

- A. USB Port
- B. SCSI Port
- C. PS/2 Port
- D. Parallel Port
- E. RS-232 Port

Answer: A, E

Explanation: The new USB and the older RS-232 serial interfaces are most often used to connect a digital camera to a computer.

Incorrect Answers

B: The SCSI interface is not used in digital cameras.

C: The PS/2 is interface is used for keyboard and mouse.

D: Not many digital cameras use the parallel interface-

QUESTION NO: 24

Which symptoms would the initial POST not identify?

- A. Bad memory location.
- B. ROM BIOS configuration failure
- C. A stuck key or defective keyboard.
- D. A RAM chip that fails at high temperature

Answer: D

Explanation: The POST (power on self test) would not be able to detect a RAM chip that fails at a high temperature. This would not happen when the computer starts.

Incorrect Answers

A, B; C: POST identifies bad memory locations, ROM BIOS configuration failures, and stuck key or defective keyboards.

QUESTION NO: 25

A bent pin on a three row DB-15 male connector plug could cause problems with which device or component?

- A. Monitor
- B. Joy sticks
- C. Laser-Jet Printer
- D. External Modem

Answer: A

Explanation: The monitor port got 15 pins in three rows (see below)



Incorrect Answers

B: The games/joystick port got 15 pins in two rows.



C: Printers use the parallel interface.

D: External modems use the serial interface.

QUESTION NO: 26

What is the first step in diagnosing a completely dead computer that was working fine the day before?

- A. Test the power supply.
- B. Replace the CMOS battery.
- C. Check the AC outlet for voltage.
- D. Reseat the hard drive cable controller.

Answer: C

Explanation: First check the most basic possible causes of the problem. We should check AC outlet first

Incorrect Answers

- **A:** The power supply is not the most likely cause of the problem. Furthermore, we should start to check the most basic causes first.
- **B:** An empty battery would only cause the CMOS settings to be lost. The computer would still be able to start.
- **D:** A unseated drive cable controller would not cause a complete dead computer.

QUESTION NO: 27

When you boot up your computer the light on the diskette drive lights up and stays lit. What does this mean?

- A. Disk is in the drive
- B. No disk is in the drive
- C. The data cable is installed backwards
- D. The diskette drive is functioning properly

Answer: C

Explanation: A floppy cable that is installed backwards would keep diskette drive light lit.

Incorrect Answers

A, B; D: If the diskette drive was functioning properly the diskette drive light would be turned off after the boot process finishes regardless if the there were a disk present or not.

QUESTION NO: 28

After inserting a floppy disk and accessing the A drive, you get the error message;

"Drive A not ready, Abort, Retry, Fail"

What should you suspect? (Choose two)

- A. The drive is bad.
- B. The floppy disk is bad.
- C. The drive cable is bad
- D. The power connector is loose.
- E. The drive is dirty and needs to be cleaned

Answer: B, E

Explanation: First we should suspect the floppy diskette. It could be defect.

The drive could also be dirty and in need of cleaning.

Incorrect Answers

A, C: The drive or the drive cable could bad, but it is less likely.

D: We would get another error message if the power connector was loose.

QUESTION NO: 29

Which AT command is used to reset your Modem's configuration?

- A. AT
- B. ATD
- C. ATH
- D. ATZ

Answer: D

Explanation: The ATZ command is used to reset the modem.

Incorrect Answers

- **A:** The AT command lets you know that your modem is plugged in and turned on. The mode should respond with OK.
- **B:** The ATD command is takes the phone off the hook and dials a number if one is included with the command.
- **C:** The ATH command is used to hang up the connection.

QUESTION NO: 30

The modem will not dial out. What is the most likely cause of the problem? (Choose two)

- A. Cable is not plugged in.
- B. The phone line is defective.
- C. The Modem is set for tone dial.
- D. The internet service provider is down.
- E. The modem is set to disable call waiting.

Answer: A, C

Explanation:

The most likely problems are a disconnected cable or incorrect modem configuration.

- **B:** A defective phone line is a less likely cause of the problem.
- **D:** It is most likely a local problem and not a problem with the ISP.
- E Disabling call waiting would not prevent the modem from dialing out.

OUESTION NO: 31

A service technician just added a slave hard drive to a working PC. When powered on the PC just gives a blank screen. What is the most likely cause?

- A. Missing floppy cable.
- B. CMOS configuration error.
- C. Hard drive cable connection.
- D. Incompatible slave hard drive.

Answer: D

Explanation: The slave driver could be incompatible with the current system.

Incorrect Answers

A: Floppy cables are not used with hard drives.

B: Hard drives are seldom needs to be configured in BIOS in modern computers.

C: A faulty hard drive connection would not prevent computer from starting.

QUESTION NO: 32

What would a failed processor fan most likely cause? (Choose two)

- A. CPU damage
- B. System lockups
- C. Hard drive failure
- D. Floppy drive failure
- E. CD-ROM drive failure

Answer: A, B

Explanation: A failed processor fan would cause the CPU to overheat. This could damage the CPU or make the CPU work incorrectly which would cause system lockups.

Incorrect Answers

C: Hard drives have their own cooling and are not dependant on the CPU fan.

D: Floppy drives have no cooling.

E: CD-ROM drives do not depend on the CPU fan for cooling.

QUESTION NO: 33

Your client has reported a problem with a slow connection to the internet using a 56Kbps Modem. What are the most likely causes? (Choose two)

- A. IRQ conflict
- B. Insufficient RAM
- C. Out dated modem drive
- D. Noise on the telephone line
- E. Modem on wrong serial port

Answer: C, D

Explanation:

C: The modem driver could be outdated and the modem could be working at a lower speed.

D: A noisy phone line would also cause slower transfer speeds due to errors which would force retransmissions.

Incorrect Answers

- **A:** An IRQ conflict would prevent all communication; it would not just slow down the traffic.
- **B:** RAM could slow the computer down in general, but it is not the main cause of a slow internet connection.
- **E:** A wrong serial port would prevent any internet connection, not just slow it down.

OUESTION NO: 34

While playing a stereo CD audio, adjusting the left hand speaker's volume from windows, effects the right hand speakers instead. What are the most probable causes? (Choose two)

- A. An IRQ conflict exists.
- B. The volume controls are muted.
- C. An incorrect CD audio cable was used.
- D. You need to run windows utility from the correct working directory.
- E. The right hand speaker is plugged at the wrong connector on the sound card.

Answer: C, E

Explanation: The problem could be with a defect CD audio cable or simply that the right and left hand speakers are connected in a reversed way.

Incorrect Answers

A: An IRQ conflict would not produce this error.

B: With muted volume controls we would have no sound.

D: This is not a configuration problem that can be solved by configuration of Windows.

QUESTION NO: 35

The user says that after downloading a program from the internet the computer will not boot. What is the first thing to ask the user?

- A. Were any modem errors were reported.
- B. If the network used for internet access.
- C. Did you scan the file for viruses before you opened it?
- D. Was the downloaded software compatible with your system?

Answer: C

Explanation: Files downloaded from the Internet could contain viruses. A virus could prevent a system from booting.

Incorrect Answers

- **A:** Modem errors are not related to boot problems.
- **B:** We already know that the network is used for internet access.
- **D:** Incompatible software is less likely to cause this problem. Incompatible software would most likely not be able to install.

OUESTION NO: 36

In the middle of printing several print jobs to a networked dot matrix printer the power goes out. When power is restored you are unable to get any print jobs from the printer. What should you do to continue printing on this device?

- A. Hit the reload button on the printer.
- B. Delete existing print jobs from the printer buffers.
- C. Print the documents from a different PC on the network.
- D. Click the print command several times until the buffer clears.

Answer: B

Explanation: We should remove the spooled documents. We simply delete the existing print jobs.

- **A:** The print jobs are not stored on the print device they are spooled on the print server.
- **C:** We need to manage the documents from the print server. There is no need to set up printing on another computer.
- **D:** This is not they way to clear the print buffers.

QUESTION NO: 37

Some one placed a BIOS password on a computer and forgot the password. What should you do? (Choose two)

- A. Boot to a floppy and fdisk the drive.
- B. Temporarily remove the CMOS battery.
- C. Go into BIOS setup and delete the password.
- D. Clear the CMOS by shortening the CMOS jumper.
- E. Boot down the computer while holding down the <CTRL> key.

Answer: B, D

Explanation: We must reset the BIOS settings. Depending on the motherboard this can be done by removing the CMOS battery or shortening or by shortening the CMOS jumper.

Incorrect Answers

- **A:** Repartitioning the drive is unnecessary and will not help.
- **C:** We cannot enter BIOS setup without the password.
- **E:** We must reset the CMOS battery. There is no way we can override the password with different key strokes.

QUESTION NO: 38

A user can not log in the local area network and to the internet over the LAN. Other users in the same area are no experiencing any problems. From your workstation you attempt to log in as the user with her username and password and do not experience any problems. However you can not log in from her workstation with either her username or yours. What is the likely cause of this problem?

- A. Server down
- B. Bad station patch cables.
- C. Wrong username and password.
- D. Insufficient rights to access the server.

Answer: B

Explanation: Something prevents the computer from connecting to the network. A bad patch cable is a possibly cause.

We were able to use her credentials to log in from another computer so we know that the server is up (not A) and the correct user name and password was used (not C) and that the user has sufficient rights to access the server (not D).

OUESTION NO: 39

Which of the following source present a risk factor for virus infection on a PC? (Choose two)

- A. A floppy disk received from a friend.
- B. A downloaded file from the internet.
- C. FDISK/MBR file on the hard drive.
- D. DLL file that was loaded with a new machine.
- E. . CAB file that was loaded with the new machine.

Answer: A, B

Explanation: Floppy disks and downloaded internet files can be infected by viruses.

Incorrect Answers

C: FDISK/MBR clears the master boot sector.

D, E: .DLL and .CAB are not executed and does not contain viruses.

QUESTION NO: 40

What are the minimum hardware components required for the POST to past? (Choose all that apply.)

- A. CPU
- B. RAM
- C. Mouse
- D. Hard drive
- E. Video Card

Answer: A, B, E

Explanation: To pass the POST the CPU, the RAM and the Video card must be functioning.

Incorrect Answers

The Mouse or the hard drive does not have to be functioning or even being present.

QUESTION NO: 41

If a computer is not protected with a UPS what problem can occur when power is restored after a power failure?

- A. ROM needs to be programmed.
- B. There is danger from a power surge.
- C. The CMOS RAM has a battery failure.
- D. The motherboard switch needs to be reset.

Answer: B

Explanation: When the power is restored the computer could be hit by a power surge.

Incorrect Answers

Restoration of power would not affect the ROM, the CMOS RAM battery, or the motherboard.

QUESTION NO: 42

Which precaution should you take when installing a video card with on-board memory?

- A. Unplug the PC
- B. Flash the BIOS
- C. Use an ESD strap
- D. Leave the power ON

Answer: A

Explanation: Unplugging the PC and using an ESD strap are both good preventive measures. Unplugging the PC is the first step to take though.

Incorrect Answers

B: There is no need to flash the BIOS.

C: First we should unplug the computer.

D: Computer should be unplugged-

QUESTION NO: 43

Silicon lubricants can be used for?

- A. Drive heads
- B. SIMM installations

- C. Keyboard performance
- D. Floppy disk drive door mechanisms

Answer: C

Explanation: Silicon lubricant can be used to improve keyboard performance: remove the keys and spray silicon lubricant on each bottom side of the keys.

Incorrect Answers

Silicon lubricant is not used for drive heads, SIMM installations or floppy disk drives.

QUESTION NO: 44

If the computer suddenly restarts and lights flicker which event probably occurred?

- A. Electrical sag
- B. Electrical surge
- C. Prolonged power outage
- D. Power overload and circuit shutdown

Answer: A

Explanation: An electrical sag could cause the lights to flicker and computers to restart.

Incorrect Answers

- **B:** An electrical surge could cause damage, but it would not cause the lights to flicker.
- C: A prolonged power outage would turn off the light, not just make them flicker.
- **D:** A power surge does not overload the power, it drops the power.

QUESTION NO: 45

In a system with multiple hard drives, what are the benefits of using multiple fans? (Choose two)

- A. Increase memory bandwidth.
- B. Increase speed of data transfers.
- C. Cool the outside of the computer.
- D. Redistribute airflow through the system.
- E. Reduce internal component temperature.

Answer: D, E

Explanation: Multiple fans redistributes airflow and reduce internal component temperature.

Incorrect Answers

A, B: Memory or data transfer speed are not directly effected by better cooling. C: The outside temperature of the computer is not affected by multiple fans.

QUESTION NO: 46

Which is not a valid AMD CPU?

- A. K6
- B. K5
- C. K8
- D. Athlon

Answer: C

Explanation: K5, K6 and Athlon are all existing AMD processors.

Incorrect Answers

There is no processor called K8.

QUESTION NO: 50

What is the main difference between AT and ATX motherboards? (Choose two)

- A. PS/2 port
- B. BNC connector
- C. Soft power switch
- D. Serial connectors
- E. Parallel connectors

Answer: A, C

Explanation: AT motherboards, but not ATX motherboards, support the PS/2 port and a Soft power switch.

- **B:** A BNC connecter is used on Network adapters to connect to bus network. A BNC connector is not built-in on AT motherboards.
- **D:** The serial connectors are about the same on AT and ATX motherboards.
- **E:** The parallel connector are the same on AT and ATX motherboards.

QUESTION NO: 51

What must you do after replacing the CMOS battery?

- A. Use FDISK
- B. Flash the BIOS
- C. Set the date and time
- D Format the hard drive

Answer: C

Explanation: Replacing the CMOS battery would reset the date and time settings.

Incorrect Answers

There is no need to use FDISK, flash the BIOS or format the hard drive after replacing the CMOS battery.

QUESTION NO: 52

Which address does the primary IDE controller use by default?

- A. 130H
- B. 170H
- C. 1F0H
- D. 300H

Answer: C

Explanation: The primary IDE controller uses the I/O address IF0H.

Check in Device Manager.

0x00000170-0x00000177 Secondary IDE Channel 0x000001F0-0x000001F7 Primary IDE Channel

Incorrect Answers

A, D: These addresses do not apply.

B: The 170H address is used by the secondary channel

QUESTION NO: 53

Where can you find the BIOS version ID?

- A. System properties
- B. BIOS setup screens
- C. Motherboard manual
- D. On the back of the computer

Answer:	B

Explanation: The BIOS version ID can be seen when using the BIOS setup screens.

Incorrect Answers

System properties,

Incorrect Answers

A: System properties cannot reveal the version of the BIOS that is running.

C, D: Most modern BIOSes can be upgraded by flashing them. It would therefore be impossible to contain the current BIOS version in either the Motherboard manual or at the back of the computer.

QUESTION NO: 54

What is the most significant difference between EDO RAM and Fast Page Mode DRAM?

- A. faster
- B. slower
- C. smaller
- D. cheaper

Answer: A

Explanation: EDO RAM is a more recent, faster technology compared to Fast Page mode DRAM.

QUESTION NO: 55

You have purchased three new USB devices and want to add them to your laptop but you only have one IRQ available. How many IRQ's will your USB modem, mouse and keyboard use?

- A. 1
- B. 2
- C. 3
- D. 4

Answer: A

Explanation: All USB devices, as many as 127, can be connected to a single USB port. They all share a single IRQ.

QUESTION NO: 56

What happens when shadowing options are enabled in a computer BIOS?

- A. Instructions stored in various ROM chips are copied into RAM.
- B. Values are stored twice in the memory for redundancy checking.
- C. Conventional memory is remapped to top of extended memory.
- D. Data stored in RAM and adaptive card is shadowed into extended memory.

Answer: A

Explanation: Generally RAM is faster than ROM. Copying the contents of the BIOS ROM into RAM for faster access is called shadowing.

QUESTION NO: 57

In a Plug and Play system when installing a second hard drive what determines the drive letter?

- A. End user
- B. Position on cable
- C. Operating system
- D. Drive manufacturer

Answer: B

Explanation: A PC has one IDE controller and two IDE port. Each port supports two IDE devices. One must be master and the other must be slave. Furthermore, the positioning on the cable determines which drive letter the device receives. This assignment is handled by the BIOS.

- **A:** Typically the drive letter assignment is automatic. However, on some systems the end user can decide this assignment himself. This is not so common yet.
- C: Different OSes can give different possibilities for assigning drive letters. However, as many OSes still does not support this feature. Furthermore, the initial assignment of drive letters is based on the positioning on the cable. Some OSes give the possibilities to re-assign these drive letters.
- **D:** The IDE standard is general and do not depend on different brands of hard drives. The position on the IDE cable decides the driver letter of the hard drive.

QUESTION NO: 58

Which CPU is intended to operate at a 66MHZ motherboard speed?

- A. Intel 80486
- B. Pentium 75
- C. Pentium II 350
- D. Pentium II 300

Answer: D

Explanation: The CPU speed must be a multiple of the bus speed. A 66MHz bus speed times 4.5 gives 300 MHz.

Incorrect Answers

- **A:** No 486 processor had a bus speed of 66MHz: The maximum bus speed of a 486 processors is 33MHz.
- **B, C:** Neither 75MHz and 350MHz are not dividable with 66MHz. The CPU speed must be a multiple of the bus speed.

QUESTION NO: 59

A Laser printer keeps getting a memory overflow error when printing a particular document. Which of the following are possible fixes? (Choose three)

- A. Reset the printer cable.
- B. Replace the toner cartridge.
- C. Decrease the print resolution.
- D. Add more RAM to the printer.
- E. Reduce the RET (Resolution Enhancement Technology).

Answer: C, D, E

Explanation: The memory is inadequate. Decreasing the print resolution or reducing the RET would decrease the memory demand. Adding more memory could also help the memory overflow problem.

Incorrect Answers

A: Memory overflows are not related to the printer cable.

B: The toner cartridge is in any way related to the memory overflow problem.

QUESTION NO: 60

In a Laser printer what is the most common cause of a wavy image on the paper?

- A. Damaged fuser
- B. Smooth pickup rollers
- C. Defective LASER scanner
- D. Defective toner cartridge

Answer: D

Explanation: A defective Laser toner cartridge is the most likely cause of a wave image.

QUESTION NO: 61

In a dot matrix printer what strikes the print ribbon to form an image?

