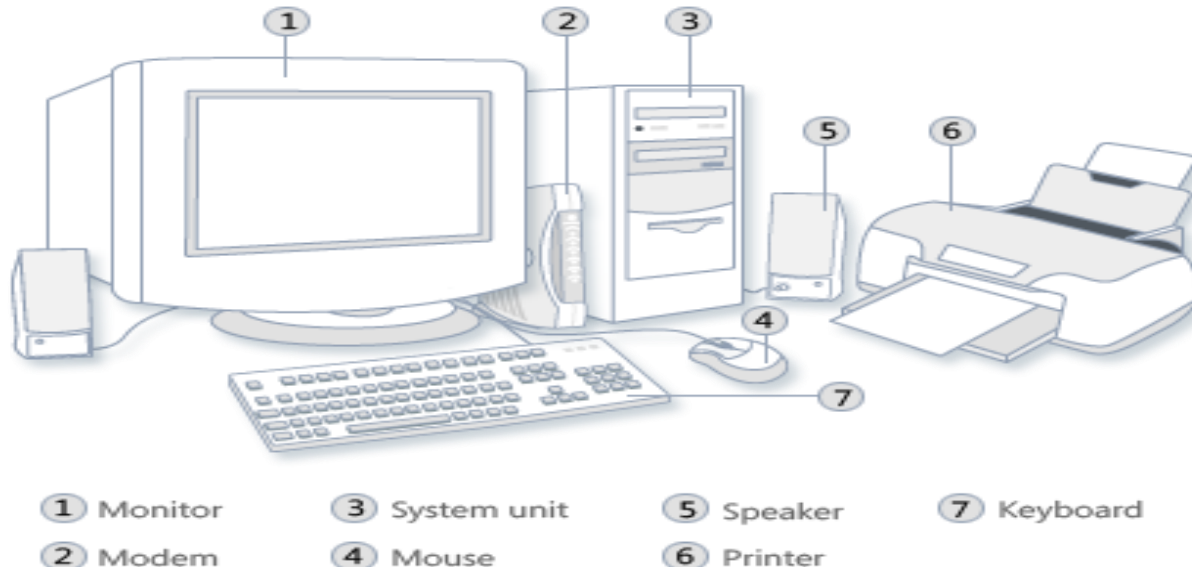# Introduction & General use of Computers
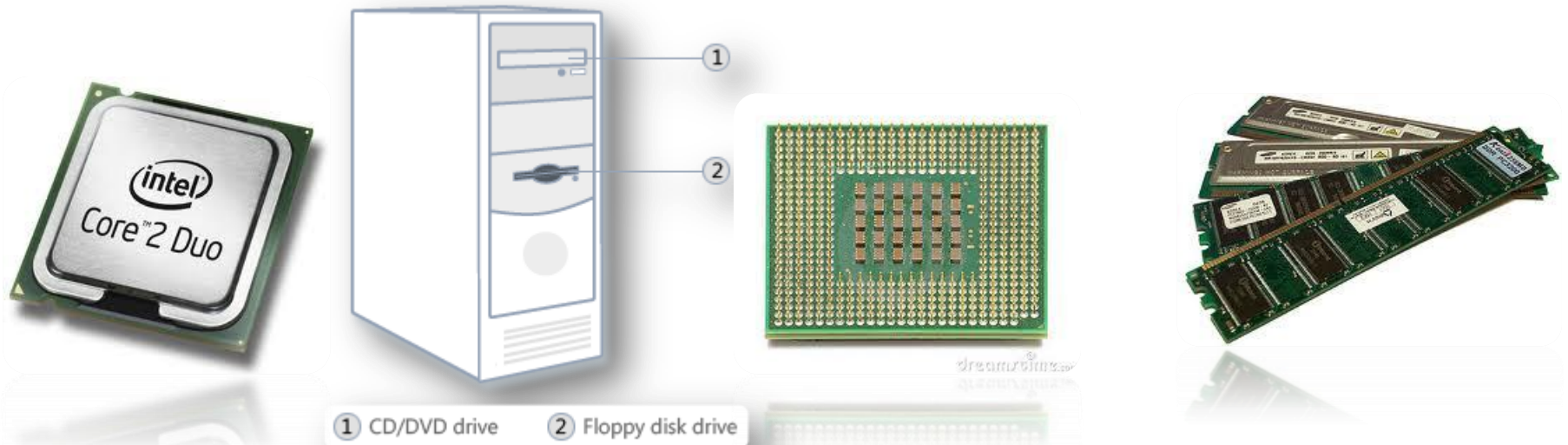
Introduction To Computer

Parts of a computer

➢ If you use a desktop computer, you might already know that there isn't any single part called the "computer." A computer is really a system of many parts working together. The physical parts, which you can see and touch, are collectively called hardware. (Software, on the other hand, refers to the instructions, or programs, that tell the hardware what to do.)

