

Final Test

Building and Understanding Your Own Computer

This is an optional test. It is a test of your knowledge of computers from this course. First, fill in the answers you are sure of. Then, check your notes. After that, check the web site mentioned in class for the answers. You will learn by this research if you forgot from class. Open book is acceptable. If you complete the test and pass at 95%, you may bring the test to Gene at the store or mail with a SASE and receive a "Certificate of Achievement"

What is the difference between an "open architecture" computer and a proprietary computer?

Name the main parts of a computer system:

Name the main parts inside the computer:

Name the main parts of the motherboard:

What is the BIOS?

What is the purpose of CMOS?

What are important features of motherboards to look at in selecting one?

CPU's are available in 2 types from manufacturers. What are they?

What are the 2 main manufacturers of CPU chips?

List the processor evolution:

What is the range of speeds for a Pentium I computer?

What is the difference between a Pentium and Pentium MMX computer?

What ports does a computer have?

What destroys computer components easily?

Name 3 more pitfalls in building your own computer:

Plugging in the keyboard, PS2 mouse, floppy or hard drive, or expansion card with power already turned on does what?

List the 3 main voltages that a computer power supply delivers:

What is the difference between an AT, ATX, and proprietary case?

What controllers were placed on the motherboard that were not normally on a 286, 386, or 486?

What controller is not desirable on a motherboard and list 2 reasons why?

What problem was "Plug and Play" supposed to solve?

What is the difference between system memory and storage memory?

What is the difference between a "Bit" and a "Byte" ?

What is hexadecimal used for?

Where do you see it as a computer user?

What is conventional memory?

What is extended memory?

How much extended memory does a computer have?

What are Upper Memory Blocks?

What type of memory does a standard Pentium computer use?

How many memory modules does a Pentium use to make a bank?

What other factor should you be aware of in selecting memory for a computer such as Dell, Gateway, IBM, Compaq, etc?

What type of memory does a Pentium II/III/ Celeron use?

How many modules make up a bank in the above?

What is the difference between PC66, PC100, PC133 memory and where is each used?

What type of memory does a Pentium 4 use?

What type of socket does a Pentium II/III use to plug in the CPU chip?

A Pentium 4 uses what "socket" for the CPU?

How many hard drives can be connected to an IDE controller?

How are each drive designated on the controller?

How many hard drive controllers are normally found on a motherboard?

List other devices that can be connected to a HDC?

How many pins does the cable and connector have for the floppy drive?

How many pins does the cable and connector have for an IDE hard drive?

What designates pin 1 of the cable or connector?

How many pins does a SCSI device use?

Why would you use SCSI in a computer?

What happens if you connect the cable backwards or miss a row or column of pins?

If you have a hard drive, a CD Rom drive, a CD Writer, and an internal Zip drive and need to add a hard drive, what is your best option?

What is required to make an Ultra 66 hard drive work that a standard EIDE drive doesn't use (2 important things)?

List the types of expansion slots used in computers including the earlier computers.

What is your best choice of expansion slots for a video card?

What expansion slots are found on the newest computers?

What is a serial port normally used for?

What is a parallel port normally used for?

What is a USB port normally used for?

What is a Firewire port normally used for?

What speeds do a USB port work at?

What speeds does a Firewire port work at?

What are IRQ's?

What address and IRQ is normally used for Com 1?

What address and IRQ is normally used for LPT 1 ?

What IRQ's are normally available in a computer?

What are the 3 popular resolutions that a computer might use?

What is the minimum color mode a computer normally needs to be in?

What is required to make a display card operate in different modes?

What 3 drivers are normally required to make most computers operational?

What is a NIC and why would you have one in your home computer?

If you are not interested in music, why would you want a sound card in your computer?

What was the main reason Microsoft told users they needed to upgrade from Windows 3.1 to Windows 95?

What was the main reason Microsoft told users they needed to upgrade from Windows 95 to 98? From 98 to 98SE?/

What feature did Microsoft try to hide in Windows Me?

What is the major difference between Windows 95/98 and Windows NT?

What big feature did Windows 2000 add from NT?

What are the steps to preparing a hard drive, including what the manufacturer does? (in order)

What is the smallest number of partitions you can have on a hard drive?

What is an extended partition? What is a logical drive?

What is the difference between FAT 16, FAT32, NTFS?

What 3 files are required to make your computer boot to the "C" Prompt?

What additionally and specifically is required to access your CD ROM drive?

Why is it recommended (2 reasons) to place CAB files on your hard drive before running setup?

How do you install Windows 98 without the "Certificate of Authenticity" serial number?

If Windows gets corrupted, what steps are recommended to repair it?

Using a scratched installation CD can cause what problems?

Why is a scratched music CD usable and a scratched data CD not usable?

Where do computer virus' come from?

What 3 things are required to protect yourself from virus'?

What does a virus do to your computer? (list at least 3)

List 4 good backup devices: _____ Why is backing up to a second hard drive the worst possible method?

Why do you need to back up?

What exactly should you backup?