

# ELITECERTIFY

## Certification Study Guide



## CompTIA

Demo

220-301 CompTIA A+ Core Technologies

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### QUESTION 1

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 2

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: MSCD.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.

### QUESTION 3

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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 4

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 5

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 6

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.

### QUESTION 7

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.

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### 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 8

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 not usually done.

### QUESTION 9

What is the first critical component that a failed motherboard battery affects?

- 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 does 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 10

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.

Incorrect Answers

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 11**

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 12**

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

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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 13**

Click the area on the graphic that shows the parallel port?

Answer:



Explanation:



This port is also known as a printer port.

**QUESTION 14**

What are the minimum hardware components required for the POST to pass? (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 15**

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.

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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 16

"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 be bad, but it is less likely.

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

### QUESTION 17

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

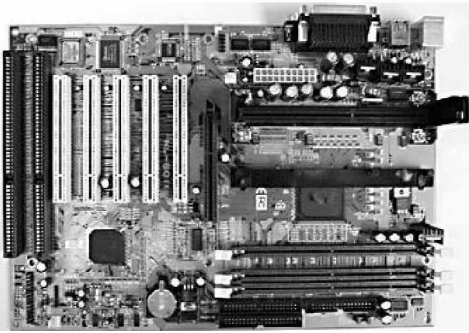
Explanation: A floppy cable that is installed backwards would keep diskette drive light lit. Incorrect Answers  
If the diskette drive was functioning properly the diskette drive light would be turned off after the boot process finishes regardless if there were a disk present or not.

### QUESTION 18

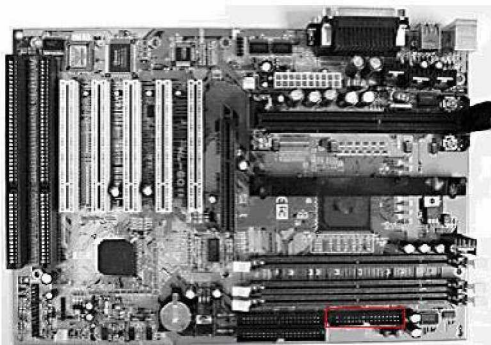
Click the area on the graphic that shows the floppy port.

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Answer:



Explanation:



#### QUESTION 19

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.