- A. Pins
- B. Trip Hammers
- C. Character Wheel
- D. Electromagnets

Answer: A

Explanation: Dot matrix uses pins that physically strike the print ribbon.

OUESTION NO: 62

What has the highest throughput?

- A. SPP
- B. ECP
- C. EPP
- D. UPP

Answer: B

Explanation: Both ECP and EPP use bidirectional communication. EPP only allow communication in one direction (half duplex), while ECP allows simultaneous bidirectional communications (full duplex). Furthermore, ECP uses a DMA channel which enables direct access to peripherals and thus makes it faster.

Incorrect Answers

A, D: The answers SPP and UPP do not apply.

C: ECP is faster.

QUESTION NO: 63

Which of the following is the newest type of printer interface?

- A. USB
- B. Serial
- C. SCSI
- D. Parallel

Answer: A

Explanation: The USB interface is a newer than the serial and parallel interfaces.

Incorrect Answers

- **B:** It is unusual to use the serial interface for printing since the serial interface is much slower than the parallel interface.
- C: SCSI is not a printer interface.
- **D:** The parallel interface is the standard interface.

QUESTION NO: 64

Which component on a printer should you check first when an error code indicates a paper jam but no paper is in the printer?

- A. Tractors
- B. Print head
- C. Platen folder
- D. Paper-Feed Sensors

Answer: D

Explanation: The paper-feed sensors are malfunctioning when a non-existing paper jam is reported.

OUESTION NO: 65

A dot matrix printer generates printouts that are good on the left side of the page but fade as the printer moves on the right side of the page. This is the most likely due to?

- A. Worn out ribbon
- B. Mis-aligned platen

- C. Worn out print head
- D. Mis-aligned print head

Answer: B

Explanation: If the image gets gradually lighter on one side of the paper, the platen is misaligned and need to be adjusted.

QUESTION NO: 66

What is the minimum cable type 100BaseTX specifies?

- A. Category 3
- B. Category 4
- C. Category 5
- D. Category 6

Answer: C

Explanation: Category 5 is the minimum cable type that supports the 100Mbps speed required by the 100BaseTX specification.

Incorrect Answers

A, B: Category 3 and Category 4 only support 10Mbps.

D: Category 6 supports 100Mbps but it is not the minimal cable type that support this speed.

QUESTION NO: 67

What is the set of rules used to transmit data from one computer to another called?

- A. Service
- B. Adaptive
- C. Protocol
- D. Network Operating System

Answer: C

Explanation: A protocol implements the set of rules that transmits data.

Incorrect Answers

A: A network service often depends on protocols, but they are not the same thing.

B: Adaptive does not apply here.

D: A Network Operating System is an OS that supports networking. The OS must use protocols to enable communication with other entities.

QUESTION NO: 68

Which of the following configuration settings are set in EEPROMS on a NIC? (Choose three)

- A. IRQ
- B. Protocol
- C. IP Address
- D. I/O Address
- E. MAC address

Answer: A, D, E

Explanation: An EEPROM of a NIC is configured with IRQ, I/O address and MAC address.

Incorrect Answers

B, C: Protocol and IP address are implemented in the operating system not in the EEPROM.

QUESTION NO: 69

Which of the following cable types can you use to network two computers? (Choose three)

- A. IDE
- B. Serial
- C. SCSI
- D. Parallel
- E. UTP

Answer: B, D, E

Explanation: Serial, Parallel and UTP (Unshielded twisted Pair) cables are examples of cables that can be used to network computers.

Incorrect Answers

A, C: The IDE and SCSI interfaces are to connect devices to the computer, not for networking two computers.

QUESTION NO: 70

Which type of logical topology does 10Base2 use?

- A. Bus
- B. Star
- C. Ring
- D. Tree

Answer: A

Explanation: 10Base2 (thinnet) uses single cable which implements a bus technology.

Incorrect Answers

B, C: Ring topology or stare topology cannot be implemented with 10Base2.

D: There is no popular network topology called tree.

OUESTION NO: 71

How many devices can be connected on a fast/wide scsi2 bus?

- A. 7
- B. 8
- C. 12
- D. 15

Answer: D

Explanation: The fast/wide SCSI2 bus supports 15 devices.

Incorrect Answers

A: Earlier versions of SCSI only supported 7 devices.

B, C: There is no SCSI standard that support 8 or 12 devices.

QUESTION NO: 72

What is the memory contained inside the CPU called?

- A. RAM
- B. ROM
- C. CACHE
- D. VIRTUAL

Answer: C

Explanation: The CPU uses fast cache memory to improve speed.

Incorrect Answers

A: CPU does not contain RAM.

- **B:** CPUs often contain micro-code. This micro-code is either hard-wired or stored in ROM. However, this ROM memory is not so well known. Therefore this alternative is not the best answer.
- **D:** Virtual memory is logical memory, not physical memory.

QUESTION NO: 73

Which interrupt is cascaded to provide interrupts 9 through 15?

- A. 1
- B. 2
- C. 3
- D. 4

Answer: B

Explanation: IRQ2 cascades to IRQ9.

QUESTION NO: 74

What does a 28 dot pitch refer to in describing a monitor?

- A. .28 cm wide.
- B. .28 millimeter wide.
- C. .28 cm apart.
- D. .28 millimeter apart

Answer: D

Explanation: A 28 dot pitch refers to a 28 millimeter distance between the dots.

Incorrect Answers

A, B: Dot pitch refers to the distance between dots, not the size of a dot.

C: Dot pitch is measured in millimeters, not centimeters.

QUESTION NO: 75

How many IDE devices can connect on a single IDE channel?

- A. I
- B. 2
- C. 3
- D. 4

Answer: B

Explanation: Each IDE channel supports two IDE devices. Ordinarily the motherboard contains one IDE controller and two IDE channels.

QUESTION NO: 76

Typically in which of the following would you use a PC card?

- A. Laptop.
- B. Desktop.
- C. Laser printer.
- D. Docking station.

Answer: A

Explanation: PC cards are used in portable computers such as Laptops. PC card are smaller than the cards user for stationary systems.

Incorrect Answers

- **B:** A desktop computer typically uses PCI and ISA cards.
- **C:** Laser printers does not use PC cards.
- **D:** A docking makes the portable computer a desktop computer with keyboard, monitor, interfaces and adapter cards.

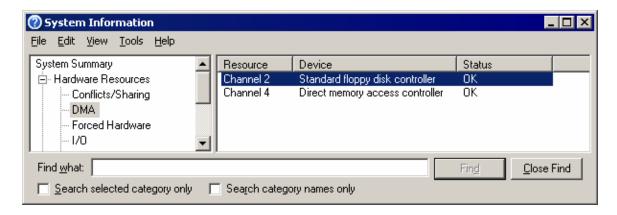
QUESTION NO: 77

What is the DMA channel for the floppy drive controller?

- A. 1
- B. 2
- C. 3
- D. 4

Answer: B

Explanation: The floppy drive controller uses DMA 2. This can be checked with the Device Manager or System Information on Windows computers.



QUESTION NO: 78

What do you need to do when replacing the motherboard in a portable computer?

- A. Ensure that the board is AT or ATX.
- B. Match the manufacturer and the model number exactly.
- C. Any motherboard will act as long as it is specified for a laptop.
- D. Ensure that the board is from that manufacturer and that the boards are interchangeable.

Answer: D

Explanation: When replacing the motherboard in a portable computer you must make sure that the boards are interchangeable. Motherboards from different vendors, or even different models from the same vendor, might not be compatible.

Incorrect Answers

- **A:** The AT and ATX standards only apply to Desktop computers.
- **B:** Different models might be compatible.
- C: Different models from the same vendor, might not be compatible.

QUESTION NO: 79

What is the default I/O port for COM2?

- A. 2E8H.
- B. 3E8H.
- C. 2F8H.
- D. 3F8H.

Answer: C

Explanation: COM2 uses I/O address 2F8.

Incorrect Answers

A: COM4 use 2E8. **B:** COM3: use 3E8. **D:** COM1: use 3F8.

QUESTION NO: 80

Which settings determine which IDE device are master and which is slave?

- A. Hardware settings on the device.
- B. Hardware settings on the motherboard.
- C. Software settings on the operating system.
- D. Hardware settings on the IDE controller board.

Answer: A

Explanation: The jumper settings on the hard drive are used to configure the drive either as master or as slave.

OUESTION NO: 81

Which IRQs are assigned first?

- A. CMOS configured.
- B. Hardware configured.
- C. Windows 9x legacy.
- D. Windows 9x plug and play.

Answer: A

Explanation: You use BIOS to reserve IRQs for non-Plug and Play devices. This prevents Plug and Play devices from using these IRQs. The BIOS configuration is saved in CMOS memory.

Incorrect Answers

B, C: Hardware configured and Windows 9x legacy devices might be configurable from within the OS or not at all. These devices are not assigned any IRQ, they just use the IRQ that they have been configured with.

D: Plug and play devices configure themselves and use the remaining available IRQs.

QUESTION NO: 82

Which features of a SCSI-2 to enable a device to accept multiple instructions?

- A. Line queuing.
- B. Dual channel.
- C. Multi LUN support.
- D. Command queuing.

Answer: D

Explanation: SCSI-2 supports a feature called command-tag queuing, which enables suitably-equipped operating systems to issue multiple disk commands to the SCSI adapter without having to serialize the operations.

QUESTION NO: 83

What is the most important step when upgrading the BIOS?

- A. Shut off the UPS.
- B. Unplug all connectors.
- C. Write down all the settings.
- D. Save the BIOS upgrade files on to a floppy disc.

Answer: C

Explanation: Before upgrading the BIOS we should write down all important CMOS settings to be able to return to the previous BIOS state if needed.

Incorrect Answers

- A: The use of an UPS is not related to the upgrade of the BIOS.
- **B:** It is not necessary to unplug connections.
- **D:** The upgrade files would not be helpful if we want to revert to the previous state.

QUESTION NO: 84

In which circumstance is it necessary to replace the CMOS chip?

- A. If it is a non flash type.
- B. When the CMOS is full.
- C. When you upgrade the CPU.

D. After you have flashed it several times.

Answer: A

Explanation: If you must upgrade the BIOS, for example to support a new device, and your BIOS is not flashable, then the CMOS chip would have to be replaced.

Incorrect Answers

B: The CMOS chip cannot become full.

C: A CPU upgrade would in general not require a replacement of the CMOS chip.

D: Flashing the CMOS chip several would not force you to replace it.

OUESTION NO: 85

What is the most important difference between standard USB and IEEE1394?

- A. IEEE1394 is faster.
- B. USB cable is bigger.
- C. USB is Plug and Play.
- D. IEEE1394 is hot swappable.

Answer: A

Explanation: IEE1394 (fireware) is a more recent and faster interface compared to the USB interface.

Incorrect Answers

B: The cables are about the same size.

C: Both USB and IEE1394 support Plug and Play.

D: Both USB and IEE1394 are hot swappable.

QUESTION NO: 86

What should you use to clean circuit board contacts?

- A. Jeweler's cloth.
- B. Silicone spray.
- C. An emery cloth.
- D. Contact cleaning solution.

Answer: C

Explanation: An emery cloth or a pencil eraser should be used to clean the circuit board contacts.

QUESTION NO: 87

Which of the following must be changed when replacing a hard drive? (Choose two)

- A. Voltage.
- B. DMA channel.
- C. Cable orientation.
- D. Controller address.
- E. Drive select jumper.

Answer: C, E

Explanation: When a drive is replaced the cable orientation and the drive select jumper must be used in an appropriate way.

Incorrect Answers

Voltage, DMA channel, and Controller Address are non-configurable settings on a hard drive.

QUESTION NO: 88

Which of the following are considered types of video RAM? (Choose three)

- A. VRAM.
- B. LRAM.
- C. WRAM.
- D. DRAM.
- E. SGRAM

Answer: A, C, E

Explanation: VRAM (Video RAM), WRAM (Windows Accelerator Card RAM), and SGRAM (Synchronous Graphic Random Access Memory) are used on video adapters.

Incorrect Answers

B:

D: DRAM is not specifically a video RAM type.

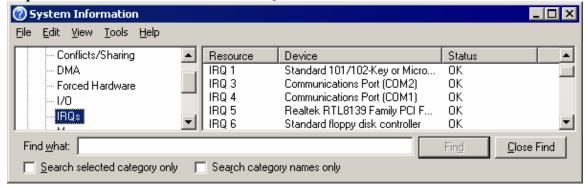
QUESTION NO: 89

What is the default IRQ for COM2?

- A. 2
- B. 3
- C. 4
- D. 6

Answer: B

Explanation: COM2 and COM4 use IRQ3.



Incorrect Answers

A: IRQ is available for general use.

C: COM1 and COM3 use IRQ4.

D: IRQ 6 is used by the standard floppy disk controller.

QUESTION NO: 90

Which of the following are FRU? (Choose three)

- A. RAM.
- B. ROM.
- C. CPU.
- D. Ziff socket.
- E. CMOS battery.

Answer: A, C, E

Explanation: Field replaceable units (FRU) can be replaced out in the field. FRUs include RAM, CPU and CMOS battery.

Incorrect Answers

B: ROM is not easily replaceable.

D: A Ziff socket cannot be replaced. They are used to insert CPUs and they are integrated into the motherboard.

QUESTION NO: 91

Which items need to be set up on a SCSI drives? (Choose two)

- A. ID.
- B. Voltage.
- C. Terminators.
- D. Cable length.

Answer: A, C Explanation:

A: To set up SCSI drives we need SCSI ID to identify each SCSI device

C: .The SCSI chain must be terminated at both ends with specific terminators.

Incorrect Answers

B, D: Voltage and cable length are not configurable SCSI settings.

QUESTION NO: 92

A customer's Windows desktop on her monitor appears to be distorted. What should you do to try to isolate the problem? (Choose two)

- A. Try another monitor.
- B. Try another program.
- C. Replace the power supply.
- D. Install additional video memory.
- E. Boot the computer to a command prompt.

Answer: A, E Explanation:

A: The monitor could be malfunctioning. One solution is to simply replace it.

E: We might be required to restart the computer in another video mode, like a command prompt, to be able to troubleshoot the monitor.

Incorrect Answers

- **B:** As the distorted monitor appears in the OS, no specific program could be the cause of the problem.
- **C:** It seems unlikely that a faulty power supply would cause this problem. Furthermore, a computer technician should not replace the power supplies of monitors.
- **D:** Video RAM affects resolution only. Video RAM does not affect distortion.

QUESTION NO: 93

What does a 201 error indicate during POST?

- A. CPU error.
- B. Memory error.
- C. Video problem.
- D. Floppy drive error.

Answer: B

Explanation: POST errors in the 200-299 range indicates (almost always) Memory

errors.

Note: In general post errors lays in the following ranges:

1xx: Motherboard errors.

2xx: RAM errors.
3xx: Keyboard errors

6xx: Floppy disk drive errors

11xx: COM1 errors 17xx: Hard drive errors

3xxx: NIC errors

Incorrect Answers

A, C: CPU and Video errors would not be in the 2xx range.

D: A floppy drive error would be in the 6xx range.

QUESTION NO: 94

How should you place terminations on a SCSI bus with one internal hard drive and one external CD-ROM drive?

- A. Terminate the hard drive only.
- B. Terminate the SCSI interface card.
- C. Terminate both the hard drive and CD-ROM drive.
- D. Terminate the SCSI card, hard drive and CD-ROM drive.

Answer: C

Explanation: We must terminate both ends in the SCSI chain. We should terminate both the internal hard drive and the external CD-ROM.

It would look like this:

Terminator<-->Internal SCSI HD<--->Controller<--->External SCSI HD<--->Terminator.

Incorrect Answers

A, B: A SCSI chain must be terminated in both ends.

D: No SCSI chain use three terminations, only two is required.

QUESTION NO: 95

A customer calls for support with a monitor problem but can't wait for a service technician. She describes the problem being no monitor signal, no screen saver and no hibernation and she reports that she thinks it is the video card. The customer also mentions that she has three identical functioning systems in her office. What could you ask the customer to do to eliminate the video card as the cause of the problem switch with one of the functioning systems?

- A. The monitor.
- B. The motherboard.
- C. The video driver chip.
- D. All flat ribbon cables.

Answer: A

Explanation: Either the monitor or the video adapter could be the cause of this problem. By replacing the monitor we could be sure if the video adapter is the source of the problem or not.

Incorrect Answers

- **B:** It would too much trouble to replace the motherboard at this early stage of the troubleshooting process.
- **C:** We should replace the monitor before we replace the video adapter.
- **D:** Neither the monitor or the Video adapter use flat ribbon cables.

QUESTION NO: 96

What is the most probable cause of a sound card and a printer working intermittently?

- A. Conflicting IRQs.
- B. The wrong APM setting.
- C. A changed printer cable.
- D. An improperly seated card.

Answer: A

Explanation:

The most likely cause of this intermittent problem is a hardware conflict. A hardware conflicts occurs when two devices use the same IRQ. In this scenario the sound card and the printer use the same IRQ.

Incorrect Answers

B: Advanced Power Management (APM) settings would not cause devices to work intermittently.

C: A changed printer cable would not affect the sound card.

QUESTION NO: 97

You just installed a second IDE slave hard drive to the primary controller in your Windows 9x system. You double click my computer and can't see the second drive. What are the reasons for this? (Choose two)

- A. Your hard drive is not partitioned.
- B. The BIOS has not been updated.
- C. The floppy drive is not connected.
- D. The proper drivers are not loaded.
- E. Device manager needs to be refreshed.

Answer: A, B Explanation:

- **A:** The hard drive might not be partitioned and formatted. It would not show up until it is partitioned.
- **B:** The system might be unable to detect the hard drive. A BIOS upgrade might enable the system to detect the second drive.

Incorrect Answers

- **C:** This is a hard drive problem, not a floppy drive problem. These problems are not directly connected.
- **D:** IDE hard drives do not require device drivers.
- **E:** Refreshing the Device Manager would not have any positive effect of the configuration.

QUESTION NO: 98

Which devices can cause interference with a modem connection? (Choose two)

- A. Fan.
- B. Phone.
- C. Printer port.
- D. Fax machine.
- E. Power supply.

Answer: B, D

Explanation: A phone and a fax machine both use the same telephone connection as the modem. This could interfere with the modem connection.

