

## **Ejercicio N°2**

**Lea e interprete el siguiente texto y en clase se realizara un cuestionario**

### **Buying a PC**

If you thought of buying the HPs5 PC, you should know that it has features like quick processing speed, but there are some disadvantages that you must consider. Its operating system is Windows 7 and it's useful that the tower is set up to read memory cards, so you won't have to purchase an external device. But it is very important that you have enough USB ports to connect everything you need, and this PC only has six, which isn't a great number. HP offers free support if you are under warranty; otherwise you have to pay extra. The warranty lasts for two years and if this isn't enough, you can always purchase a longer warranty if you want extra protection and free support. Fortunately, you always can resolve many troubles by visiting the user forums and there are many of them on the Internet.

### **Questions.**

What are the characteristics of an HPs5 PC?

How many USB ports does it have?

What about the warranty?

How can I solve problems if I have problems with the HPs5 PC?

Having a PC at home is almost a necessity nowadays. Your PC will make your life easier by allowing you to control your bank account or watch a movie. It is also a file cabinet, internet portal, photo archive, and much more. First, if you wanted to make some of your office work at home, your PC would help you a lot. Second, you will have a place to store your images, videos and music. And with the right software, and a good machine, you can do your own editing work. The HP s5z has features like quick processing speed, but there are some disadvantages that you must consider. It comes with a 1.5 TB hard drive, but 6 GB of RAM is not as high as it should, especially if you want to run multiple applications.

### **Questions.**

What is the advantage of having a PC at home?

What are the characteristics of an HPs5z?

### **I/O Structure**

A computer system consists of CPUs and multiple device controllers that are connected through a common bus. The device controller is responsible for moving the data between the peripheral devices that it controls and its local buffer storage. Typically, operating systems have a device driver for each device controller. For moving bulk data, direct memory access (DMA) is used. After setting up buffers, pointers, and counters for the I/O device, the device controller transfers an entire block of data directly to or from its own buffer storage to memory, with no intervention by the CPU. Only one interrupt is generated per block, to tell the device driver that the operation has completed, rather than the one interrupt per byte generated for low-speed devices.

To start an I/O operation, the device driver will load the appropriate registers within the device controller. The device controller must examine the contents of these registers to determine what action to take. Once the transfer of data is complete, the device controller informs the device driver via an interrupt that it has finished its operation. The device driver then returns control to the operating system . For other operations, the device driver can return status information. Computer system structure There are different categories for designing a computer system according to the number processors used.

1. Single-processor system: there is one CPU for executing instructions.
2. Multiprocessor system: It contains two or more processors that share bus, clock, physical memory and peripheral devices. The advantages of multiprocessors are:

- a) Increase throughput.
- b) Economy scale (less cost).
- c) Increase reliability.

3. Clustered system: it consists of multiple computer systems connected by a local area network.

**Questions.**

What does a computer system consist of?

What is the function of the device driver?

What does the controller do to initiate an I/O operation?

What are the different categories to design a computer system?