Lecture-05



1.4.4 Computer System

According to section 2(1)(I) of the IT Act "computer system" means a device or collection of devices, including input and output support devices and excluding calculators which are not programmable and capable of being used in conjunction with external files, which contain computer programs, electronic instructions, input data and output data, that performs logic, arithmetic, data storage and retrieval, communication control and other functions.

Simply put, a computer system has the following characteristics:

- 1. it is a device or collection of devices which contain data or programs,
- 2. it performs functions such as logic, storage, arithmetic etc,
- 3. it includes input and output support systems,
- 4. it excludes non-programmable calculators.

Illustrations:

- Laptop computers
- Cell phones
- Sophisticated laser printers
- Hi-end scanners

The American courts have held that the Internet falls under the definition of computer system and the use of email is accessing a computer.

State of Pennsylvania v. Murgalis

[No. 189 MDA 1999 (Pa. Super.Ct., June 2, 200)]

1.4.5 Computer Network

According to section 2(1)(j) of the IT Act

"computer network" means the interconnection of one or more computers through:

(i) the use of satellite, microwave, terrestrial line or other communication media and

(ii) terminals or a complex consisting of two or more interconnected computers whether or not the interconnection is continuously maintained. Simply put, a computer network is the interconnection of one or more computers through:

• satellite Satellite Internet connection is an arrangement in which the outgoing and incoming data travels through a satellite.

Each subscriber's hardware includes a satellite dish antenna and a transceiver (transmitter / receiver). The dish antenna transmits and receives signals.

microwave

The term microwave refers to electromagnetic waves of a particular frequency. Microwave frequencies are used in radars, Bluetooth devices, radio astronomy, GSM mobile phone networks, broadcasting and telecommunication transmissions etc.

• terrestrial line or Terrestrial lines include fibre optic cables, telephone lines etc.

• other communication media

Communication media refers to any instrument or means that facilitates the transfer of data, as between a computer and peripherals or between two computers. Other ways in which two computers can be connected include cables, hubs, switches etc.