Incorrect Answers

A fan, the printer port, and the power supply do not in a direct way interfere with the modem connection

QUESTION NO: 99

Your external modem is not functioning properly and you suspect that a malfunctioning serial port is the problem. Which tool should you use to test the serial port?

- A. Multimeter.
- B. Post card.
- C. Loopback plug.
- D Null modem cable

Answer: C

Explanation: Loopback plugs can be used to test local ports of a computer.

Incorrect Answers

- **A:** Measuring the Voltage, Resistance, etc is not of much use when troubleshooting a serial port.
- **B:** A POST card can be used to interpret BIOS POST messages.
- **D:** A null modem cable is used to connect two PCs through the serial port.

QUESTION NO: 100

You install a network interface card NIC that is not plug and play in your computer and see several jumpers on the card that allow you to change various settings. Which NIC setting do jumpers allow you to change? (Choose two)

- A. IRQ.
- B. Token size.
- C. MAC address.
- D. Memory address.
- E. Communication protocol.

Answer: A, D

Explanation: The IRQ and the Memory address of a NIC (Network Interface Card) can be configured by jumpers.

Incorrect Answers

- **B, E:** Token size and communication protocols are configured in the operating system and not by jumpers on the card.
- C: The MAC (Media Access Control) address is a preconfigured factory setting that cannot be changed by jumpers on the NIC card. Every network adapter has an unique MAC address.

QUESTION NO: 101

You had just made a floppy boot disk and want to test it. You put the disk in the drive and restart the computer but it boots up to the Windows 9x GUI. Why?

- A. The disk is set to write protect.
- B. The BIOS is set to boot the hard drive first.
- C. You did not set the boot sector of the disk to active.
- D. You left your Windows 9x CD in the CD-ROM drive.

Answer: B

Explanation: The BIOS is configured to boot from the hard drive before it tries to boot from the floppy.

Note: GUI stands for the Graphical User Interface.

Incorrect Answers

- A: A write protected floppy disk can still be use as a boot disk.
- **C:** To boot from a hard drive partitions the partition need to be set to active. No such procedure is required to boot from a diskette.
- **D:** The system would not boot to GUI from a Windows 9x CD-ROM. The installation process would start but no GUI would be reached initially. Furthermore if the system boots from the CD-ROM instead of the diskette, the BIOS start order should be changed.

QUESTION NO: 102

A customer calls and says the computer will not boot. The system brings up the first screen that shows the memory count but it freezes immediately so that the user can't enter the CMOS setup screen. What should you take to the site to fix the problem?

- A. CPU.
- B. Modem.

- C. Video card.
- D. Floppy drive.

Answer: A

Explanation: It could be a memory problem(not listed) or a CPU problem.

Incorrect Answers

B: POST does not check modems.

C: The monitor is working so it is not a video card problem.

D: A floppy drive problem with not freeze the computer.

QUESTION NO: 103

What is the first critical component that a fail motherboard battery effects?

- A. RAM.
- B. ROM.
- C. BIOS.
- D. CMOS.

Answer: D

Explanation: The CMOS memory uses the motherboard battery to keep its settings.

Incorrect Answers

A: RAM do not use the motherboard battery.

B: ROM is not affected.

C: The BIOS is the firmware that handles the settings in CMOS. The BIOS program is stored in ROM and is not affected by motherboard battery.

QUESTION NO: 104

You have just finished a clean installation of Windows 2000 and remove the installation CD from the drive. When you reboot the system you receive the following error message 'Can't find the bootable CD ROM device'. What should you do to correct the problem?

- A. Reinstall the ATAPI driver.
- B. Make sure MSCDEXE is loaded in CONFIG.BAT.
- C. Change the BIOS boot sequence to A, C, CD-ROM.
- D. Replace your hard drive and run FDISK and reinstall the OS.

Answer: C

Explanation: We should ensure that the boot sequence lists the hard drive before the CD-ROM drive or at least ensure that the hard drive is included as a boot device.

Incorrect Answers

- **A:** ATAPI drivers are not installed by users. They are a part of the operating system.
- **B:** MCSD.EXE was used in older Windows versions. It is not used in Windows 2000.
- **D:** There is no need to reinstall the OS, we just need to change the boot sequence.

OUESTION NO: 105

You have installed a new CD-ROM drive on the secondary controller with an IDE external storage device and now neither device works. What should you do?

- A. Install new CD-ROM drivers.
- B. Check master/slave jumpers.
- C. Plug in the CD-ROM drive power cable.
- D. Delete the drivers for the external storage device.

Answer: B

Explanation: Each IDE channel can host two IDE devices. One of the them must be configured as master and the other one must be configured as slave. Master and slave configuration are done by jumpers in the IDE devices.

Incorrect Answers

- **A:** CD-ROM drivers would not get the external storage device to work.
- **C:** A unplugged power cable of the CD-ROM would not cause both devices to malfunction.
- **D:** Deleting existing drivers would make the matters worse.

QUESTION NO: 106

You have an older PC that only has one IDE interface. One IDE hard drive and one IDE CD-ROM drive are also installed on the PC. How should you add a second IDE hard drive?

- A. Install a SCSI card.
- B. Install an add-on IDE interface card.
- C. Use an IDE cable that has extra connections on it.
- D. Use the existing free connector on the floppy drive cable.

Answer: B

Explanation: Each IDE interface can only support two IDE devices. To add a third IDE device we must add another IDE interface. Installing an add-on IDE interface card would provide a second IDE channel. Another two IDE devices could be installed.

Incorrect Answers

A: SCSI cards do not support IDE drives.

C: Each IDE channel can only support two IDE devices. There are no IDE channels cables that allow three or more IDE devices on a single IDE channel.

D: The floppy interface cannot be used for IDE devices.

QUESTION NO: 107

A monitor refresh rate in Windows 95 was changed and now the desktop in not available. What is the first step to correct this problem?

- A. Replace the video card.
- B. Boot windows in safe mode.
- C. Run VIDFIX.EXE from a DOS prompt.
- D. Change the video setting in the BIOS configuration.

Answer: B

Explanation: We must reboot in Safe mode and change to VGA mode, and then reboot normally.

Incorrect Answers

A: It is a configuration problem, not a hardware problem.

C: There is no VIDFIX.EXE DOS utility that can help fix the configuration problem.

D: There are no video settings in BIOS for the refresh rate.

QUESTION NO: 108

A user calls support and says that his system will not boot up. The error message that is displayed is 'missing operating system'. What can cause this?

- A. A non bootable disk is in the disk drive.
- B. The Windows 9x CD is in the CD ROM drive.
- C. The Windows 9x CD is not in the CD ROM drive.
- D. The key board is not working or is plugged in improperly.

Answer: A

Explanation: A non-bootable diskette in the disk drive could cause this problem if the boot sequence lists A: before C:.

Incorrect Answers

- **B:** The Windows 9x CD is bootable. The system would be able to boot from it, however only the Windows 9x installation program would be started.
- **C:** An empty CD-ROM drive would never cause this error message.
- **D:** The keyboard failure could not cause this error message.

OUESTION NO: 109

What would definitely cause an IDE hard drive to be damaged?

- A. Forcing the IDE cable to the floppy drive connector.
- B. Connecting one end of the IDE cable the wrong way.
- C. Using the Y splitter where the 5- and 12- volt connectors are switched on one end.
- D. Connecting to a defective power supply that only gives five volts on the 12volt line.

Answer: C

Explanation: A switch of the 5 volt and 12-volt connectors could cause physical damage to the hard drive. The appropriate voltage must be used.

Incorrect Answers

- **A:** It is not physically possible to use an IDE cable to floppy drive connector. They are dissimilar.
- **B:** The IDE cable is symmetrical. It can be used both ways.
- **D:** A power supply that provides 5 volts instead of 12 volt would not cause any harm to the hard drive.

QUESTION NO: 110

You have a jumpered modem that could only take the standard COM1 and COM 2 ports. Which step will help when installing the modem in a Windows 9x PC?

- A. Disable the second serial port in CMOS.
- B. Free the IRQ tied up by the floppy drive controller.
- C. Use manual setting for COM1 and set it to IRQ 4.
- D. Ensure that the second and third USB devices are not conflicting with the IRQ.

Answer: C

Explanation: In Windows 9x we can manually configure COM1 for the modem. Furthermore, we should ensure that COM1 use the standard IRQ value of 4.

Incorrect Answers

- **A:** Disabling the second serial port would not be useful. We have no conflicts.
- **B:** The IRQ used by the floppy controller, IRQ 6, cannot be used. We must the standard IRQ for COM1, namely IRQ 4.
- **D:** The USB devices on a single USB bus use only a single IRQ:

QUESTION NO:111

How are toner cartridges disposed off?

- A. Burned
- B. Thrown Away
- C. Recycled by manufacturer
- D. Recycled with standard plastic

Answer: C

Explanation: Toner cartridges contain material that could damage the environment and should therefore be recycled. The manufacturer is responsible for recycling the toner cartridges.

Incorrect Answers

Toner cartridges should not be burned, thrown away or recycled as standard plastic.

QUESTION NO:112

Uninterruptible power supply is also known as?

- A. Surge Strip
- B. Power Helper
- C. Battery Backup
- D. Circuit Breaker

Answer: C

Explanation: Sometimes Battery Backup is used to denote Uninterruptible Power Supply (UPS).

Incorrect Answers

- **A:** Surge suppressors, maybe we can call them surge strips, are devices used to filter out the effects of voltage spikes and surges that are present in commercial power sources and smooth out power variations. The they do offer any uninterruptible supply of power however.
- **B:** There is no such thing as a Power Helper in this context.
- **D:** A circuit breaker is out of context here.

QUESTION NO: 113

What is the proper storage environment for OPC (Organic PhotoConductive) drums?

- A. Humidity free
- B. Cool and Dark
- C. Cool and Bright
- D. Warm and Dark

Answer: B

Explanation: An OPC drum should be stored cool and dark.

Incorrect Answers

A: It is not of outermost importance to store the OPC drum humidity free.

C: The OPC drum should not be exposed to light.

D: The OPC drum should not be exposed to heat.

QUESTION NO: 114

Why should you have slot covers installed in a computer? (Choose two)

- A. Keep dust out
- B. Improve Air flow
- C. Protect against ESD
- D. CPU warmer
- E. Prevent installing unnecessary components

Answer: A, B

Explanation: The slot covers keep dust out and improve the air flow.

Incorrect Answers

C: Slot covers are not used for ESD protections.

D: The CPU need to be cooled, not warmed.

E: This is not the purpose of slot covers.

QUESTION NO: 115

ISA card should work in which bus slots? (Choose two)

- A. PCI
- B. ISA
- C. AGP
- D. MCA
- E. EISA

Answer: B, E

Explanation: ISA cards work in ISA and Extended ISA (EISA) slots.

Incorrect Answers

- **A:** The PCI bus is a newer and faster compared to ISA. ISA cards cannot be used in PCI slots.
- **C:** The AGP (Accelerated Graphics Port) can only be used for video adapters.
- **D:** MCA is an even older technology than ISA. MCA and ISA are not compatible.

QUESTION NO: 116

A ZIF socket was put on the motherboard to help with inserting and removing?

- A. CPUs
- B. SIMMS
- C. DIMMS
- D. CPU FANS

Answer: A

Explanation: A Zero Insertion Force (ZIF) socket is used to inserting and removing CPUs.

Incorrect Answers

B, C: Memory modules such as SIMMS and DIMMS do not a ZIF socket

D: CPU fans do not use a ZIF socket.

QUESTION NO: 117

What is the motherboard speed setting for a Pentium-200?

- A. 50 MHZB. 60 MHZ
- C. 66 MHZ
- D. 200MHZ

Answer: C

Explanation: A Pentium 200 MHz processor runs with a 66MHz bus speed. The CPU speed is three times the bus speed.

Incorrect Answers

- **A:** There are not Pentium motherboards with bus speed of 50MHz.
- **B:** 200 is not dividable by 60. The CPU speed is always a multiple of the bus speed.
- **D:** Pentium motherboards do not support bus speed as high as 200MHz.

QUESTION NO: 118

How many 168 Pin DIMMs are required per memory bank?

- A. 1
- B. 2
- C. 6
- D. 8

Answer: A

Explanation: A single 168 Pin DIMM is used for every memory bank.

Incorrect Answers

B: 168 Pin DIMM do not need to be installed in pairs.

C, D: Only a single 168 Pin DIMM is required per memory bank.

QUESTION NO: 119

How many 72 pin SIMMs are required when using a socket 7 motherboard?

- A. 1
- B. 2
- C. 4
- D.6

Answer: B

Explanation: 72-pin SIMMs are used in pairs.

Incorrect Answers

A: A single 72-pin SIMM cannot be installed.

C: Often four SIMMs can be installed, but only two are required.

D: Only two is required.

QUESTION NO: 120

Which are valid types of parallel ports? (Choose three.)

A. EPP

B. EEP

C. ECP

D.USB

E. Bi-directional

Answer: A, C, E

Explanation:

A: EPP (Enhanced Parallel Port) features up to 2-MB-per-second data-transfer rates, bidirectional 8-bit operation.

C: ECP (Extended Capabilities Port) features 2-MB-per-second data transfer and bidirectional 8-bit operation.

E: A parallel port can be bi-directional.

Note: Bi-directional is not a port type, however this is the third best alternative. Bi-tronic would be a better choice, but it is not present. Bi-Tronics features bidirectional communication.

Incorrect Answers

B: There is no such thing as an EEP parallel port standard.

D: USB is a serial port.

OUESTION NO: 121

What is the data bus width for an ISA slot?

A. 12

B. 16

C. 32

D. 64

Answer: B Explanation: ISA uses a 16-bit data bus width. **Incorrect Answers A:** 12 bits are not used by ISA: **C, D:** Later technologies such as PCI and AGP implements 32 and 64 bit data buses. **QUESTION NO: 122** What is the main feature of SDRAM? A. Using fewer transistors B. Locating the boot sector C. Transferring the BIOS information D. Delivering the data in high speed bursts Answer: D **Explanation:** SDRAM delivers the data in high-speed bursts. **Incorrect Answers A:** The number of transistors are very high. **B:** BIOS locates the boot sector. **C:** RAM is used to store information, not to transfer information. **QUESTION NO: 125** Intel's Single Edge Contacts (SEC) design contains both a CPU and a A. L1 Cache B. L2 Cache C. L3 Cache D. L4 Cache **Answer: B Explanation:** The SEC design contains the CPU and a L2 cache. **QUESTION NO: 126** The process of refreshing memory is the process of A. Testing the memory chip registers.

- B. Cleaning the memory for reuse.
- C. Recharging or reenergizing the registers.
- D. Deleting memory before shutting down the system.

Answer: C

Explanation: The memory is refreshed by recharging and reenergizing the memory registers.

QUESTION NO: 128

Where are the system date and time maintained when the system is turned off?

- A. In RAM
- B. In the CMOS
- C. On the hard drive
- D. In the power supply

Answer: B

Explanation: The BIOS use CMOS memory to store the system date and time.

Incorrect Answers

- **A:** RAM is volatile and any information stored in RAM are lost when the system is turned off.
- **C:** The hard drive is not used by the BIOS to storage information.
- **D:** The power supply is not used for data storage.

QUESTION NO: 129

How do you differentiate an ATA/33 cable from an ATA/66 cable?

- A. Cable color
- B. Cable pin out
- C. Twists in the cable
- D. Number of wires

Answer: D

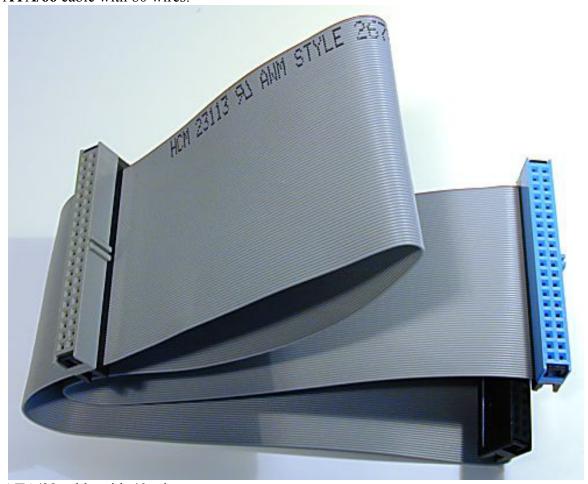
Explanation: The ATA/33 cable has 40 wires, while the ATA/66 cable has 80 wires. The

best way to distinguish between the cables is simply to count the wires

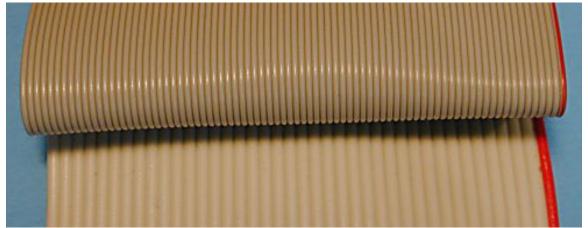
Note: Ultra ATA/66 removes bottlenecks associated with data transfers, especially

during sequential operations. Ultra ATA/66 requires a special 40-pin, 80-conductor cable

that reduces noise bleed-over and improves signal integrity by providing 40 additional ground lines between each of the standard 40-pin ATA signal lines and ground lines. **ATA/66** cable with 80 wires.



ATA/33 cable with 40 wires.



Incorrect Answers

A: There is no standard for coloring the cables..

- **B:** Both the ATA/33 cable and the ATA/66 cable use 40-pins. This enables ATA/33 and ATA/66 devices can coexists on the same cable. However, since both cables have the same number of pins they cannot easily be distinguished by pins.
- **C:** There are no twists in the cable.

QUESTION NO: 130

In common ink jet printers how is ink transferred to the page? (Choose two)

- A. Pressure is built by boiling ink
- B. Pressure is applied by using a crystal
- C. Pressure is built by a motorized pump
- D. Screens deflect ink on the paper into the proper positions.
- E. Ink is sprayed on to the paper and managed by a nozzle.

Answer: A, E

Explanation: There are two basic inkjet techniques:

Bubble jet: In a thermal inkjet printer, tiny resistors create heat, and this heat vaporizes ink to create a bubble. As the bubble expands, some of the ink is pushed out of a nozzle onto the paper.

Piezo-electric: A crystal is located at the back of the ink reservoir of each nozzle. The crystal receives a tiny electric charge that causes it to vibrate. When the crystal vibrates inward, it forces a tiny amount of ink out of the nozzle.

