Purchasing a PC or Building Your Own - Chapter #23

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Key Terms

Clone — A computer that is a no-name Intel- and Microsoft-compatible PC.

Hard-disk loading — The illegal practice of installing unauthorized software on computers for sale. Hard-disk loading can typically be identified by the absence of original software disks in the original system's shipment.

IBM-compatible PC — A computer that uses an Intel (or compatible) processor and can run DOS and Windows.

Review Questions

1. What are the advantages of buying a well-known, brand-name computer?
Most come with after sales warranty services and they provide additional support, such as functional Web sites, updated drivers and utilities, and online troubleshooting or user manuals.

2. What are the advantages of buying a less-expensive PC clone?
They are easier to obtain replacement or additional parts.

3. When purchasing a computer system that has preinstalled software, what else should you be certain to obtain from the vendor with this software?
Documentation, reliable upgrades, and support, along with original cd's or disks.

4. List three reasons why it may be wise to build your own PC. List three reasons, other than fear, why you may not want to build your own PC.
1) **Wise –**
   a. Knowledge is poser. The knowledge and experience gained in researching the parts to buy, studying the documentation, and finally assembling the PC cannot be overemphasized.
   b. When you buy all the parts and software for a PC individually, you also get the documentation for each hardware component.
   c. When you purchase each computer part individually, you are more likely to understand what you are buying, and you can be more particular about the selection of each component. You have control over the brand and feature of each component ion the PC.
2) **Unwise –**
   a. If you are in a rush to get a PC up and running. If you are a first time builder this is not a good idea, because the process takes time and you always make mistakes the first time.
   b. Individual parts are may be warranted, but if you build your own PC, there is no overall warranty on it.
   c. If you don't have access to an experienced technician or technical service center you can consult if you encounter a problem you cannot solve on your own.

5. When is it most likely best to buy a new system rather than upgrade an old one?
When the system needing upgraded is more than five years old, because the cost of upgrading it will exceed the value of the current system.

6. Why is it necessary to match your AGP video card to your motherboard AGP slot?
Because the video card must match the AGP standards your motherboard supports.

7. What is one reason to install drives before installing the motherboard?
The risk of dropping a drive on the motherboard and damaging it.

8. When using serial ATA, which operating systems support up to six IDE drives?
Windows 2000/XP

9. What is the purpose of the thermal compound placed on top of the processor?
To conduct heat from the CPU to the heat sink.

10. In what type of configuration is one end of the audio cord connected to the CD drive and the other end connected to the motherboard?
Sound support embedded on the motherboard.

11. Why is it a good idea not to put the case cover back on right after you've installed all the internal components?
To make changes easier if something goes wrong.

12. What is the purpose of installing spacers in a computer case?
To keep the motherboard from touching the case and possibly shorting.

13. Name three possible sources of information for connecting the front leads.
1. Each one is labeled
2. Corresponding screen-printed labels on the board to tell you which lead goes on which pins.
3. A sticker inside the case showing a diagram of the motherboard with labels for the front leads.
4. The documentation

14. Which drive cable has a twist in it and why?
The floppy drive cable to make it drive A in the final configuration.

15. Give one advantage of not installing drive cables until after the motherboard is installed in the case.
This ensures that the cords are not in the way when the motherboard is installed.

16. Why should you use short screws when securing drives?
So that they will not protrude too deeply into the drive and damage it.

17. What is the purpose of tying power cords and cables together before closing the computer case?
Tying up cords makes the inside of the case less cluttered and prevents cords from obstructing airflow and fans.

18. What is the purpose of the registration tab on the video card in this chapter's example installation?
To allow the card to fit into an AGP Pro slot.

19. Name the component that fits around the AGP slot and helps to stabilize the video card.
Retention Mechanism

20. Why should you not run a system for a long time with the case cover removed?
Because some systems require the cover to be on to achieve proper airflow.