**I.What is Operating System?**

Every computer must have an operating system to run other programmes. Operating system is the most important programme that runs on a computer. Operating systems perform basic tasks, such as rec­ognizing input from the keyboard, sending output to the display screen, keeping track of files and directories on the disk, and controlling periph­eral devices such as disk drives and printers.

Operating systems provide a software platform on top of which other programmes, called*application programmes,* can run. The application programmes must be written to run on top of a particular operating sys­tem. Your choice of operating system, therefore, determines to a great ex­tent the applications you can run. For PCs, the most popular operating systems are DOS, OS/2, and Windows.

**to run a programme** — работать с программой

**scroll wheel** — колесико или кнопка на мыши для прокрутки длин­ных текстов

**scrolling** — прокрутка

**to click** — сделать щелчок мышью

**sensor** — датчик

**pointer** — указатель (курсор в форме стрелки, следующий за дви- кениями мыши)

**cordless** — беспроводной

**infrared**- инфракрасный

**interchangeable** — взаимозаменяемый

**computational bandwidth** — диапазон вычислительных возмож- юстей

**dot-matrix printer** — матричный принтер

**dot** — точка

**pin** — штифт, игла

**ribbon** — лента

**ink-jet printer** — струйный принтер

**laser printer** — лазерный принтер

**hand-held** — ручной

**flatbed scanner** — планшетный сканер

**floppy** — гибкий

**storage capacity** — емкость запоминающего устройства

**Questions:**

1. What is a mouse?
2. How many buttons are there on a serial mouse?
3. Who invented a mouse?
4. What are the types of mice?
5. What are the basic characteristics of microprocessors?
6. What are the types of the most widely used printers?
7. What printers are the fastest?
8. What is an optical scanner?
9. What is a floppy disk?
10. What is CD-ROM?
11. What basic tasks do operating systems perform?
12. What are the most popular operating systems?
13. What are application programmes?

Задание: Что из ниже перечисленного относится к оборудованию, а что к программному обеспечению?

1. Programme
2. Mouse
3. CPU
4. Peripheral devices
5. CD-ROM
6. Word processor
7. Modem
8. Web-browser
9. Operating system
10. Scanner
11. Printer

12. Software

13. Display

14. Applications software

15. Disk drives.

II.COMPUTER OPERATIONS . TYPES OF DATA

Much of the processing computers can be divided into two general types of operation. Arithmetic operations are computations with numbers such as addition, subtraction, and other mathematical procedures. Early computers performed mostly arithmetic operations, which gave the false impression that only engineers and scientists could benefit from computers. Of equal importance is the computers ability to compare two values to determine if one is larger than, smaller than, or equal to the other. This is called a logical operation. The comparison may take place between numbers, letters, sounds, or even drawings. The processing of the computer is based on the computer's ability to perform logical and arithmetic operations.

Instructions must be given to the computer to tell it how to process the data it receives and the format needed for output and storage. The ability to follow the program sets computers apart from most tools. However, new tools ranging from typewriters to microwave ovens have embedded computers, or built-in computers. An embedded computer can accept data to use several options in it's program, but the program itself cannot be changed. This makes these devices flexible and convenient but not the embedded computers itself.

Types of data

With the advent of new computer applications and hardware, the definition of data has expanded to include many types.

Numeric data consists of numbers and decimal points, as well as the plus (+) and minus (-) signs. Both arithmetic operations and logical operations are performed on numeric data. This means that numbers can be used for calculations as well as sorted and compared to each other.

Text, or textual data, can contain any combination of letters, numbers and special characters. Sometimes textual data is known as alphanumeric data.

Various forms of data that we can hear and see makes up audio-visual data. The computer can produce sounds, music and even human voice. It can also accept audio-information as an input. Data can also take form of drawings and video sequences.

Physical data is captured from the environment. For example, light, temperature and pressure are all types of physical data. In many large buildings, computer systems process several kinds of physical data to regulate operations. Computers can set off security alarms, control temperature and humidity, or turn lights on and off, all in response to physical data. These applications increase people's safety and save the time and money.