The bubble-jet technique is more common so boiling ink and nozzle is the correct answer.

QUESTION NO: 131

How many print head pins would there be on a standard paper quality dot matrix printer?

- A. 9
- B. 15
- C. 24
- D. 25

Answer: C

Explanation: Using 24 pins is called Near Letter Quality. It is the standard paper quality dot on matrix printers.

Note: Some Dot matrix printers have 48 pins.

Incorrect Answers

A: 9 pins are used in Draft mode. The quality is quite poor.

B, D: 15 or 25 pins are not used by matrix printers.

OUESTION NO: 132

In the fusing stage of the laser printing process the

- A. toner transfers to the corona.
- B. printer melts the written image to the paper.
- C. primary corona wire gives a charge to the photosensitive drum.
- D. laser writes the image that it will print to the photo sensitive drum.

Answer: B

Explanation: In the fusing stage the toner is melted permanently to the page by the fusing rollers that apply pressure and heat.

OUESTION NO: 133

Which type of connector is used for a parallel connector on the end that connects to the printer?

- A. 9-Pin (DB-9) male
- B. 25-Pin (DB-25) male
- C. 25-Pin (DB-25) female
- D. Centronics (36-pin) D-shell

Answer: D

Explanation: A 36-pin Centronics connector is used to connect to the physical printer (print device).

OUESTION NO: 134

A dot matrix printer is printing patchy, faint or uneven. Which action will correct the problem?

- A. Replacing the ribbon
- B. Replacing the timing belt
- C. Adjusting the paper feed tension
- D. Adjusting the tractor feed tension

Answer: A

Explanation: The print ribbon is worn out and should be replaced.

QUESTION NO: 135

Which component must be vacuumed or replaced during preventive maintenance on a laser printer?

- A. Ozone filter
- B. Scanning mirror
- C. Developing Blade
- D. Photosensitive Drum

Answer: A

Explanation: The Ozone filter must be kept clean. You can vacuum it or use canned air. Eventually the ozone filter will have to be replaced.

Incorrect Answers

B, **C**: Scanning mirrors and developing blades are usually not vacuumed or replaced.

D: You should not vacuum the photosensitive drum. It might be harmed.

QUESTION NO: 136

What should you use to connect two computers in an Ethernet peer to peer network using RJ-45 connectors and Category-5 Cable?

- A. Modem
- B. Patch Cable
- C. Cross over cable
- D. Hardware Loopback

Answer: C

Explanation: Two computers can directly be connected, via RJ-45 connectors, only by using a crossover cable.

Note: If you are going to connect devices with use the same ports you will always have to use crossover cable.

Incorrect Answers

A: A serial modem does not have any RJ-45 connector.

B: A patch cable is used to connect the computer to the wall socket.

D: A hardware Loopback is used to test if a port is functioning.

QUESTION NO: 137

Which equipment of the following means that the NIC and network equipment are set up so that they cannot send and receive at the same time?

- A. Half Duplex
- B. Single Duplex
- C. Paused Duplex
- D. Switched Duplex

Answer: A

Explanation: In half duplex we have bi-directional communication, but not in both

directions simultaneously.

Note: Full Duplex allows simultaneous traffic in both directions.

QUESTION NO: 138

Windows uses what name of a peer to peer network?

- A. Group
- B. Domain
- C. Network
- D. Workgroup

Answer: D

Explanation: In Windows terminology a Workgroup implements peer-to-peer networking.

Incorrect Answers

A: A Group is a container for users.

B: A Domain is a logical security boundary within the network. Servers are used to centralize the administration and the resources.

C: The network consists of the connected devices and the cabling.

QUESTION NO: 139

What is the minimum cable type 10BaseT specifies

A. Category 3

- B. Category 5
- C. Category 5e
- D. Category 6

Answer: A

Explanation: Category 3 and above can be used in 10BaseT networks. 10BaseT networks run at a speed of 10Mbps.

Incorrect Answers

Category 5, Category 5e, and Category 6 supports 100Mbps.

QUESTION NO: 140

Which device is used to extend the 10Base2 network beyond the maximum distance?

- A. Extender
- B. Repeater
- C. Converter
- D. Expander

Answer: B

Explanation: Repeaters are used to extend the signal distance of the cable by regenerating the signal.

OUESTION NO: 141

How many DMA channels are there in AT class computers?

- A. 3
- B. 4
- C. 7
- D. 8

Answer: D

Explanation: Traditionally, in XT computers had a single DMA circuit with 4 DMA channels. In later models, including AT computers, two DMA-circuits are used, each with 4 channels which brings the total number of DMA channels to eight.

Incorrect Answers

A, C: 3 or 7 DMA channels have never been used.

B: XT class computer used 4 DMA channels.

QUESTION NO: 142

From which location are first instructions available when a microcomputer is powering up?

- A. CPU
- B. Boot.ini
- C. ROM BIOS
- D. Config.sys

Answer: C

Explanation: The instructions are loaded from the ROM BIOS.

Incorrect Answers

- **A:** The CPU only contains microcode for the CPU itself. It does not contain any code run by the system at startup.
- **B, D:** The first instructions are not fetched from the hard drive, they are fetched from ROM:

QUESTION NO: 143

Typically how many PC Type III cards can you insert into a laptop at a time?

- A. 1
- B. 2
- C. 3
- D. 4

Answer: A

Explanation: PC Type 3 cards are quite thick. A LapTop only has a single Type III slot. A type 3 PC card does not fit in Type II or Type I slots so only a single Type III card can be used at a time.

Note: Type III slots are primarily for computers with removable hard disk drives. Type III cards are 10.5 mm thick Type II cards are 5 mm thick and Type I cards 3.3 mm thick. A PC Card will fit in any slot either its own size or a larger size. For example, a Type II modem would fit in a type III slot.

QUESTION NO: 145

Which is the fastest speed?

- A. 2 ns
- B. 20 ns
- C. 50 ns
- D. 100 ns

Answer: A

Explanation: The fast speed is the smallest time: 2 nanoseconds.

Access time is often measured in nanoseconds (ns).

QUESTION NO: 146

How many pins are on a VGA connector?

- A. 9
- B. 15
- C. 25
- D. 50

Answer: B

Explanation: There are 15 pins in a VGA connector. 3 rows with 5 pins each.



QUESTION NO: 147

When seeking to upgrade your BIOS for a particular motherboard. What do you need to know?

- A. Memory Type
- B. Hard Drive Size
- C. Make and Model
- D. DIMM manufacturer

Answer: C

Explanation: To get the appropriate BIOS update we need the make and model of the motherboard or the BIOS.

QUESTION NO: 148

Which kind of devices does SCSI support? (Choose three)

- A. Modem
- B. CD-ROM
- C. Tape Devices
- D. Hard Drives
- E. Video Cards
- F. Sound Cards

Answer: B, C, D

Explanation: CD-ROMs, Tape Devices, and Hard Drives are all example SCSI devices.

Generally SCSI is used for huge data volumes at high speeds.

Incorrect Answers

Modems, video cards, or sounds do not use SCSI.

QUESTION NO: 149

How does a parallel port communicate information to a peripheral device?

- A. 1 bit at a time
- B. 8 bytes at a time
- C. 1 byte at a time
- D. 16,555 bytes at a time.

Answer: C

Explanation: Parallel communication use 8 bits simultaneously. One byte is 8 bits.

Incorrect Answers

A: Serial communication use one bit a time.

B, D: Parallel communication only uses one byte at time.

QUESTION NO: 150

What could cause a larger capacity drive to format at lower capacity when you install it in an existing system?

A. The disk repository is full

- B. The new drive in not y2k compatible
- C. The ram does not support the larger capacity hard drives
- D. The BIOS cannot handle the larger capacity drive and formats at the highest recognizable capacity.

Answer: D

Explanation: If the BIOS do not support the higher capacity drive, you may only be able to use a portion the available space on the hard drive.

QUESTION NO: 151

A bearing in the power supply fan goes out. What should you replace?

- A. Fan
- B. Case
- C. Bearing
- D. Power Supply

Answer: D

Explanation: The whole power supplier should be replaced. PC technicians should not try to repair power supplies.

OUESTION NO: 152

Which values are held in the CMOS for hard drive?

- A. Drive bay location.
- B. Access Speed to data
- C. Size (Head, Cylinders, Sectors)
- D. Physical dimension of the drive (Height, Width, Depth, Weight)

Answer: C

Explanation: In BIOS the size of a hard drive is measured in Heads, Cylinders and Sectors.

QUESTION NO: 153

Which type of field replaceable unit is a SCSI host adapter?

A. CPU

- B. I/O card
- C. Video Card
- D. Hard Drive

Answer: B

Explanation: A SCSI adapter is used for communication. It is an Input/Output card.

QUESTION NO: 154

How many devices does USB support?

- A. 32
- B. 64
- C. 127
- D. 256

Answer: C

Explanation: 127 devices are supported on a single USB chain.

QUESTION NO: 155

What is the main communication method from one personal digital assistant to another personal digital assistant?

- A. IR
- B. USB
- C. RS 232
- D. IEEE1394

Answer: A

Explanation: PDAs (personal digital assistants) use wireless Infrared (IR) to communicate.

QUESTION NO: 156

Which of the following devices may have the same looking connector? (Choose two)

- A. USB printer
- B. VGA monitor
- C. Serial mouse

- D. SCSI scanner
- E. Parallel printer

Answer: D, E

Explanation: SCSI scanners and parallel printers might have the same looking connector

QUESTION NO: 157

Which steps must you complete when installing a second IDE on the same IDE controller that has an existing device?

- A. Set the drive identification to match.
- B. Terminate the second drive properly
- C. Set one drive a master and the other a slave.
- D. Place the boot drive at the end of the IDE cable.

Answer: C

Explanation: One drive must be set as master and the other must be set as slave. The jumper settings on the hard drive are used for this purpose

Incorrect Answers

- **A:** IDE does not, like SCSI, require device identification.
- **B:** IDE does not, like SCSI, require termination.
- **D:** The boot drive is not required to be placed at the end of the IDE cable.

QUESTION NO: 158

What is the function of an energy star compliant monitor?

- A. Used only with fast processors
- B. Same as standard monitor type
- C. Switches to low power status when signal does not change
- D. Consumes less power than other monitors while powering up.

Answer: C

Explanation: An energy star compliant monitor saves power by switching to low power status when the video signal is constant.

QUESTION NO: 159

When installing an AT power supply which colors are adjacent on the connector?

- A. Red, Red
- B. Black, Red
- C. Red, Black
- D. Black, Black

Answer: D

Explanation: On XT, AT and Baby AT motherboards black should be adjacent to black when attaching the power cables.

QUESTION NO: 160

Your customer decided to install a new USB printer on his Windows 95 computer but cannot get the computer to recognize it. What is the most likely cause?

- A. IRQ conflict
- B. DMA conflicts
- C. USB cable too short
- D. USB supplement for Windows 95 is not installed.

Answer: D

Explanation: Windows 95 needs additional installation packages to support USB. The original version of Windows 95 was released before the USB standard arrived.

QUESTION NO: 161

You get a CMOS Checksum error during boot up. What is the most likely cause?

- A. Power Supply is bad.
- B. BIOS needs Updating
- C. CMOS battery is nearing end of life.
- D. Hard Drive types are incorrectly defined.

Answer: C

Explanation: A CMOS checksum error indicates an error in the configuration. The most likely cause of this error is that the contents of the CMOS have been erased. The CMOS settings will be lost when the CMOS battery is used up.

QUESTION NO: 162

Which of the devices have same looking connector? (Choose Two)?

- A. USB Printer
- B. PS/2 mouse
- C. ATX keyboard
- D. Parallel Printer
- E. Serial Scanner

Answer: B, C

Explanation: The PS/2 mouse and the ATX keyboard connectors have the same look.

QUESTION NO: 163

What should you replace if the brightness or contrast adjustments were malfunctioning on a Laptop?

- A. Fuse
- B. LCD Display
- C. Adjustment Switch
- D. LCD display Cable

Answer: C

Explanation: We should start by replacing the adjustment switch.

QUESTION NO: 164

What would cause a keyboard error message? (Choose two)

- A. Stuck key
- B. Pressing the F5 key
- C. Keyboard not plugged in
- D. Pressing CTRL + ALT + ESC

Answer: A, C

Explanation: A stuck key or an absent keyboard would cause a keyboard error message.

Incorrect Answers

B, D: Pressing keys would not cause a keyboard error message.

QUESTION NO: 165

You have just installed a 128 MB 168 pin DIMM on your ATX motherboard. You already had 128 MB in 72 pin slots using SIMM. When you turn on your system it is only recognizing only 128 MB of RAM in total. Which of the following are possible causes? (Choose three)

- A. You need to update or upgrade your BIOS.
- B. BIOS is not set to Read both types of memory.
- C. A jumper is not set to support both types of memory
- D. The motherboard only supports one type of memory at a time.
- E. You need to remove one of the 72- pin memory chips so you have one of each.

Answer: A, B, D Explanation:

- **A:** The BIOS might have to be upgraded in order to support both memory types.
- **B:** The BIOS might need configuration in order to use both memory types.
- **D:** If we are unlucky the BIOS will only support one memory type at a time.

Incorrect Answers

- **C:** If the motherboard has both SIMM and DIMM slots it supports both type of memories at the same time.
- E: 72-pin SIMMs must be installed in pairs.

QUESTION NO: 166What causes chip creep?

- A. Thermal expansion and contraction.
- B. Overheating of chips due to electrical shorts.
- C. Chips that don't communicate with other chips.
- D. Chips memory that is incompatible with the motherboard.

Answer: A

Explanation: The process of chips that work their way out over time from their slots is called chip creep. It is caused by changes in temperate that make the chip expand and contract.

QUESTION NO: 167

Which of the following are valid translations in the hard drive settings in the CMOS? (Choose three)

- A. CHS
- B. LBA
- C. TRA
- D. Extended CHS
- E. Extended TRA

Answer: A, B, D Explanation:

Incorrect Answers

- **A:** CHS = Cylinder, Head, Sectors. Early BIOSs had a limitation on the maximum cylinder, head, and sector (CHS) values allowed.
- **B:** LBA, Logical Block Addressing, is a translation standard for BIOS to support IDE drives larger than 528 MB.
- **D:** Enhanced (or extended) CHS allows drives to be manufactured a little faster and more easily than LBA.

QUESTION NO: 168

After installing a sound card the system locks up when a parallel port tape backup is also used. What is the most likely problem? (Choose Two)

- A. IRO conflict
- B. DMA conflict.
- C. Defective LPT port
- D. Defective Tape Driver
- E. Defective Sound Card

Answer: A, E Explanation:

A: There might be an IRQ conflict.

E: It is possible that the sound card is defective.

Incorrect Answers

B: A DMA conflict would not result in this behavior.

C, D: The LPT port and the Tape Driver were functioning before the sound card was installed so both should be working.

QUESTION NO: 169

The mouse pointer moves erratically. What is the possible cause?

- A. The ball is dirty
- B. Is not connected
- C. Driver is not installed properly.
- D. It has an incorrect IRQ setting.

Answer: A

Explanation: The most likely cause of this problem is that the ball of the mouse is dirty. It should be cleaned.

Incorrect Answers

B: If the mouse is disconnected the mouse pointer would not move.

C: It seems unlikely that an incorrect mouse driver would cause this behavior.

D: The mouse has no IRQ setting.

QUESTION NO: 170

You just installed a new IDE hard drive but your system BIOS will not recognize the new drive. What should you check first?

- A. Cable sequence
- B. Jumpers on the hard Drive
- C. Drivers that need to be loaded
- D. Hard Drive manufacturer Website information

Answer: B

Explanation: The jumpers on the hard drive must be correctly set either to master or to slave. If a single IDE device is used on IDE channel it must be set to master. If two IDE devices are used on the same IDE channel one must be set to master and one must be set to slave.

OUESTION NO: 171

What would a Multimeter be used to measure?

- A. CD-ROM data
- B. Power-supply voltage

- C. Floppy drive speed
- D. RAID controller synchronization

Answer: B

Explanation: A multimeter can be used to measure voltage.

QUESTION NO: 172

What is your first action when windows report that your hard drive is developing bad sectors?

- A. Replace the hard drive.
- B. Run Secclean from DOS
- C. Run the defrag utility on the hard Drive.
- D. Run Scan Disk with the thorough option.

Answer: D

Explanation: Scan disk should be run to check and repair hard disk.

Incorrect Answers

- **A:** Eventually we could be forced to replace the hard drive, but should not be the first action.
- **B:** Secclean is a UNIX utility.
- **C:** Defragmenting the hard drive could make things worse. We should repair the disk first.

OUESTION NO: 173

The resolution on a new 19" ULTRA VGA monitor was set to $640 \times 480 \times 16$ colors. You change the resolution to 800×600 High color 16-bit. But the monitor goes blank. What could be the problem?

- A. The video card is using an IRQ
- B. The video card is not installed properly
- C. The monitor trapezoid setting is wrapped.
- D. The refresh rate is too fast for the monitor

Answer: D

Explanation: The monitor does not support the selected refresh rate.

Incorrect Answers

- **A:** The video card should use an IRQ to be able to communicate.
- **B:** The video card worked at 640 x 480 so it is physically installed correctly.
- **C:** The monitor trapezoid setting would not cause the monitor to go blank.

QUESTION NO: 174

The computer will not boot from the floppy drive. What are the most likely causes? (Choose two)

- A. The floppy drive is defective.
- B. There is no partition on the hard drive.
- C. The boot floppy is formatted on FAT 16.
- D. The boot sequence in the BIOS is incorrect
- E. The hard drive has more than one partitions defined.

Answer: A, D Explanation:

A: The floppy drive could be defective.

D: If the boot sequence does not include **A:** the system would never be able to boot from the diskette, and we would have to correct it in BIOS.

Incorrect Answers

- **B:** PCs should be able to boot from the diskette even though no hard drive is present.
- **C:** Diskettes use the FAT16 file format.
- **E:** The partitioning of the hard drive would not affect the diskette boot process.

QUESTION NO: 175

What is a major design difference between Pentium I and Pentium II?

- A. Pipeline cache size
- B. Capacitor technology
- C. High-core temperature
- D. Additional instruction set

Answer: B

Explanation: The capacitor technology is improved with decreasing size and improved performance.