➢ The illustration below shows the most common hardware in a desktop computer system. Your system may look a little different, but it probably has most of these parts. A laptop computer has similar parts but combines them into a single notebook-sized package.

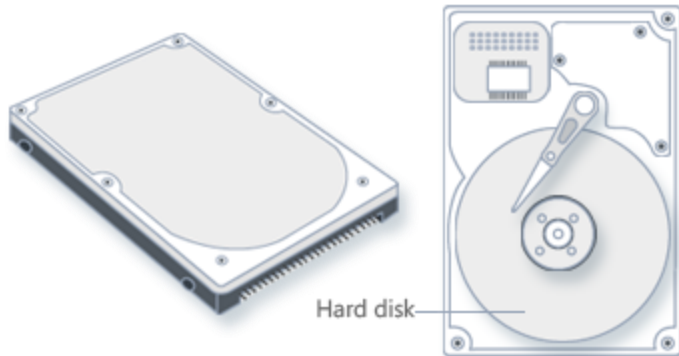| ① Monitor	③ System unit	⑤ Speaker	⑦ Keyboard
② Modem	④ Mouse	⑥ Printer	

Introduction To CPU

System unit

➢ The system unit is the core of a computer system. Usually it's a rectangular box placed on or underneath your desk. Inside this box are many electronic components that process information. The most important of these components is the central processing unit (CPU), or microprocessor, which acts as the "brain" of your computer. Another component is random access memory (RAM), which temporarily stores information that the CPU uses while the computer is on. The information stored in RAM is erased when the computer is turned off.

① CD/DVD drive ② Floppy disk drive

Introduction To Storage

Storage

➢ Your computer has one or more disk drives—devices that store information on a metal or plastic disk. The disk preserves the information even when your computer is turned off.

• **Hard disk drive**

➢ Your computer's hard disk drive stores information on a hard disk, a rigid platter or stack of platters with a magnetic surface. Because hard disks can hold massive amounts of information, they usually serve as your computer's primary means of storage, holding almost all of your programs and files. The hard disk drive is normally located inside the system unit.

Hard disk

Introduction To Storage(Cont)

- **CD and DVD drives**

➢ Nearly all computers today come equipped with a CD or DVD drive, usually located on the front of the system unit. CD drives use lasers to read (retrieve) data from a CD, and many CD drives can also write (record) data onto CDs. If you have a recordable disk drive, you can store copies of your files on blank CDs. You can also use a CD drive to play music CDs on your computer.

➢ DVD drives can do everything that CD drives can, plus read DVDs. If you have a DVD drive, you can watch movies on your computer. Many DVD drives can record data onto blank DVDs.

Introduction To Computer Accessories

➢ **Mouse>>** A mouse is a small device used to point to and select items on your computer screen.

➢ **Keyboard>>** A keyboard is used mainly for typing text into your computer. Like the keyboard on a typewriter, it has keys for letters and numbers
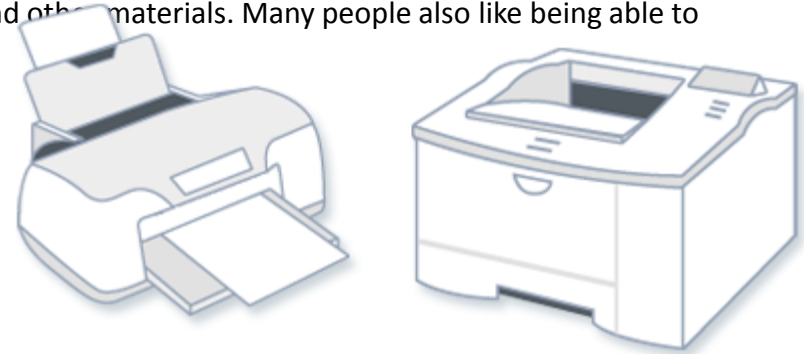
➢ **Monitor>>** A monitor displays information in visual form, using text and graphics.

➢ The portion of the monitor that displays the information is called the screen.

➢ Like a television screen, a computer screen can show still or moving pictures

➢ There are two basic types of monitors:

➢ CRT (cathode ray tube) monitors and

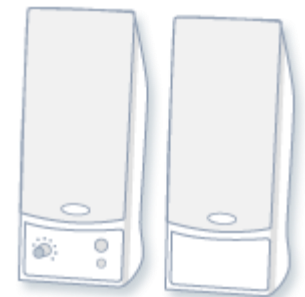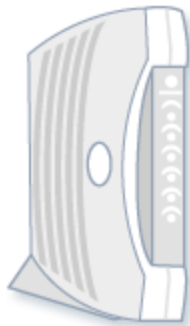➢ LCD (liquid crystal display) monitors

Introduction To Computer Accessories(Cont)

➢ **Printer>>**A printer transfers data from a computer onto paper. You don't need a printer to use your computer, but having one allows you to print e-mail, cards, invitations, announcements, and other materials. Many people also like being able to print their own photos at home.

