

## **Computer Application in e-Business: -**

E-Business (e-Business), or Electronic Business, is the administration of conducting business via the internet. This would include the buying and selling of goods and services, along with providing technical or customer support through the Internet. E-Business is a term often used in conjunction with e-commerce but includes services in addition to the sale of goods.

**Electronic business** commonly referred to as "**E-Business**" or "**E-business**", or an internet business, may be defined as the application of information and communication technologies (ICT) in support of all the activities of the business. Commerce constitutes the exchange of products and services between businesses, groups, and individuals and is one of the essential activities of any business. Electronic commerce focuses on the use of ICT to enable the external activities and relationships of the business with individuals, groups and other businesses.



Fig.no 1.37

## **Bio-Informatics: -**

Bioinformatics is the field of science which applies computer-based tools and technologies on biological research and development. It primarily involves collection and storage of biological and genetic data on which statistical techniques are applied to arrive at the required solution.

Bioinformatics has become an important part of many areas of biology. In experimental molecular biology, bioinformatics techniques such as image and signal processing allow extraction of useful results from large amounts of raw data. In the field of genetics and genomics, it aids in sequencing and annotating genomes and their observed mutations. It plays a role in the textual mining of biological literature and the development of biological and gene ontologies to organize and query biological data. It plays a role in the analysis of gene and protein expression and regulation.

## **Health Care :-**

Now a day, computers are being used to cater to several different aspects of healthcare. The use of a computer is evident right from the beginning when a patient approaches healthcare facility. The healthcare staffs log the patient's details in an organized manner in a computer system. The same system is used for finding and allocating a vacant bed to the patient if required.

The most significant use of computers within healthcare has been its amalgamation with medical equipment. Most of the medical equipment is now computer-based, thus enabling accurate capture of data in digital form. Further, a device like CT scanner helps the physicians to view a 3-D image of body organs.

Health care (or healthcare) is the diagnosis, treatment, and prevention of disease, illness, injury, and other physical and mental impairments in humans. Health care is delivered by practitioners in medicine, chiropractic, dentistry, nursing, pharmacy, allied health, and other care providers. It refers to the work done in providing primary care, secondary care, and tertiary care, as well as in public health.



Fig.no 1.38

### Remote Sensing: -

Remote sensing is the technique of acquiring information about a subject (material or spatial) without coming in direct contact with it. Since there are no direct contact involved, wireless devices are used for performing remote sensing task. Such devices are typically real-time systems that continuously gather and store data related to the subject under observation. A **RADAR** system can be considered as a good example of remote sensing device that



measures the time delay between sending and receiving of signals to detect information related to the objects.

Fig.no 1.39

### GIS (Geographic information system): -

Geographic information system (GIS) is a system that gathers location-specific data present it in various meaningful forms. It is basically a computer-based information system that captures and stores location-specific data against different parameters.

A geographic information system (GIS) lets us visualize, question, analyse, interpret, and understand data to reveal relationships, patterns, and trends.

**Geographic information system (GIS)** is a system designed to capture, store, manipulate, analyse, manage, and present all types of geographical. The acronym **GIS** is sometimes used for **geographical information science** or **geospatial information studies** to refer to the academic discipline or career of working with geographic information systems. In the simplest terms, GIS is the merging of cartography, statistical analysis, and database technology.



Fig.no 1.40

**Meteorology and Climatology: -**

Metrology is the study of the atmosphere and the related weather condition over short time intervals aims at making routine weather forecasts.

**Meteorology** is the interdisciplinary scientific study of the atmosphere. Studies in the field stretch back millennia, though significant progress in meteorology did not occur until the 18th century. The 19th century saw breakthroughs occur after observing networks developed across several countries. After the development of the computer in the latter half of the 20th century, breakthroughs in weather forecasting were achieved.



Fig.no 1.41

**Computer Gaming: -**

Computers are widely used for playing games that are like video or console- based games. A computer must process graphics and animations support for ensuring rich gaming experience to the user. The computer gaming industry has evolved tremendously over the experience over the past decade.

Computer and video games are a maturing medium and industry and have caught the attention of scholars across a variety of disciplines. By and large, computer and video games have been ignored by educators.



Fig.no 1.42

**Multimedia: -**

Multimedia is media and content that uses a combination of different content forms. This contrasts with media that use only rudimentary computer displays such as text-only or traditional forms of printed or hand-produced material. Multimedia includes a combination of text, audio, still images, animation, video, or interactivity contentforms.

Multimedia is usually recorded and played, displayed, or accessed by information contentprocessing devices, such as computerized and electronic devices, but can also be part of a live performance. Multimedia devices are electronic media devices used to store and experience multimedia content.



Fig.no 1.43

## **Animation:-**

**The animation** is the rapid display of a sequence of images to create an illusion of movement. The most common method of presenting animation is as a motion picture or video program, although there are other methods. This type of presentation is usually accomplished with a camera and a projector or a computer viewing screen which can rapidly cycle through images in a sequence. Animation can be made with either hand rendered art, computer-generated imagery, or three-dimensional objects, e.g. puppets or clay figures, or a combination of techniques. The position of each object in any image relates to the position of that object in the previous and following images so that the objects each appear to fluidly move independently of one another. The viewing device displays these images in rapid succession, usually 24, 25, or 30 frames per second.



Fig.no 1.44