QUESTION NO: 176

The monitor is displaying mostly in green and not in normal colors. Which of the following would cause this? (Choose Two)

- A. The monitor is defective
- B. The refresh rate is too fast.
- C. The resolution is set too high
- D. A pin on the connector is bent.
- E. The drivers are installed incorrectly.

Answer: A, D

Explanation: Either the monitor could be defective or a pin could be bent.

Incorrect Answers

The refresh rate, the resolution, or the video adapter device driver would not cause this type of color distortion.

QUESTION NO: 177

What is proper installation practice for installing DIMMs and RIMMs?

- A. Unplug the PC.
- B. Use a ground strip.
- C. Leave the power on.
- D. Install modules in pairs.

Answer: A

Explanation: First we should unplug the computer.

Incorrect Answers

B: A ground could be used but first we should unplug the computer.

C: We should unplug the PC.

D: DIMMs do not need to be installed in pairs.

QUESTION NO: 178

You have just installed a new internal PCI modem in your desktop. It will not dial out. What is the problem?

- A. The port speed is set too high.
- B. The modem has not been set up in control panel properties
- C. The phone line is plugged in to the line-in port on the modem card.

D. The phone line out of the wall is plugged into the phone port on the modem card.

Answer: D

Explanation: The phone line should be plugged to the line-in port on the modem card (not to the port out).

Incorrect Answers

A: A port speed that is too high would not prevent the modem from dialing.

B: Internal modems do not appear in the control panel properties.

C: This is the proper procedure.

QUESTION NO: 179

A customer calls and says that her computer will not boot. She can hear noises and see lights on the box but nothing comes on the screen. What should you take to the site to fix the problem?

- A. Hard Drive
- B. Video Card
- C. Power Cable
- D. Power Supply

Answer: B

Explanation: The computer is starting but nothing is displayed on the screen. The Video Card might have to be replaced.

QUESTION NO: 180

What are benefits of cleaning the inside of the computer? (Choose Two)

- A. Increase connectivity speed.
- B. Provide better system cooling
- C. Increase CPU processing speed.
- D. Increase the value of your computer.
- E. Reduce the risk of component failure.

Answer: B, E

Explanation: Less dust would improve the system cooling and reduce the risk of component failure.

QUESTION NO: 181

How should be used to extinguish a computer fire?

- A. Fire hose
- B. Class A extinguisher.
- C. Class C extinguisher
- D. A silver foam water extinguisher

Answer: C

Explanation: Class C extinguishers should be used for fires in electrical appliances.

Incorrect Answers

Water (fire hose, Class A extinguisher, or silver foam water) should no be used to extinguish a computer fire.

Note, Fire Classifications:

Class A: Fires that involve wood, cloth, rubber, paper, and some types of plastics.

Class B: Fires that involve gasoline, oil, paint, natural and propane gases, and flammable liquids, gases, and greases.

Class C: Fires that involve all the materials found in Class A and B fires, but with the introduction of an electrical appliances, wiring, or other electrically energized objects in the vicinity of the fire.

Class D: Fires that involve combustible metals, such as sodium, magnesium, and potassium.

QUESTION NO: 182

Which device should not be plugged into a standard UPS?

- A. Any monitor
- B. Laser printer
- C. An inkjet printer
- D. External Modem

Answer: B

Explanation: A Laser printer should never be plugged to an UPS since Laser Printers consumes a lot of power when printing. This could disrupt the UPS

Incorrect Answers

A: Monitors can be attached to an UPS.

- C: Inkjet printer does not use as much power as LaserJet printers and they can therefore be connected to an UPS.
- **D:** External modem consumes minimal power and be attached to an UPS.

QUESTION NO: 183

All of the following voltage/current combinations should be considered dangerous but which of these combinations is the most likely to cause serious injury or death?

- A. 120 Volts DC at 500 Amperes.
- B. 5 volts DC at 100milli amperes.
- C. 12 volts DC at 200milli ampere.
- D. 240 volts and DC at 10milli amperes.

Answer: A

Explanation: High Amperes could kill.

QUESTION NO: 184

What is modified when changing the system start up boot sequence?

- A. BIOS/CMOS.
- B. CONFIG.SYS
- C. AUTOEXEC.BAT
- D. COMMAND.COM

Answer: A

Explanation: The CMOS memory holds the BIOS settings. The boot sequence is a BIOS setting.

Incorrect Answers

The startup boot sequence is not configured in the OS.

QUESTION NO: 185

What expansion bus types do most motherboards support?

- A. MCA, PCI
- B. ISA, EISA
- C. ISA, PCI, AGP
- D. ISA, VESA, PCI

Answer: B

Explanation: Most modern motherboards support ICA; PCI, and possibly AGP. However, some new motherboards do no longer support ISA:

Incorrect Answers

- **A:** MCA is an old standard which is no longer supported.
- **C:** AGP is not supported by older motherboards or by some low-priced motherboards with integrated graphic support.
- **D:** VESA is no longer supported.

QUESTION NO: 186

What next technology was added to the Pentium III?

- A. MMX4.
- B. Enhanced audio steaming.
- C. Enhanced graphics capabilities.
- D. Internet streaming SIMB extensions.

Answer: D

Explanation: Internet streaming SIMB extensions were added to the Pentium III processor.

OUESTION NO: 187

What does a 601 error POST (Power On Self-Test) indicate?

- A. hard drive error
- B. floppy drive error
- C. network boot problem
- D. defective power supply

Answer: B

Explanation: POST errors in the 600-699 range generally indicate Floppy disk drive errors.

Incorrect Answers

- **A:** Hard drive errors are in the 17xx range.
- **C:** Network adapter errors are in the 3xxxx range.
- **D:** A defective power supply would not generate errors in the 6xx range.

Note:

1xx: Motherboard errors.

2xx: RAM errors.
3xx: Keyboard errors

6xx: Floppy disk drive errors

11xx: COM1 errors 17xx: Hard drive errors

3xxx: NIC errors

OUESTION NO: 188

What are advantages of the USB? (Choose three.)

- A. Speed.
- B. Safety.
- C. Security.
- D. Expansion.
- E. Ease of configuration.

Answer: A, D, E Explanation:

A: The USB bus is faster.

D: A single USB chain supports up to 127 devices which make it easier to expand.

E: USB devices should not need any configuration. They are self-configured.

Incorrect Answers

B, C: There is no safety or security built into USB.

QUESTION NO: 189

How much video RAM is needed to display 1024 into 768 at 24bit color?

- A. 1MB.
- B. 4MB.
- C. 8MB.
- D. 512KB.

Answer: B

Explanation: With 24-bit color we need 3 bytes per pixel. In total we need 1024 * 768 *3 bytes which roughly is 2.4MB of RAM. 4 MB of video RAM would be sufficient.

QUESTION NO: 190

Which processors will fit in the same socket? (Choose three.)

- A. AMD K7.
- B. Cyrix MLL.
- C. AMD K6.
- D. Pentium II.
- E. Pentium MMX.

Answer: B, C, E

Explanation: Socket 7 is supports late Pentium Models including Pentium MMX, AMD K6 (not K7 which is much later), and Cyrix processors.

QUESTION NO: 191

What is the highest address that can be referred on a three-position SCSI-2 jumper block?

- A. 4
- B. 7
- C. 8
- D. 15

Answer: B

Explanation: The highest binary value with three digits is 111. In decimal this corresponds to 4+2+1=7.

QUESTION NO: 192

What are the major hard drive settings in the CMOS? (Choose three.)

- A. Heads.
- B. Tracks.
- C. Volume.
- D. Sector.
- E. Cylinder.

Answer: A, D, E

Explanation: The major CMOS hard drive settings are Cylinders, Heads, and Sectors.

Incorrect Answers

B, C: Tracks and volumes are not configured in CMOS.

QUESTION NO: 194

Why was MMX technology added to the Pentium II?

- A. Improve printing speed.
- B. Speed up modem access to the internet.
- C. Improve security when using windows 95/98.
- D. Handle multimedia functions like sound and video.

Answer: D

Explanation: MMX stands for MultiMedia eXtensions.

QUESTION NO: 195

What is a type of IDE translation?

- A. LBA
- B. UTB
- C. QIC
- D. USB

Answer: A

Explanation: LBA, Logical Block Addressing, is a translation standard for BIOS to support IDE drives larger than 528 MB. LBA is on old IDE translation.

QUESTION NO: 196 WRAM is used on a?

- A. Modem.
- B. Video card.
- C. Motherboard.
- D. ATA controller.

Answer: B

Explanation: WRAM (Windows Accelerator Card RAM) is used on Video cards.

QUESTION NO: 197

Which of the following expansion slots can a SCSI adapter plug into? (Choose two)

- A. PCI
- B. USB
- C. EISA
- D. IEEE 1264
- E. IEEE 1394

Answer: A, C

Explanation: SCSI adapters can either use PCI slots or EISA slots. Most modern SCSI cards use PCI slots.

QUESTION NO: 198

When upgrading to a Pentium II, which slot or socket is viable?

- A. Slot 1
- B. Slot A
- C. Slot 3
- D. Socket 7

Answer: A

Explanation: Pentium II requires slot 1. Slot 1 is used for Celeron, Pentium II and Pentium III processors.

QUESTION NO: 199

You must service the laser printer in your office. Which part of the printer should you avoid touching because it is hot?

- A. Fuser.
- B. Print head.
- C. Primary corona.
- D. High voltage power supply.

Answer: A

Explanation: The fuser heats the toner which is melted to the paper. The temperature is around 170 Celsius.

QUESTION NO: 200

In ink jet printers what is the most common problem with the paper tray?

- A. In consistent printing.
- B. Malfunctioning pick up rollers.
- C. Misalignment of the sheet feeder.
- D. Paper jamming on the ink cartage.

Answer: B

Explanation: Inkjet printer use pick up rollers. Problems with pickup rollers would prevent any papers from being pulled into the printer.

QUESTION NO: 201

A laser printer generates a totally black paper. What is the cause?

- A. Malfunctioning image laser.
- B. Low level in the tonal cartage.
- C. No power to the transfer corona.
- D. No power to the primary corona.

Answer: D

Explanation: No power to the primary corona would result in a totally black paper.

OUESTION NO: 202

What is the paper feeder technology most commonly associated with dot matrix printers?

- A. Sheet feed.
- B. Tractor feed.
- C. Friction feed.
- D. Manual feed.

Answer: B

Explanation: Matrix printers use tractor feed.

QUESTION NO: 203

Laser jet printer speeds are measured in pages per minute (PPM). What do we use to measure the speed of dot matrix printers?

- A. Lines per inch.
- B. Lines per sheets.
- C. Characters per inch.
- D. Characters per second.

Answer: D

Explanation: The speed of matrix printers is measured in characters per second.

QUESTION NO: 204

What allows you to print on both sides of the paper?

- A. Fuser.
- B. Duplexer.
- C. Toner cartage.
- D. Paper swapping unit.

Answer: D

Explanation: To be able to print on both sides of the paper the printer would need some sort of paper swapping unit.

Incorrect Answers

A: A fuser melts the image onto the paper.

B: A duplexer is not used in a printer, it is used in communication.

C: A toner cartridge just a container for toner.

QUESTION NO: 205

With respect to the interface network card, what does the term 10/100 refer to?

- A. Protocol speed.
- B. A fiber network.
- C. Megabits per second.
- D. Minimum and maximum server speed.

Answer: C

Explanation: 10/100 refers to the transfer rate which is measured in Megabits per seconds (Mbps). More specifically it specifies that the network adapter supports both the 10Mbps and the 100Mbps speed.

QUESTION NO: 206

When installing PCI network interface you can check IRQ availability looking at?

- A. DIP switches.
- B. Config.sys.
- C. Jumper settings.
- D. Motherboard BIOS.

Answer: D

Explanation: The BIOS (or even better the Device Manager) can be used to check IRQ availability.

Incorrect Answers

A, C: DIP switches or jumper settings might be used for IRQ configuration, but they do not contain information on available IRQs.

B: Configuration files do not contain information on available IRQs.

QUESTION NO: 207

Which of the following are characteristics of peer to peer networking? (Choose two.)

- A. Router.
- B. TCP/IP protocol.
- C. Centralized security and administration.
- D. Limited number of computers involved.
- E. Computer acting as both client and a server.

Answer: D, E

Explanation:

- **D:** A peer-to-peer network should only contain a limited amount of computer, typically not more than 10 computers.
- **E:** All computers are peers acting as both client and servers. There is no dedicated server.

Incorrect Answers

- **A:** A router is used in larger networks, not in peer-to-peer networks.
- **B:** TCP/IP is typically used in larger networks, though it might very well be used in a peer-to-peer network.
- **C:** A peer-to-peer network implements de-centralized security and administration.

QUESTION NO: 208

What is the common language that computers use to talk with one another on a network?

- A. Client.
- B. Adapter.
- C. Protocol.
- D. Operating system.

Answer: C

Explanation: A protocol implements the set of rules that transmits data between networked devices..

QUESTION NO: 209

Which type of a cable is most likely in use with RJ-45 connectors to attach computers to the network?

- A. 10Base 2.
- B. 10Base 5.
- C. 10Base T
- D. 10Base FL.

Answer: C

Explanation: RJ-45 connectors are used with UTP and STP cables. 10BaseT networks use UTP/STP.

QUESTION NO: 210

When configuring ISA network interface cards without jumpers or plug and play. What is used to set IRQs?

- A. DMA.
- B. COMS.
- C. The operating system.

D. Configuration software.

Answer: D

Explanation: ISA cards need either configuration software or configuration on the physical cards (DIP switches or jumpers).

QUESTION NO: 211

Which device connects to a parallel port?

- A. Mouse
- B. Joystick
- C. External Modem
- D. External storage device

Answer: D

Explanation: External storage devices often use the parallel port.

Incorrect Answers

A: Mouse use serial ports.B: Joystick use game ports

C: External modems use serial ports.

OUESTION NO: 212

Which setting must a device have in order to interrupt the CPU?

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

Answer: A

Explanation: Interrupt requests (IRQs) are used to interrupt the processor.

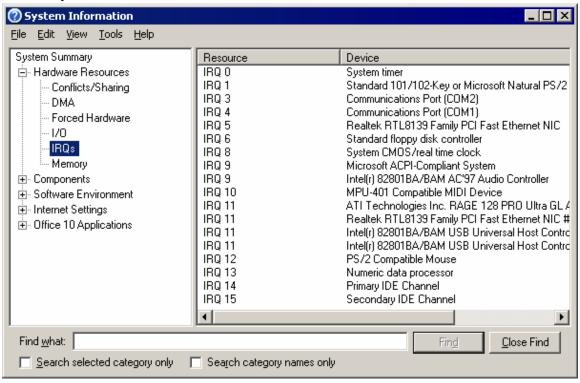
QUESTION NO: 213

What is the default IRQ for LPT1?

- A. 2
- B. 5
- C. 7
- D. 13

Answer: C

Explanation: LTP1 use IRQ 7 by default. This can be checked with the Device Manager or with System Information.



Incorrect Answers

A, C: IRQ 2 and IRQ 7 are available and free to use.

D: IRQ 13 is used by the numeric data processor.

OUESTION NO: 214

An IDE drive can be set to use a specific connector on the cable by?

- A. Jumping for cable select.
- B. Jumping connector for slave
- C. Jumping connector for master
- D. Plugging the IDE cable into the second connector on the motherboard.

Answer: A

Explanation: An alternative to the standard master/slave jumpering system used in the vast majority of PCs is the use of the cable select system. To use cable select, both

devices on the channel are set to the "cable select" (CS) setting, usually by a special jumper.

QUESTION NO: 215

Which statement is true concerning the installation of USB mouse?

- A. You can plug it in while the computer is running.
- B. You must first set up a specific IRQ for the device.
- C. You must first set a DMA channel for the new device.
- D. You must shut the computer down, plug in the mouse, and restart.

Answer: A

Explanation: USB devices are hot pluggable and should be detected and installed automatically.

QUESTION NO: 216

Which interrupt is reserved for the system timer?

- A. 0
- B. 1
- C. 8
- D 13

Answer: A

Explanation: IRQ 0 is reserved for the system timer. Check in Device Manager or System information.

Incorrect Answers

B: IRQ 1 is used for the keyboard.

C: The System clock use IRQ8.

D: IRQ 13 is used by numeric data processor.

QUESTION NO: 217

What is the default IRQ for the floppy drive controller?

- A. 2
- B. 3
- C. 6

D 9

Answer: C

Explanation: The floppy drive controller use IRQ 6 as default.

Incorrect Answers

A, D: IRQ 2 and IRQ 9 are available for use.

B: IRQ 3 is used by COM2 and COM4.

QUESTION NO: 218

How is the LCD on a laptop powered?

- A. 120VAC
- B. 120VDC
- C. Low voltage DC
- D. Low voltage AC

Answer: C

Explanation: Like in a desktop, the power supply supplies low voltage DC.

QUESTION NO: 219

Which device contains its own BIOS?

- A. DRAM
- B. Hard drive
- C. Diskette drive
- D. Video adapter

Answer: D

Explanation: Video adapters may contain its own BIOS.

QUESTION NO: 220

Which expansion slot can a SCSI adapter plug into? (Choose three)

- A. PCI
- B. USB
- C. EISA

D. VL-BUS E. IEEE 1394

Answer: A, C, D Explanation:

A: Most SCSI adapters use the PCI bus.

C: Some SCSI adapters still use the EISA bus. D: Only very old SCSI adapters use the VL-BUS.

Incorrect Answers

B: A SCSI adapter cannot be plugged into USB or IEEE 1394 (fireware).

QUESTION NO: 221

When replacing a power supply what must you observe?

- A. Voltage
- B. Current
- C. Wattage
- D. Resistance

Answer: C

Explanation: The wattage should be checked. The replacement power supply should supply the same Wattage.

QUESTION NO: 222

On a system with one hard drive and one CD-ROM what is the typical placement of the CD-ROM drive?

- A. Slave drive on the primary IDE channel.
- B. Master drive on the primary IDE channel.
- C. Slave drive on the secondary IDE channel
- D. Master drive on the secondary IDE channel

Answer: D

Explanation: The CD-ROM is typically placed as a master on the secondary IDE channel.