➢ The two main types of printers are inkjet printers and laser printers

➢ **Speakers>>**Speakers are used to play sound.

➢ They may be built into the system unit or connected with cables. Speakers allow you to listen to music and hear sound effects from your computer.

➢ **Modem>>**To connect your computer to the Internet, you need a modem.

➢ A modem is a device that sends and receives computer information over a telephone line or high-speed cable. Modems are sometimes built into the system unit, but higher-speed modems are usually separate components.

Role of Computers in Daily Life

- ➢ You wake up in the morning, switch on your PC and check the mail or update your Facebook status. You go to work, switch on your computer and work. You come back from work, and re-check your mails, make entries in your account folder, check your bank balance, etc. You encourage your child to watch *NatGeo*, or undertake grammar test using the latest software. You watch a movie or play one round of computer game and end your day. But wait, in this busy schedule, have you wondered how much you are dependent on your PC or computer for your daily activities. Take a look at the following points which will help you realize the actual role of computers in daily life.

- ➢ **Importance of Computers in Daily Life**

- ➢ When talking about the use of computers in daily life, we talk about the direct as well as indirect uses. For e.g, when we use the computer for working or gaming, we have its direct uses; while using an ATM, we are actually making an indirect use of computer based technology. The Internet proved to be a boon in the field of science and technology. Computers, in general, are used in nearly all fields, today, like supermarkets, banks, etc. Here are some of the common uses of computers which may help in realizing the role of computers in daily life.

- ➢ **Education**
- ➢ **Accounts**
- ➢ **Data Storage**
- ➢ **Working**
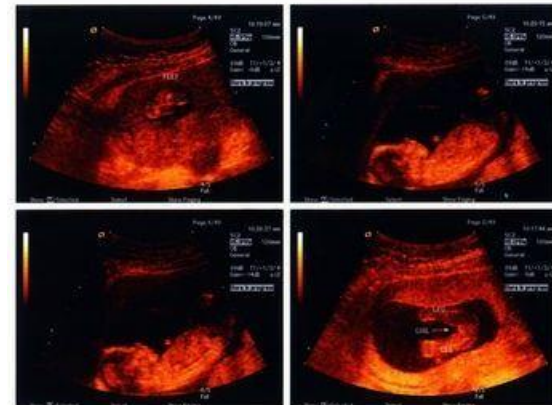- ➢ **Social Networking and Gaming**

Role of Computers in Daily Life(Cont)

➢ **Some More Uses of Computers in Daily Life**

- E-banking

- E-shopping

- Graphics and architectural designs

- Sharing of knowledge

- Entertainment

- Day planners / organizers

- Writing / publishing content

Use of Computers in the Medical Field

➢ A computer has become an essential service in every hospital. Everything is computerized today, from open heart surgeries to X-rays to various clinical tests. Everything is carried out efficiently and effectively by the computer. There are many advantages of computers that make it a must have by every medical professional.

➢ **Computers in the Medical Office**

➢ There are various uses of computer in medical field as it plays a vital role in every medical office. It contributes a lot to the hospital administration where all the administrative processes are computerized. For example, staff records, recording incoming and outgoing time of the staff, the holiday records of the staff, etc.

➢ **Use of Computers in Medicine**

➢ Use of computers in the medical field is also associated with the research and inventions in health sector. Various research studies are carried out with the help of various applications in the computer. For example, studying certain cells, micro organisms, bacteria, etc., is easily possible with computer. It helps you save all the related information that you can refer to, whenever required.

Use of Computers in the Medical Field(Cont)

➢ **Uses of Computers in Hospitals**

➢ Computers are widely used in all the hospitals for numerous purposes apart from administration, accounting, billing, and appointments. It literally helps doctors in performing various surgeries, especially laparoscopic surgeries are possible because of computers where doctors insert the medical tools and small camera and conduct an operation with the help of computers and monitors. Many high tech surgical machines and instruments are capable with small computer systems so that every surgical process is recorded and monitored to avoid complications. Many clinical imaging processes are conducted and examined with the help of computers, such as X-ray and CT scan, etc. Computers also play a vital role in conducting various clinical and biological laboratory tests in hospitals that help in correct diagnosis of the disease. Many critical patients who's heart rate, pulse rate, and brain readings, etc., need be recorded and monitored continuously, are observed through computers.

Video Conferencing

➢ What is Video Conferencing

➢ Video conferencing includes a range of technologies used in a wide range of situations, often it is not just video and audio that is transmitted but also data, allowing collaborative working though shared applications Video conferencing may be:

➢ One-to-one meetings, also known as point to point communications usually involving full two-way audio and video

➢ One-to-many involving full audio and video broadcast from the main site.

➢ Many-to-many, known as multi-point communication, provides audio and video between more than two sites.

➢ Teleconferencing

➢ Video Conferencing

➢ Audio Conferencing

➢ Web Conferencing