6. INTERNET

6.1 INTERNET

A global network connecting millions of computers, more than 100 countries are linked into exchanges of data, news and opinions. The Internet links are computer networks all over the world so that users can share resources and communicate with each other.



➢ Uses of Internet

- Communication
- Send and receive emails
- Download files
- Post your opinion to a newsgroup
- Chatting
- Surf the world wide web
- Business
- Shopping
- Entertainment

6.2 Advantages of Internet

- **E-mail**: Email is now an essential communication tools in business. With e-mail you can send and receive instant electronic messages, which works like writing letters. Your messages are delivered instantly to people anywhere in the world, unlike traditional mail that takes a lot of time. Email is free, fast and very cheap when compared to telephone, fax and postal services.

- **24 hours a day - 7 days a week:** Internet is available, 24x7 days for usage.

- **Information:** Information is probably the biggest advantage internet is offering. There is a huge amount of information available on the internet for just about every subject, ranging from government law and services, trade fairs and conferences, market information, new ideas and technical support. You can almost find any type of data on almost any kind of subject that you are looking for by using search engines like google, yahoo, msn, etc.

- **Online Chat:** You can access many 'chat rooms' on the web that can be used to meet new people, make new friends, as well as to stay in touch with old friends. You can chat in MSN and yahoo websites.

- **Services:** Many services are provided on the internet like net banking, job searching, purchasing tickets, hotel reservations, guidance services on array of topics engulfing every aspect of life.

- **E-commerce:** Along with getting information on the Internet, you can also shop online. There are many online stores and sites that can be used to look for products as well as buy them using your credit card. You do not need to leave your house and can do all your shopping from the convenience of your home. It has got a real amazing and wide range of products from household needs, electronics to entertainment.

- **Entertainment:** Internet provides facility to access wide range of Audio/Video songs, plays films. Many of which can be downloaded. One such popular website is YouTube.

- **Software Downloads:** You can freely download innumerable, software's like utilities, games, music, videos, movies, etc. from the Internet.

6.3 Limitations of Internet

- **Theft of Personal information:** Electronic messages sent over the Internet can be easily snooped and tracked, revealing who is talking to whom and what they are talking about. If you use the Internet, your personal information such as your name, address, credit card, bank details and other information can be accessed by unauthorized persons. If you use a credit card or internet banking for online shopping, then your details can also be 'stolen'.

- **Negative effects on family communication:** It is generally observed that due to more time spent on Internet, there is a decrease in communication and feeling of togetherness among the family members.

Internet addiction: There is some controversy over whether it is possible to actually be addicted to the Internet or not. Some researchers, claim that it is simply people trying to escape their problems in an online world.

- **Virus threat:** Today, not only are humans getting viruses, but computers are also. Computers are mainly getting these viruses from the Internet. Virus is a program which disrupts the normal functioning of your computer systems. Computers attached to internet are more prone to virus attacks and they can end up into crashing your whole hard disk.

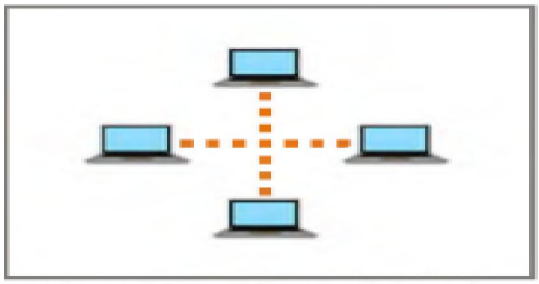
- **Spamming:** It is often viewed as the act of sending unsolicited email. This multiple or vast emailing is often compared to mass junk mailings.

It needlessly obstructs the entire system. Most spam is commercial advertising, often for dubious products, get-rich-quick schemes, or quasi-legal services. Spam costs the sender very little to send — most of the costs are paid for by the recipient or the carriers rather than by the sender.