QUESTION NO: 223

What does TCP/IP support? (Choose three)

- A. NWLink
- B. Ethernet
- C. NetBEUI
- D. Token Ring
- E. Modem dial-up

Answer: B, D, E

Explanation: With the TCP/IP protocol you can connect to Ethernet and Token Ring networks, and use dialup networking.

Incorrect Answers

NWLink and NetBEUI are two other separate protocols.

QUESTION NO: 224

What is unique about each device on a SCSI chain?

- A. I/O
- B. LUN
- C. Identification
- D. Master or Slave

Answer: C

Explanation: The identification of each device on the SCSI chain must be unique. A simple SCSI chain works like a network, and, like a network, each device requires its own unique address. A SCSI device can have any ID number in a range recognized by the host adapter, as long as no other device on the same chain has been set to the same number.

Incorrect Answers

- **A:** Unique I/O addresses are not required by SCSI devices.
- **B:** It is possible to have a single SCSI ID support more than one device. Logical unit numbers (LUNs) can be used to provide a unique identifier for up to seven subunits per ID number.
 - This is not the best answer however.
- **D:** Master and slave settings are used by IDE devices, not by SCSI devices.

QUESTION NO: 225

What are the correct combinations of COM ports and IRQ? (Choose Two)

- A. COM1 and COM2, IRQ5
- B. COM3 and COM4, IRQ2
- C. COM1 and COM3, IRQ4
- D. COM1 and COM3, IRQ3
- E. COM2 and COM4, IRQ3

Answer: C, E

Explanation: COM1 and COM3 use IRQ4.

COM2 and COM4 use IRQ3.

QUESTION NO: 226

A NIC that has an ST or SC connector on it is an example of?

- A. IR
- B. Thin Net
- C. Fiber Optic
- D. Twisted Pair

Answer: C

Explanation: ST or ST-SC are examples of fiber connectors.

QUESTION NO: 227

When you configure the hard disk or COM ports in the BIOS, where do the BIOS save this information?

- A. CPU
- B. CMOS
- C. Memory
- D. Hard Drive

Answer: B

Explanation: The BIOS settings are stored in the CMOS memory.

QUESTION NO: 228

Which type of connectors is used on a parallel printer cable? (Choose two)

- A. DB9
- B. RJ-25
- C. DB25
- D. MiniDIN
- E. Centronics36

Answer: C, E Explanation:

C: A DB25 is a typical parallel printer connection on the PC end.



E: A Centronics36 is the typical parallel printer connection on the printer end.



OUESTION NO: 229

What is the first program to run during a system boot sequence?

- A. BIOS
- B. COMMAN.COM
- C. CONFIG.SYS
- D. AUTOEXEC.BAT

Answer: A

Explanation: The BIOS is the first program being run during the system boot sequence. The OS starts to load after the BIOS has finished its startup process.

QUESTION NO: 230

The CD-ROM does not work on your system. You suspect that the CD-ROM is not getting the proper voltage. What should you use to test the power connector?

- A. Multimeter
- B. Continuity Tester
- C. Loop back tester
- D. High voltage probe

Answer: A

Explanation: A multimeter can be used to measure voltage.

QUESTION NO: 231

You are installing a modem on COM3. Which I/O address should you normally use?

- A. 2E8H
- B. 2F8H
- C. 3E8H
- D. 3F8H

Answer: C

Explanation: The following IO addresses are used by the COM ports:

COM1: 3F8 COM2: 2F8 COM3: 3E8 COM4: 2E8

QUESTION NO: 232

What are the usable DMA channels? (Choose three)

- A. 0
- B. 1
- C. 7
- D. 8
- E. 9

Answer: A, B, C

Explanation: Computers have eight DMA channels numbered from 0 to 7.

QUESTION NO: 233

What would cause the error message "Bad or missing operating system at boot up"?

- A. No CD-ROM
- B. Missing or corrupt boot sector
- C. Slave hard drive not powered up

D. A bad floppy drive cable connection

Answer: B

Explanation: The boot sector is used to launch the boot process. If the boot sector is corrupt this error message would occur.

QUESTION NO: 234

You find that you have no audio. Which of the following does not apply?

- A. The sound card is set to a 66MHz bus speed.
- B. You should check to see if Windows volume control is up.
- C. The speaker cable is not plugged into the right connection.
- D. An audio adapter needs hardware resources such as an IRQ.

Answer: A

Explanation: Sound cards are not configured with bus speeds.

QUESTION NO: 235

You have a Notebook PC, where the 2.5 inch IDE hard drive will not respond. How should you confirm if the problem is in the hard drive or the Notebook's IDE interface? (Choose Two)

- A. Boot from a CD and then run FDISK.
- B. Boot from a floppy and then run FDISK.
- C. After replacing the Notebooks motherboard confirm whether the hard drive works.
- D. Using a 2.5 inch to 3.5 inch IDE cable adapter try a 3.5 inch IDE hard drive on the Notebook's IDE interface.
- E. Using a 2.5 inch to 3.5 inch IDE cable adapter try a 2.5 inch IDE hard drive on a desktop PC's IDE interface.

Answer: D, E

Explanation: Either the IDE interface or the 2.5 HD is malfunctioning, and we must discover which. We could try the 2.5 HD in a Desktop computer, or we could try a 3.5 HD on the LapTop.

Incorrect Answers

- **A, B:** FDISK will give not give any useful information on whether the IDE interface or the HD is at fault.
- **C:** Replacing the motherboard would require lot of effort and is not the best solution.

QUESTION NO: 236

Which protocol requires unique addressing through software configuration?

- A. IPX
- B. TCP/IP
- C. NetBEUI
- D. AppleTalk

Answer: B

Explanation: Each TCP/IP device must have a unique logical IP address. This IP address is either configured dynamically with DHCP or statically in the operating system.

Incorrect Answers

- **A:** IPX use the MAC addressing to provide unique addressing. This is a physical addressing scheme, which cannot be configured through software.
- C: NetBEUI requires no configuration since it only communicates through broadcasts.
- **D:** AppleTalk does not require configuration for unique addressing.

QUESTION NO: 237

When you arrive at the customer's desk the computer is giving a continuous beep noise that will not stop. What is the problem?

- A. Virus was down loaded from the internet.
- B. BIOS on the motherboard was corrupted.
- C. Improper driver was loaded on the hard drive.
- D. A key on the key board is stuck in the down position.

Answer: D

Explanation: A stuck key could cause the noise.

Incorrect Answers

It is unlikely that a virus, corrupted BIOS, or an improper driver would have this effect.

QUESTION NO: 238

After attempting to dial-up to internet, your mouse pointer freezes. What should be your first diagnostic step in solving the problem?

- A. Check for IRQ conflict.
- B. Check for browser updates.
- C. Check to see if the correct mouse driver is loaded.
- D. Check to see, if you are still connected to internet.

Answer: A

Explanation: There could be an IRQ conflict between the mouse and the modem.

QUESTION NO: 239

A customer calls and says his computer will not boot. You have determined that no sounds are coming from the system and none of the lights are on. What should you take to the site to fix the problem?

- A. CPU
- B. Modem
- C. Video Card
- D. Power Supply

Answer: D

Explanation: It seems that the system does not have any power. We should bring a replacement power supply.

QUESTION NO: 240

You install new local printer. When you print a test page on the printer, the printer prints the printer code and several extra blank printer pages are printed. What are the possible causes? (Choose Two)

- A. Wrong printer driver.
- B. Empty toner cartridge.
- C. Overloaded paper tray.
- D. High printer resolution settings.
- E. Un-secured or loose printer cable.

Answer: A, E

Explanation: The print driver could be incorrect or the print cable could be loose.

QUESTION NO: 241

Which I/O port does the secondary IDE controller use?

- A. 134H
- B. 168H
- C. 170H
- D. 1F0H

Answer: C

Explanation: The secondary IDE Channel uses the 170-177 address range

Incorrect Answers

The primary IDE Channel uses the 1F0-1F7 address range.

QUESTION NO: 242

The customer is complaining that the program applications being displayed on the screen are missing lines, details and other graphics. How should you change the setting?

- A. Reduce hard ware graphics acceleration.
- B. Increase hardware graphics acceleration.
- C. Increase the horizontal setting on the monitor.
- D. Decrease the vertical display settings on the monitor.

Answer: A

Explanation: Reducing the hardware graphics acceleration could help with this problem.

Incorrect Answers

B: Increasing the hardware acceleration would probably make things worse.

C, D: Changing the horizontal or vertical display settings would not address the problem.

QUESTION NO: 243

How many pins does a standard IDE connector have?

- A. 34
- B. 40
- C. 50

D. 68

Answer: B

Explanation: Internal IDE or EIDE hard disk drive and CD-ROM ribbon cable connection use the IDC 40 connector which has 40 pins.

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QUESTION NO: 244

You have installed a new modem with jumpers set to COM2 and IRQ3, but Windows cannot detect the modem. What is the problem?

- A. No dial tone.
- B. IRQ conflict.
- C. DMA overrun
- D. COM port speed not set to 256Kbps.

Answer: B

Explanation: The most likely cause of this problem is an IRQ conflict.

QUESTION NO: 245

How should you clean the CD-ROM media?

- A. Wipe it using circular motions.
- B. Wipe it using center to edge motions.
- C. Dip it in a diluted cleaner solution, and then let it dry.
- D. Set clean mode from the CD properties menu.

Answer: C

Explanation: CD-ROM media could be cleaned by a diluted cleaner solution.

Incorrect Answers

A, B: We should take care not to scratch it.

D: There are no commands within the OS to clean the CD-ROM media.

OUESTION NO: 246

Due to the possibility of brownouts which of the following items will help electronic equipment perform in an interrupted manner? (Choose two)

- A. Strips
- B. Extension Cords
- C. Line conditioners
- D. Battery backup devices

Answer: C, D Explanation:

C: Line-conditioners ensure that spikes and brownouts do not affect the electronic equipment.

D: Battery backup devices will protect against power loss.

OUESTION NO: 247

Which tools can be used to clean the inside of a computer? (Choose two)

- A. Magnet
- B. Canned air
- C. Small brush
- D. SIMM extractor
- E. Ammonia based cleaner

Answer: B, C

Explanation: A small brush, canned air, or a small vacuum cleaner (not listed here) could be used to clean the inside of a computer.

Incorrect Answers

A, E: A magnet or ammonia based cleaner could cause harm to the computer.

D: A SIMM extractor is not used for cleaning.

OUESTION NO: 248

How many IDE controllers are typically built into an ATX motherboard?

- A. 1
- B 2
- C. 4
- D. 8

Answer: B

Explanation: ATX motherboards, like AT motherboards, have 2 built-in IDE controllers.

QUESTION NO: 249

Where is the firewall typically stored?

- A. RAM
- B. CPU
- C. Hard disk
- D. ROM BIOS

Answer: C

Explanation: Typically a Firewall could be implemented as:

- 1) A program on a general purpose computer. This could be ISA Server 2000 in a Windows 2000 server for example. In this case the firewall is stored on the hard drive and is run in RAM.
- 2) Implemented on a network device such as a Cisco Router. In this case the Cisco IOS contains the code that runs the firewall. The small version of the IOS OS is store in ROM and a larger running version is stored in flash memory. Other implementations could store the whole firewall code in ROM.

The most common running firewalls are from category 1) and C) is therefore the best answer.

OUESTION NO: 250

What is the advantage of using ECC (Error Checking and Correction) memory?

- A. Costs less money.
- B. Corrects Cache errors.
- C. Corrects memory error
- D. Has no dense packaging

Answer: C

Explanation: ECC has the ability to correct memory errors.

Incorrect Answers

A: ECC memory is more expansive.

B: ECC does not correct cache memory errors.

D: ECC memories fit standard memory slots.

OUESTION NO: 251

How many bits wide is the AGP Bus?

- A. 8
- B. 16
- C. 32
- D. 64

Answer: C

Explanation: AGP (Advanced Graphic Port) is a 32-bit bus designed for the high demands of 3-D graphics.

QUESTION NO: 252

A Windows 9x system fails to successfully detect new devices that are added. What should you check first?

- A. Device manager for DMA assignments.
- B. Plug and Play settings in control panel.
- C. CMOS settings in BIOS for Plug and Play
- D. BIOS settings in CMOS for Plug and Play.

Answer: D

Explanation: We should check the BIOS have setting for Plug and Play for any possible inconsistencies.

Incorrect Answers

A: IRQ and not DMA is critical for detecting new devices.

B: There are no Plug and Play settings in the control panel.

C: The BIOS settings are stored in CMOS, not vice versa.

QUESTION NO: 253

Why can multiple SCSI devices work on the same channel?

- A. No two devices are made exactly the same.
- B. Each manufacturer codes its equipment number.
- C. Each can be configured with a unique identification number.
- D. The first device is set as master and others are set slave.

Answer: C

Explanation: By using a unique identification number the SCSI devices can use the same channel.

Incorrect Answers

- A: Multiple devices with same brand and model can be use on a single SCSI chain.
- **B:** Network adapters have unique identification number, but SCSI device do not.
- **D:** Master and slave are use IDE channels, not on SCSI chains.

QUESTION NO: 254

What is the system board BIOS designed to manage?

- A. NIC
- B. Printers
- C. Modems
- D. ATA (IDE)

Answer: D

Explanation: IDE ATA settings are included BIOS.

Incorrect Answers

Network adapters, printers, and modems are not configured in BIOS.

OUESTION NO: 255

How many bits wide is 72-pin non-parity SIMM memory?

- A. 16
- B. 32
- C. 36
- D. 64

Answer: B

Explanation: 72-pin SIMMs are 32 bits wide.

QUESTION NO: 256

How many pins are on a serial port connector? (Choose two)

- A. 8
- B. 9

- C. 10
- D. 15
- E. 25
- F. 29

Answer: B, E

Explanation: Serial connectors are either 9 or 25 pins.

DB9:



DB25:



Incorrect answers:

A, C, F: 8, 10, or 29 pins are rarely used.D: 15 pins are used for Monitor connectors.

QUESTION NO: 257

On a diskette driver data cable, what is the drive letter assigned to the drive after the twist?

- A. A
- B. B
- C. C
- D. D

Answer: A

Explanation: The floppy drive connected after the twist will be assigned the letter A.

Incorrect Answers

B: The floppy drive connected **before** the twist will be assigned the letter B.

C, D: The letters C and D cannot be assigned to diskette drive. They are used for mass storage devices such as hard drives and CD-ROMs.

QUESTION NO: 258

Which processors use a slot 1 connection on a motherboard? (Choose two.)

- A. AMD K7
- B. PENTUIM II

- C. PENTIUM III
- D. PENTIUM PRO
- E. PENTIUM II XEON

Answer: B, C

Explanation: Slot 1 motherboards are used for Celeron, Pentium II (not Pentium II XEON however) and Pentium III processors, not for Pentium Pro and Athlon processors.

QUESTION NO: 259

The electrical connector between the docking station and a portable computer is:

- A. Used as a surge suppressor
- B. Manufacturer specific only
- C. Manufacturer and model specific
- D. Not propriety but is an industry standard

Answer: A, B

Explanation: The electrical connector between the docking station and the portable works like a surge suppressor and is manufacturer specific: you must have the correct docking station for each specific portable computer brand.

Incorrect Answers

- **C:** The same manufacturer usually uses the same electrical connector for all their docking station models.
- **D:** The electrical connector is vendor specific. There exists no industry standard.

QUESTION NO: 260

Which motherboard type allows you to turn off the computer via software?

- A. AT
- B. ATX
- C. MCA
- D. VESA

Answer: B

Explanation: ATX has a soft power switch.

Incorrect Answers

A: AT motherboards are older and do not support a soft power switch.

C, D: MCA and VESA are slot types, not motherboard types.

QUESTION NO: 261

Where is hard disk information stored?

- A. RAM
- B. CMOS
- C. BOOT.INI
- D. SYSTEM.INI

Answer: B

Explanation: BIOS stores hard disk information in CMOS.

QUESTION NO: 262

What are possible ways to print a printer self test page? (Choose two.)

- A. By inserting special test paper.
- B. Through operator panel on printer.
- C. From the start menu of the task bar.
- D. By pressing the engine control button
- E. Through properties of the printer settings.

Answer: B, E Explanation:

B: It is often possible to print a test page through the operator panel on the printer.

E: It is always possible to print a test page from printer properties settings.

QUESTION NO: 263

What is the standard parallel cable used with most ink jet printers?

- A. USB
- B. SCSI 3
- C. IEEE 1284
- D. SERIAL DB 15

Answer: C

Explanation: IEEE 1284 is the standard used for parallel print cables and connectors.

Note: A standard 25-pin "D" (female) connector, also called the parallel port, is used for printing.

QUESTION NO: 264

Which items in the CMOS can be password protected? (Choose Two)

- A. Printer
- B. Startup
- C. Modem
- D. System setup
- E. Screen saver

Answer: B, D

Explanation: Startup and system setup settings are stored in CMOS. Most CMOS settings, including these two, can be password protected.

Incorrect Answers

Printer, modem and screen saver configuration is stored in the operating system, not in CMOS.

QUESTION NO: 265

Why would the back of your page come out dirty on a Laser printer?

- A. Light weight paper.
- B. High humidity level.
- C. Contaminated fuser.
- D. Bad AC power module.

Answer: C

Explanation: The fuser could be dirty, for example contaminated with toner.

QUESTION NO: 266

After you take a page out of the LaserJet printer, the printer looks good but smears when you pickup the paper. What is the problem?

- A. Damp paper
- B. Fuser assembly
- C. Wrong type of toner

D. Output roller assembly.

Answer: A

Explanation: Damp paper, or bad quality paper, could cause pages from a Laserjet to smear.

Note: This is what HP writes on smearing on the HP LaserJet 1100 printer:

- If toner smears appear on the leading edge of the paper, the paper guides may be dirty. Wipe the paper guides with a dry, lint-free cloth.
- Check the paper type and quality.
- Try installing a new HP toner cartridge.

Incorrect Answers

Fuser assembly, wrong type of toner, or output roller assembly are not likely to cause smearing.

QUESTION NO: 267

While your ink jet printer is sitting idle what keeps the ink from leaking out of the ink cartridge and onto the paper?

- A. Pump pressure
- B. Electrical current
- C. Close nozzle gate
- D. Maintenance Station

Answer: C

Explanation: The nozzle gate, which is closed when the printer is idle, prevents the ink from leaking out of the cartridge.

QUESTION NO: 268

If a Laser printer pulls multiple paper sheets at one time, what are possible causes? (Choose three.)

- A. Humidity
- B. Worn Fuser
- C. Improper media
- D. Worn Separation Pad
- E. Defective toner cartridge.

Answer: A, C, D Explanation:

A: Humidity could make the papers to stick together.

C: Improper paper, to thin paper for example, could get many papers to be pulled at a time.

D: A defect separation pad could also cause several papers to be used at a time.

Incorrect Answers

A worn fuser or defective toner cartridge would not affect the pulling of papers.

QUESTION NO: 269

On a dot matrix printer which paper type requires tractors to feed the paper?

- A. Envelopes
- B. Fiction Fed
- C. Single sheets
- D. Continuous Forms

Answer: D

Explanation: Dot matrix printers use track feeding which require continuous forms.

QUESTION NO: 270

The maximum distance for a 10BaseT segment is?

- A. 100 meters
- B. 185 meters
- C. 330 meters
- D. 1000 meters

Answer: A

Explanation: The maximum segment distance in a 10BaseT segment is 100 meters.

Incorrect Answers

B: 10Base2 has a maximum distance of 185 meters.

C: No common network cabling has a maximum distance of 330 meters.

D: Fiber cabling can support distances of 1000 meters.

QUESTION NO: 271

What can a crossover cable in an Ethernet network be used to do?

- A. Test a faulty network card.
- B. Connect two network devices without a Hub
- C. Improve bandwidth between the server and the workstations.
- D. Convert from 10 Megabits per second to 100 Megabits per second.

Answer: B

Explanation: A crossover cable can be used to directly connect (without any hub) two devices in an Ethernet network. For example two PCs, two switches, or two routers could be connected. The only requirement is that the same type of port must be used.

QUESTION NO: 272

Which memory address range is reserved for VGA video card?

- A. C000-C3FF
- B. C000-C7FF
- C. D000-D7FF
- D. D000-DFFF

Answer: B

Explanation: The video BIOS is usually mapped to the upper memory address range C000-C7FF

QUESTION NO: 273

What device must be installed on a computer to provide it with a physical and electrical connection to a network?

- A. NIC
- B. Router
- C. Gateway
- D. BNC connector

Answer: A

Explanation: A network adapter also known as a network interface card (NIC) is required connect a computer to a network.

QUESTION NO: 274

Which type of cable is most likely in use with RJ-45 connectors attached to a computer?

- A. 10Base2
- B. 10Base5
- C. 10BaseT
- D. 10BaseXL

Answer: C

Explanation: A 10BaseT cable is either an UTP or a STP cable. Both these cables use the RJ-45 connections.

Incorrect Answers

A, B: Coaxial cables are used on thinnet (10Base2) or thicknet (10Base5) networks.

D: Fiber connectors are used on 10BaseXL networks.

QUESTION NO: 275

What is the maximum cable length, in meters, using 20-gauge twisted-pair shielded cable between two full speed USB devices?

- A. 5
- B. 6
- C. 7
- D 8

Answer: A

Explanation: The maximum distance between two USB devices is 5 meters.

QUESTION NO: 276

What is the default IRQ for COM1?

- A. 2
- B. 3
- C. 4
- D. 5

Answer: C

Explanation: COM1 and COM3 use IRQ4.

Incorrect Answers

COM2 and COM4 use IRQ3.

QUESTION NO: 277

Which computer port would a digital video camera typically use?

- A. USB
- B. RS-232
- C. IEEE 1284
- D. IEEE 1394

Answer: D

Explanation: Digital video cameras typically use the fireware port, also known as the IEEE 1394 standard. IEEE 1394 is a faster interface than the USB, RS-232 (serial), and IEEE 1284 (parallel) interfaces.

QUESTION NO: 278

Which interrupt does the real-time clock use?

- A. 0
- B. 1
- C. 8
- D. 13

Answer: C

Explanation: The System CMOS/real time clock uses IRQ 8.

Incorrect Answers

A: The system timer use IRQ 0.

B: The keyboard use IRQ 1.

D: The numeric data processor use IRQ 13.

QUESTION NO: 279

What are the most common SCSI implementations? (Choose two)

- A. 32-bit SCSI-2
- B. 32-bit SCSI-3

- C. 16-bit Fast/Wide
- D. 8-bit Standard SCSI

Answer: A, B

Explanation: Today the most common SCSI interfaces are 32-bit SCSI-2 and 32-bit SCSI-3

Incorrect Answers

16-bit Fast/Wide and 8-bit Standard SCSI are older SCSI standards which are rarely used today.

QUESTION NO: 280

Which of the following is NOT capable of full-duplex transmission?

- A. USB
- B. Serial
- C. Parallel
- D. IEEE 1394

Answer: B

Explanation: The standard serial interface is not capable of full-duplex transmission.

Incorrect Answers

USB, parallel, and fireware (IEEE 1394) support full-duplex transmissions.

QUESTION NO: 281

When installing floppy drive, the A drive letter is established_____

- A. by the cable
- B. through Windows
- C. by a jumper on the drive
- D. by a jumper on the motherboard

Answer: A

Explanation: The A drive is established by the location of floppy drive at the cable (before or after the twist of the cable).

Incorrect Answers

B: Floppy drive letter assignment are not software configurable.

C: There are no jumpers on diskette drives.

D: There is no jumper on the motherboard for the diskette drive letter assignment.

QUESTION NO: 282

Which hardware device on a motherboard drive can be updated through software?

- A. chip set
- B. data bus
- C. system BIOS
- D. IDE controller

Answer: C

Explanation: The System BIOS can be updated with a Flash BIOS upgrade program usually resident on a diskette.

QUESTION NO: 283

After installing or replacing a hard drive, you try to format the drive but get the error message: "invalid media type". What should you run next?

- A. FDISK
- B. CHKDSK
- C. DISKDIAG
- D. SCANDISK

Answer: A

Explanation: Before formatting a hard drive the drive must by partitioned. In older OSes like Windows 9x the FDISK utility can be used to partition a hard disk.

QUESTION NO: 284

Assuming that the primary and secondary IDE controllers are both enabled, what is the maximum number of devices that can be connected?

- A. 3
- B. 4
- C. 5
- D. 6

Answer: B

Explanation: Each IDE controller can host 2 IDE devices; one master and one slave. So a maximum of four IDE devices could be connected.

QUESTION NO: 285

The IEEE 1394 is related to which type of bus type?

- A. DMA
- B. SCSI
- C. PS/2
- D. Serial

Answer: D

Explanation: The IEEE1394 standard (firewire) is a fast serial bus.

QUESTION NO: 286

How would an ID logical 3 be set on a three-bit jumper block on a SCSI hard disk drive?

- A. 010
- B. 011
- C. 111
- D. 101

Answer: B

Explanation: 3 decimal is 011 binary (4*0+2*1+1*1=3).

QUESTION NO: 287

What is the smallest storage access unit on an IDE hard drive?

- A. Track
- B. Sector
- C. Partition
- D. Cylinder

Answer: B

Explanation: A sector is the smallest storage access unit on an IDE hard drive.

QUESTION NO: 288

The USB port can supply power for a device?

- True
- False

Answer: True

Explanation: Some USB devices, such as hard drives, have their own power supply, while other USB devices, like keyboards, use power from the USB interface.

QUESTION NO: 289

When powering on a system, you receive a keyboard error. What generates this message?

- A. CMS
- B. ASPI
- C. POST
- D. POSIX

Answer: C

Explanation: The Power On Self Test (POST) checks the system hardware and could generate a keyboard error.

QUESTION NO: 290

What is the newest type of serial bus architecture?

- A. DVD
- B. USB
- C. ATA
- D. ST-506

Answer: B

Explanation: USB is newer serial bus architecture compared to the classical serial bus. Note: IEEE 1394 (fireware) is an even faster serial bus architecture.

Incorrect Answers

DVD, ATA, and ST-506 are not serial bus architectures.

QUESTION NO: 291

Which of the following are associated with ROM? (Choose three)

- A. DMA
- B. MBR
- C. BIOS
- D. POST
- E. CMOS

Answer: C, D, E Explanation:

C: The POST process is hard coded and stored in ROM.

D: The instructions of the BIOS program are stored in ROM.

E: The BIOS program stores its settings in CMOS.

Incorrect Answers

The concepts of Direct Memory Access (DMA) and Master Boot Record (MBR) have no direct relation to ROMs.

QUESTION NO: 292

Which CPU socket 7-based? (Select all that apply.)

- A. Pentium I
- B. Pentium II
- C. AMD Athlon
- D. Pentium MMX

Answer: A, D

Explanation: Socket 7 is supports late Pentium Models including Pentium MMX, AMD K6 (not K7 or AMD Athlon), and Cyrix processors.

QUESTION NO: 293

Which differentiates EPP (Enhanced Parallel Port) from ECP (Enhanced Capsulation Port) parallel ports?

A. ECP uses DMA

- B. EPP requires more RAM
- C. EPP requires a device driver
- D. ECP uses 8-bits, EPP uses 4-bits

Answer: D

Explanation: ECP uses 8 bits, but EPP uses only 4 bits. Both ECP and EPP use bidirectional communication. EPP only allow communication in one direction (half duplex), while ECP allows simultaneous bi-directional communications (full duplex). ECP is therefore faster than EPP.

QUESTION NO: 293

Some users on a 10Base2 network cannot connect to the server. What are likely causes of the problem? (Choose Two)

- A. Faulty T-connector
- B. Malfunctioning hub
- C. Improperly terminated cable
- D. Server not connected to the hub
- E. Faulty modular connector on the server NIC

Answer: A, C Explanation:

- **A:** If only some of the users are unable to connect to the network the problem is most likely only local: a faulty connector for example.
- **C:** An improperly terminated cable could also cause some users to lose the network connection (but more likely all users would be affected).

Incorrect Answers

B. D: Hubs are not used in 10Base network segments.

E: There no things like modular connecter in a 10Base2 network.

QUESTION NO: 294

What is the most important feature to look for when, replacing the mouse?

- A. color
- B. connector
- C. the number of buttons
- D. the manufacturer and model number

Answer: B

Explanation: There are several different mouse connectors (serial, USB, IR). We must make sure that we choose the correct conenctor.

QUESTION NO: 295

To which connector on an IDE cable, should you connect the bootable drive?

- A. The first connector from primary IDE controller.
- B. The second connector from the primary IDE controller.
- C. The third connector from the primary IDE controller.
- D. Either the first or the second connector from the primary IDE controller.

Answer: D

Explanation: The bootable device is not decided by the location on the IDE connector. The active partition will be the bootable drive. The active partition is configurable from within the OS.

QUESTION NO: 296 The ISA bus speed is

- A. 4.27 MHz
- B. 6 MHz
- C. 8.33 MHz
- D. 16 MHz

Answer: C

Explanation: The ISA bus speed is 8.33 MHz.

QUESTION NO: 297

Which of the following cable types can you use to network two computers? (Choose Three)

- A. IDE
- B. Serial
- C. SCSI
- D. Parallel
- E. 10Base2

Answer: B, D, E Explanation:

B: A null modem cable can be used to network two computers.

D: A cross-over parallel cable can be used to network two computers.

E: 10Base2 cabling can be used to connect two computers on a small bus network segment.

Incorrect Answers

IDE and SCSI are used for hard drives, CD-burners, etc. and not for networking.

QUESTION NO: 298

What is the maximum distance for a 10Base2 segment?

A. 100 meters

B. 185 meters

C. 330 meters

D. 1000 meters

Answer: B

Explanation: The maximum distance on a 10Base2 (thinnet) segment is 185 meters.

QUESTION NO: 299

A customer states that after someone borrowed a computer, a larger than normal black border appeared around the edge of the Windows desktop. What is the first logical question would you ask?

- A. Have you adjusted the contrast?
- B. Has the operating system just been upgraded?
- C. Have you checked to see if the video cable is loose?
- D. Have you checked the video monitor control settings?

Answer: D

Explanation: The most likely cause of the problem is incorrect video monitor settings.

OUESTION NO: 300

A service technician is trying to master-slave two known good IDE hard drives, C and D. Drive D was installed as a slave to drive C, but couldn't be made to work.

The same problem occurred when drive C was installed as a slave to drive D. Assuming that the technician used correct jumpering in both instances, what should you do next?

- A. Replace drive D, because it is now defective.
- B. Conclude that drives C and D are non-standard.
- C. Conclude that drives C and D are not compatible.
- D. Replace drives C and D, because both are now defective.

Answer: C

Explanation: We have tried both possible master/slave configurations. The conclusion is that the hard drives are incompatible.

Incorrect Answers

The drives are not to be good so they are not defective or non-standard and there is no need to replace them.

QUESTION NO: 301

Which of the following would NOT be repaired onsite?

- A. Virus infection
- B. Faulty video card
- C. File system errors
- D. CRT high voltage supply

Answer: D

Explanation: Only a specialist should try to repair a monitor.

QUESTION NO: 302

A PC's CMOS information was erased. What should you do first after re-entering the correct settings?

- A. Replace the CMOS battery.
- B. Check the motherboard reset pin.
- C. Test the CMOS battery's voltage level.
- D. Observe the PC for problem recurrence.

Answer: D

Explanation: We should observe and see if the problem reoccurs. If it reoccurs we should replace the CMOS battery.

Incorrect Answers

- **A:** We should replace the CMOS battery *before* re-entering correct settings, not after. When we replace the battery the CMOS settings will be lost.
- **B:** The motherboard reset pin is used to reset the CMOS settings. It would not serve any point in checking this pin.
- **C:** Checking the CMOS battery level is no usually done.

QUESTION NO: 303

10BaseT Ethernet uses which type of physical topology?

- A. Bus
- B. Star
- C. Ring
- D. Tree

Answer: B

Explanation: 10BaseT use hub or hubs to implement a physical star topology.

QUESTION NO: 304

A system was working perfectly yesterday. Suddenly you get a "CMOS configuration mismatch" error. What should you do?

- A. Check the settings of the hard drive.
- B. Check the voltage of the CMOS battery.
- C. Verify that all devices are getting power.
- D. Erase the CMOS settings and reconfigure.

Answer: D

Explanation: We should erase the CMOS settings and reconfigure. If the problem reoccurs we should replace the CMOS battery.

Incorrect Answers

- **A:** Hard drive settings is not related to this problem.
- **B:** Checking the voltage of the CMOS battery is not a standard troubleshooting procedure.
- **C:** There is no need to verify that all devices are getting power.

QUESTION NO: 305

The computer identifies a non-maskable interrupt error. What is most likely cause of this error?

- A. Lost clusters
- B. Defective RAM
- C. The I/O controller
- D. Corrupted software

Answer: B

Explanation: A non-maskable interrupt error indicates a hardware error. A defective RAM is a likely cause of this problem

Incorrect Answers

A, D: A non-maskable error is not caused by lost clusters or by corrupted software.

C: The I/O controller is not a likely cause of this problem.

QUESTION NO: 306

You install a 1.2 GB IDE drive. When you run FDISK, it only reports a drive of 540MB. What went wrong?

- A. The drive is set to slave.
- B. No active partition is set.
- C. The ribbon cable is on backwards.
- D. There is no power to the hard drive.
- E. BIOS/Disk Manager was not updated.

Answer: E

Explanation: The BIOS does not support hard drives larger than 540MB. The BIOS should, if possible, be upgraded for large hard-drive support.

Incorrect Answers

- **A:** It is not relevant if the drive is set to slave or master.
- **B:** The active partition only makes a partition bootable.
- C: If the ribbon cable was set backwards, it would not be possible to access the drive at all.
- **D:** If the drive had no power, it would not be possible to access the drive at all.

OUESTION NO: 307

Which test checks the transmitter and receiver of a local modem?

- A. Data-parity
- B. Analog loop back
- C. Local digital loop back
- D. Remote digital loop back

Answer: C

Explanation: The Local Digital loop back test is used to check the transmitter and receiver of the local modem.

QUESTION NO: 308

Which of the following are important troubleshooting questions to ask a user when gathering information about an issue? (Choose two)

- A. Who caused this issue?
- B. When did this issue begin?
- C. How much did your computer cost?
- D. Where did you buy your computer?
- E. What were you doing when the issue began?

Answer: B, E

Explanation: In order to determine what caused the problem we should ask when the issue occurred and what was done immediately before it occurred.

Incorrect Answers

- **A:** This is not the first step. First we determine when the issue occurred and what was done immediately before it occurred. Then we would be able to find out who or what caused this problem.
- **C:** The cost of the computer not important when you are troubleshooting the computer.
- **D:** For troubleshooting purposes it is not important to know the origin of computer.

QUESTION NO: 309

How should you open the tray on an inoperative CD-ROM drive?

- A. Push the eject button.
- B. Push in on the lower-right corner door.
- C. Right-click the CD icon and select Eject.
- D. Insert a paper clip into the CD drive eject hole.

Answer: D

Explanation: The eject hold of the CD Drive can be used to mechanically open the drive.

QUESTION NO: 310

The fan stopped working in the power supply, but the computer is still running. What is the proper repair procedure?

- A. Replace the fan.
- B. Replace the transformer.
- C. Lubricate the fan with oil.
- D. Replace the power supply.

Answer: D

Explanation: When a power supply malfunctions it should be replaced.

We should not try to replace parts of it, or try to repair it.

QUESTION NO: 311

An A+ candidate just built a clone PC from scratch. The floppy drive's LED is lit up (and stays that way) from the time the machine is powered on. What is the most likely cause?

- A. Hard drive failure
- B. CMOS configuration error
- C. A disk left in the floppy drive
- D. Floppy drive cable connection

Answer: D

Explanation: A floppy drive cable that has been applied backwards would cause the floppy drive's LED light to stay lit.

QUESTION NO: 312

What should you do after installing a new ink-jet cartridge?

- A. Reboot your computer
- B. Print a very detailed picture
- C. Adjust the assignment manually
- D. Run the printer alignment program

Answer: D

Explanation: The new ink-jet cartridge should be aligned. Most printers have a print alignment software program.

QUESTION NO: 313

What can cause laser-jet printer to print too light? (Choose two)

- A. Too much humidity in the air.
- B. Malfunctioning transfer corona.
- C. Printing on wrong side of paper.
- D. Duplex mechanism inside printer.
- E. Malfunctioning high-voltage DC power supply.