6.4 types of computer networks

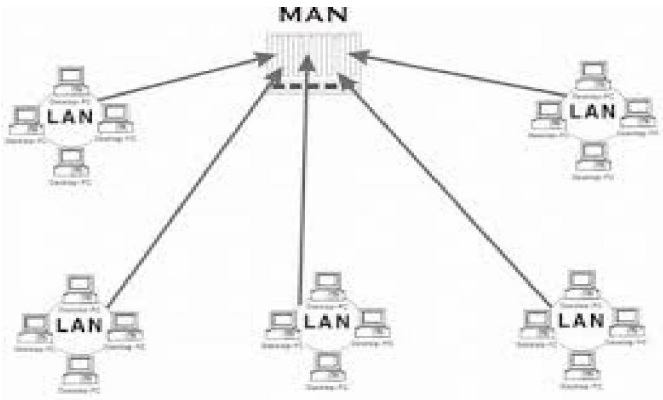
A **network** is a group of two or more computer systems linked together. They are three types of computer networks:

- **Local Area Network (LAN):** A LAN is two or more connected computers sharing certain resources in a relatively small geographic location, often in the same building. Examples include home networks and office networks.

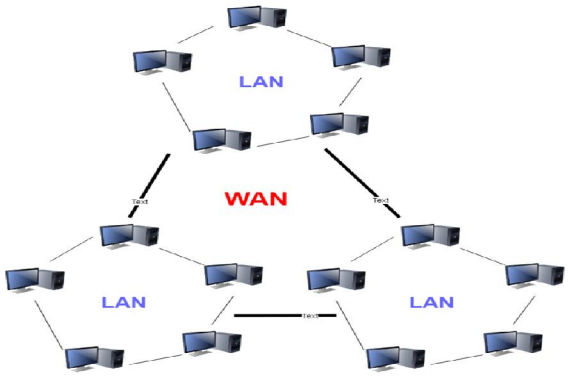


A Local Area Network (LAN)

- **Metropolitan Area Network (MAN):** A metropolitan area network(MAN) is a large computer network that usually spans a city or a large campus. A MAN often acts as a high speed network to allow sharing of regional resources. A MAN typically covers an area of between 5km and 50km diameter.



- **Wide Area Network(WAN):** WAN covers a large geographic area such as country, continent or even whole of the world. A WAN is a geographically-dispersed collection of LANs. Most WANs (like the Internet) are not owned by any one organization but rather exist under collective or distributed ownership and management.



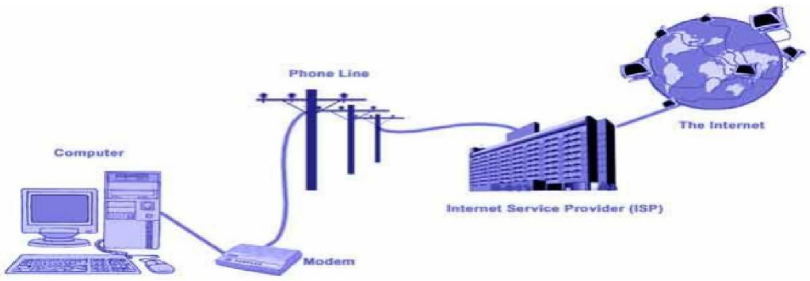
6.5 Types of internet connections

These types of internet connections which are as follows

Dial-up

- Slower that other type of connection
- Connects through existing phone lines using dial-up modem
- Cheapest
- Must “dial-up” to connect to Internet and disconnect when done.
- Cannot use Internet and phone line at the same time.

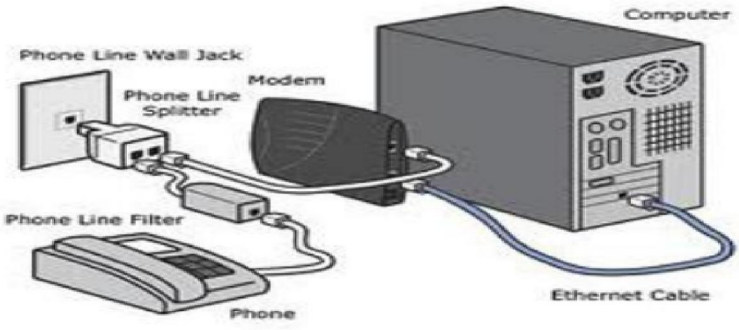
Dial-up



Digital Subscriber Line (DSL)