Answer: A, B

Explanation: Too much humidity or a malfunctioning transfer corona could cause printing which is too light.

QUESTION NO: 314

What is the name of the process that laser printers use to produce a printed image?

- A. Laser writing
- B. Micro-laser printing
- C. Electro-photographic
- D. Ink-jet laser photographic

Answer: C

Explanation: Laser printers use the electro-photographic process to produce the printed image.

QUESTION NO: 315

On the dot-matrix you only see the bottom half of the characters. What is a possible cause of this?

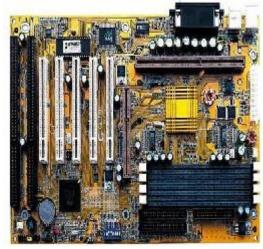
- A. Defective print head.
- B. Wrong paper thickness.
- C. Paper text incorrectly on tractor.
- D. Defective home position sensor.

Answer: A

Explanation: The print head is defective and should be replaced.

QUESTION NO: 316

What motherboard form is the Exhibit?



A. XT

B. ATX

C. FULL AT

D. BABY AT

Answer: B

Explanation: In the more recent ATX motherboard layout the CPU is placed away from the expansion slot and closer to the power supply compared with AT and baby AT motherboards.

QUESTION NO: 317

Click the area on the graphic that shows the sound card speaker connection?

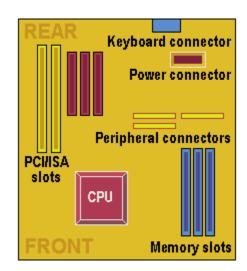


Answer:



QUESTION NO: 318

What mother board form is shown in the exhibit?



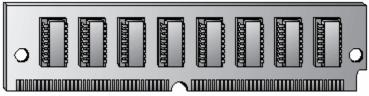
- A. XT
- B. Baby AT
- C. Full AT
- D. ATX

Answer: B

Explanation: The processor socket is located at the front of the motherboard, and full-length expansion cards are intended to extend over it.

QUESTION NO: 319

Which memory module is shown in the exhibit?



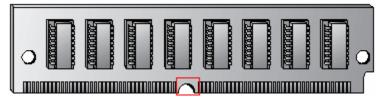
A. 30- pin SIMM

B. 72- pin SIMM C. 168- pin DIPP

D. 168-pin DIMM

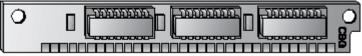
Answer: B

Explanation: A 30-pin SIMM does not have a notch (see illustration):



QUESTION NO: 320

Which memory module is shown in the exhibit?



A. DIPP

B. SIPP

C. 30 pin SIMM

D. 72 pin SIMM

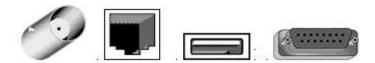
Answer: C

Explanation: 30 pin SIMMs do no have a notch.

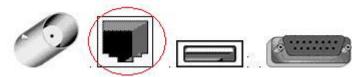
OUESTION NO: 321

Click the area on the graphic that shows RJ-45 connector.

The Power Of Knowing Seriously Real for the Really Serious



Answer:



Explanation: The RJ-45 connector is used for standard UTP/STP cables. It is somewhat similar to RJ-11 the standard telephone connector.

QUESTION NO: 322

Click the area on the graphic that shows the mini DIN connector.







Answer:



Explanation: The mini DIN connector is used for the Keyboard. It is similar to PS/2 mouse.

QUESTION NO: 323

Click the area on the graphic that shows the Monitor connector.









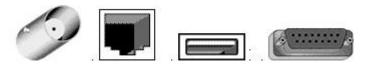
Answer:



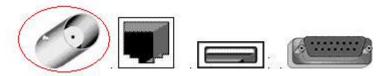
Explanation: The monitor connector has three rows. The joystick connector has two rows.

QUESTION NO: 324

Click the area on the graphic that shows the BNC connector.



Answer:



Explanation: Somewhat similar to the TV antenna connector.

QUESTION NO: 325

Click the area on the graphic that shows the place to connect a joystick.









Answer:



Explanation: The joystick connector has two rows. The monitor connector has three rows.

QUESTION NO: 326

Click the area on the graphic that shows the SCSI connector.









Answer:



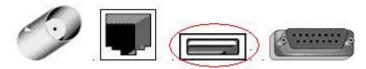
Explanation: The classical SCSI interface.

QUESTION NO: 327

Click the area on the graphic that shows the USB connector.



Answer:



Explanation: The USB connector is flat.

QUESTION NO: 328

Click the area on the graphics that shows the PS/2 mouse connector.







Answer:



Explanation: Some size as the 5-DIN connector that is used for the Keyboard.

QUESTION NO: 329

Click the area on the graphic that shows the parallel port?









Answer:



Explanation: This port is also known as a printer port.

QUESTION NO: 330

Click the area on the graphic that shows the mini DIN connector.







Answer:



Explanation:

QUESTION NO: 331

Click the area on the graphic that shows the place to connect an ethernet cable.









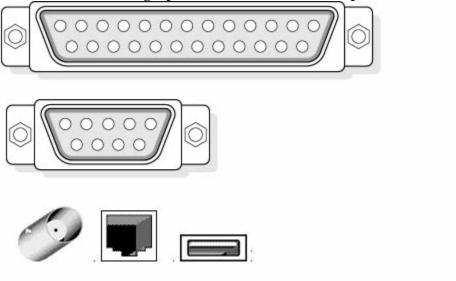
Answer:

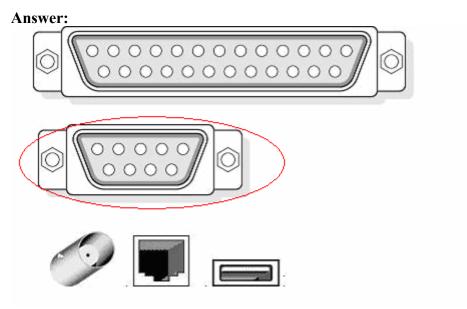


Explanation: An RJ-45 connector (or BNC connector for example) can be used to connect the computer to an Ethernet network.

QUESTION NO: 332

Click the area on the graphics that shows the COM port connector.

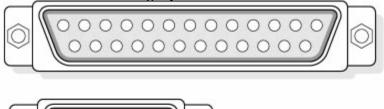


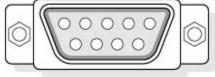


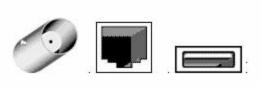
Explanation:

QUESTION NO: 333

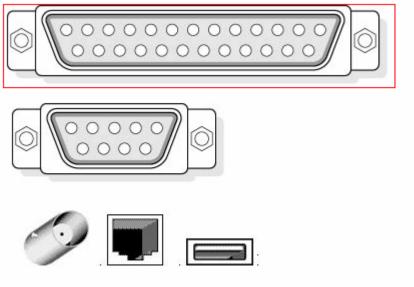
Click the area on the graphics that shows the connector for the printer port.





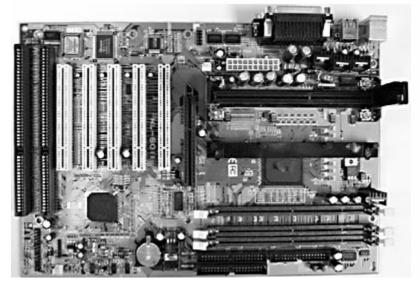


Answer:

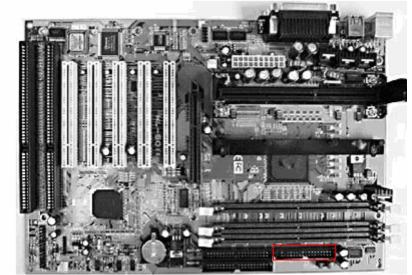


QUESTION NO: 334

Click the area on the graphic that shows the floppy port.



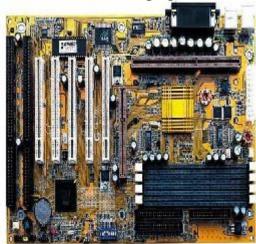
Answer:



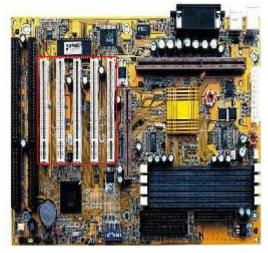
Explanation:

QUESTION NO: 335

Click the area on the graphic that shows the PCI slot on the motherboard.

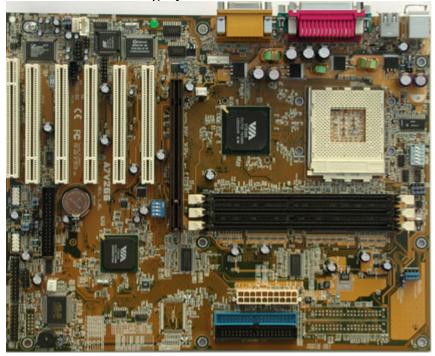


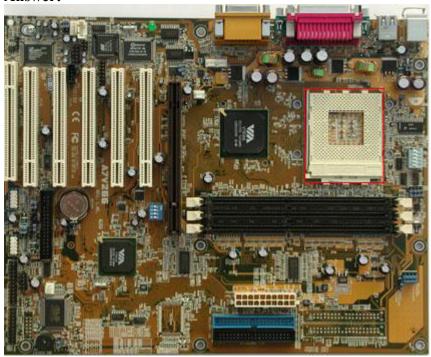
Answer:



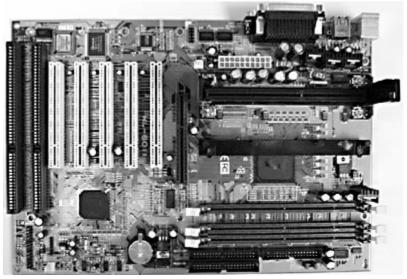
QUESTION NO: 336

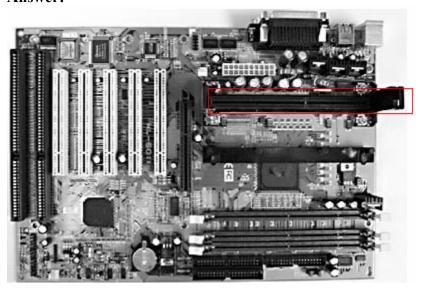
Click the area on the graphic that shows the CPU slot.



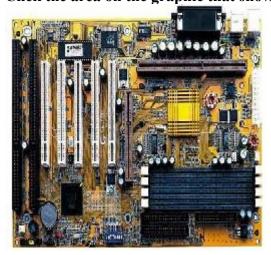


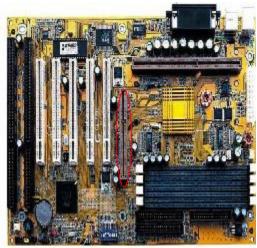
QUESTION NO: 337 Click the area on the graphics that shows the ZIF socket.



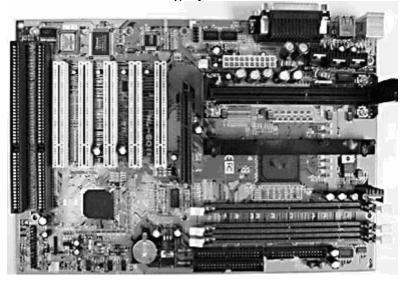


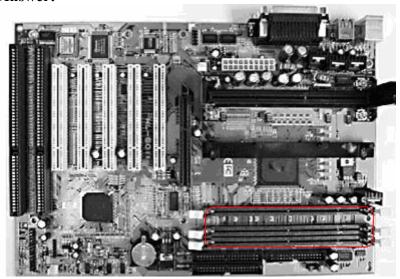
QUESTION NO: 338 Click the area on the graphic that shows the AGP slot on the motherboard.



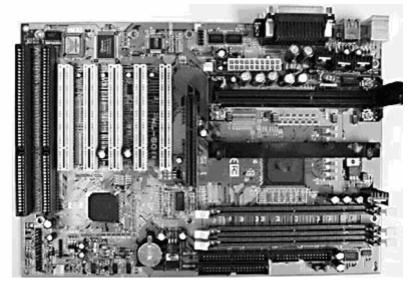


QUESTION NO: 339 Click on the area on the graphic that shows the SIMM slots.

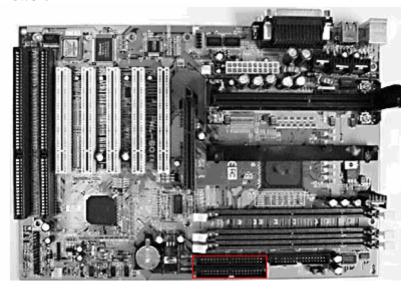




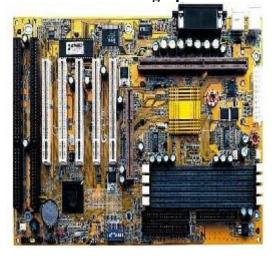
QUESTION NO: 340 Click the area on the graphic that shows the IDE ports.

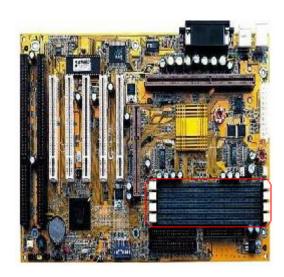


Answer:

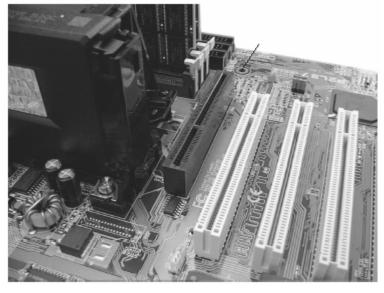


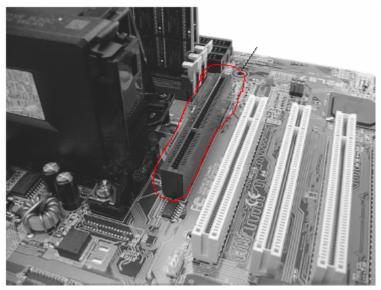
QUESTION NO: 341 Click the area on the graphic that shows the DIMM slot on the motherboard.



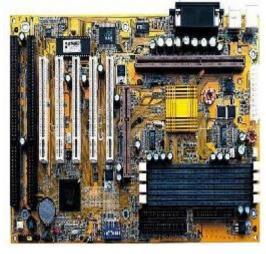


QUESTION NO: 342 Click the area on the graphic that shows the AGP slot on the motherboard.





QUESTION NO: 343 Click the area on the graphic that shows the ISA slots.

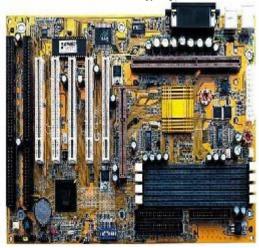


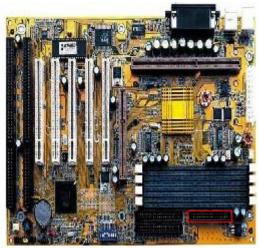
Answer:



QUESTION NO: 344

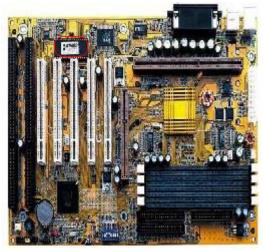
Click the area on the graphic that shows the Floppy port.



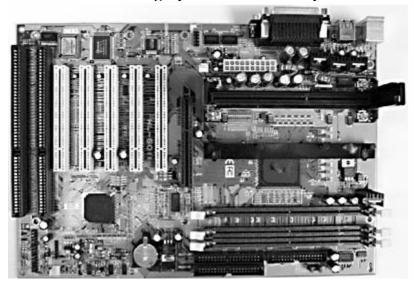


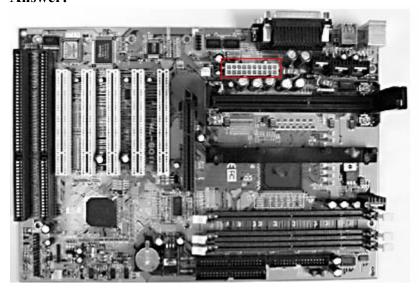
QUESTION NO: 345 Click the area on the graphic that shows the CMOS chip.



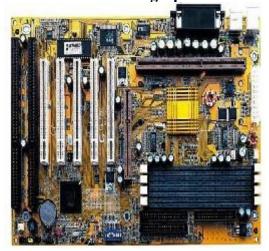


QUESTION NO: 346Click the area on the graphic that shows the power connector,

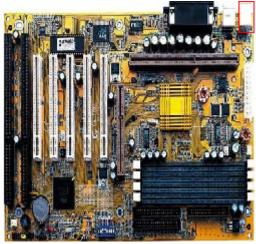




QUESTION NO: 347 Click the area on the graphic that shows the keyboard connector.



Answer:



QUESTION NO: 348

Click on the area on the graphic that shows the RJ11 connector.

<No picture available>

Answer: Click the RJ-11 interface.

Explanation: The RJ-11 connector is similar to the RJ-45 connector but thinner.

RJ 45 connector: RJ-11 cable:



QUESTION NO: 349

Click the area on the graphic that shows the place to connect a telephone line to the modem.

<No picture available. It shows a rear view of a modem.>

Answer: Similar to the previous question. **Explanation:** The RJ-11 connector is used.

QUESTION NO: 350

After replacing a keyboard with a known good one, it still is not recognized by the system. What could be the problem?

- A. SETUP was not run.
- B. The processor is overheating.
- C. The BIOS needs to be flashed.
- D. The keyboard controller is not working.

Answer: D

Explanation: The keyboard controller could be malfunctioning.

Incorrect Answers

A: There is no need to run SETUP to install a keyboard.

B: Processor overheating is a very unlikely cause of this problem.

C: BIOS upgrades are not required to support new keyboards.

QUESTION NO: 351

A user often gets "Out of disk space" error. Which actions should you consider? (Choose three)

- A. Add more RAM.
- B. Add a larger hard drive.
- C. Replace diskette drive.
- D. Remove unneeded files.
- E. DEFRAG the existing hard drive.

Answer: B, D, E Explanation:

B: Additional hard drive space is one solution.

D: A more prudent solution is simply to remove unneeded files.

E: Defragmentation only improves the performance of a hard drive. No disk space is freed. However, this is the third best option.

Incorrect Answers

RAM and the diskette drive do not affect available hard disk space.