- Broadband – faster than dial-up connection
- Connects through phone lines, but does not require phone service
- Always on
- Internet and phone can be used in the same time
- Unavailable in many location

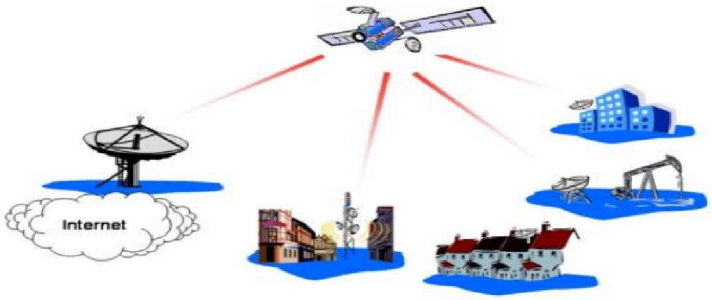
Digital Subscriber Line (DSL)



Satellite

- Broadband – faster than dial-up, but data is delayed
- Connects via satellites
- Can be affected by rain and snow
- Does not require phone lines and cables
- Can be use anywhere around the world

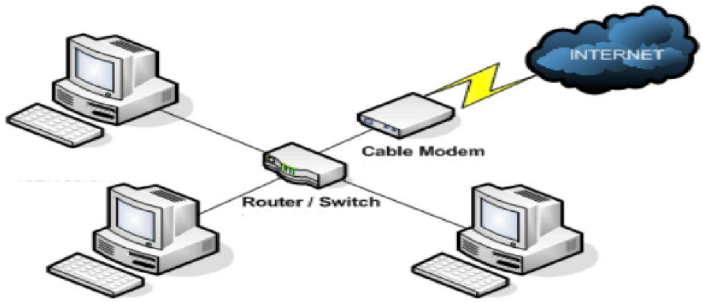
Satellite



Cable

- Broadband – faster than dial-up and DSL
- Use cable connection
- Always on
- Only available where cable is available

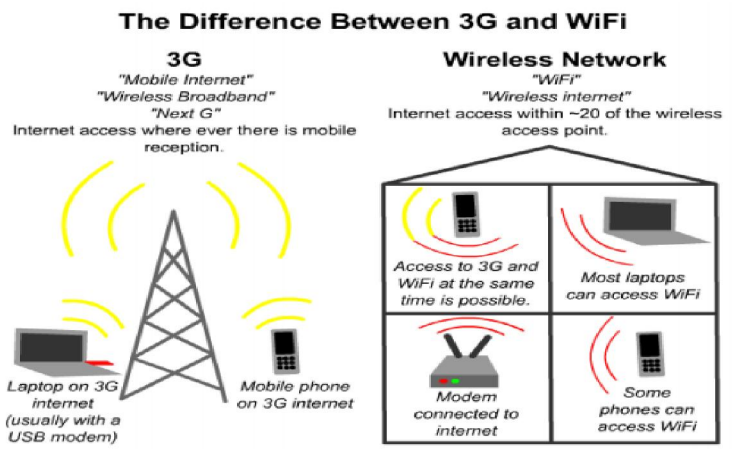
Cable



3G and 4G

- Available for mobile phones, computers and tablets
- Connects wirelessly through 3G/4G provider
- Can access Internet anywhere
- Slower than DSL and Cable connection

3G and 4G



6.6 Internet Applications

- The World-Wide Web (WWW)
- Electronic Mail (E-Mail)
- File Transfer Protocol (FTP)
- Search Engine
- Chatting
- Video Conferencing
- E-Commerce

6.7 Understanding Website Names

- .com- for commercial enterprises.
- .org – for nonprofit organization.
- .net – for networks.
- .edu- for educational institutes.
- .gov- for governmental organizations.
- .mil – for military services.
- .int – for organizations established by international treaty.