

## **TOPIC: METHODS AND MEDIUM OF TRANSMITTING INFORMATION**

### **RADIO**

In 1894, the young Italian inventor Guglielmo Marconi began working on the idea of building a commercial wireless telegraphy system based on the use of Hertzian waves (radio waves).

By August 1895, Marconi was field testing his system but even with improvements, he was only able to transmit signals up to one-half mile. In 1897, he established a radio station on the isle of Wight, England. In summary, Radio is a means of transmitting information over a long distance; most especially rural areas have access to information transmitted over the radio. It is all about sending audio messages over a long distance using electromagnetic wave.

### **TELEVISION**

Television is used to transmit both visual and audio messages to large audience over a far distance.

Electronic television was first successfully demonstrated in San Francisco on Sept, 7, 1927.

The system was designed by Philo Taylor Farnsworth, a 21-year-old inventor who had lived in a house without electricity until he was 14. While still in high school, Farnsworth had begun to conceive of a system that could be coded onto radio waves and then transformed back into a picture on a screen. There was also a mechanical television system, which scanned images using a rotating disk with holes arranged in a spiral pattern, had been demonstrated by John Logie.

In summary, Farnsworth scanned images with a beam of electrons while John Logie developed a mechanical television. Television is audio – visual electronic used to transmit both the audio messages and images.

### **MEDIUM OF INFORMATION TRANSMISSION**

Types of Information Transmission, namely:

1. Satellite
2. Wireless
3. Cable

**SATELLITE:** In satellite communication, signal transferring between the sender and receiver is done with the help of satellite. In this process, the signal which is a beam of modulated microwaves is sent towards the satellite. Then the satellite amplifies the signal and sent it back to the receiver's antenna present on the earth surface. All the signal transferring is happening in the space. Thus, this type of communication is known as

### **SPACE COMMUNICATION.**

**WIRELESS:** Wireless communication involves the transmission of information over a distance without the help of wires, cables or any other forms of electrical conductors. The transmitted distance can be anywhere between a few meters (e.g. a television's remote control) and thousands of kilometers (e.g. radio communication).

Devices used for Wireless Communication

1. Cordless telephones
2. Mobiles
3. GPS Units
4. Wireless computer parts
5. Satellite

**CABLE:** Cable used for information transmission is Fiber-optics, also called

**OPTICAL FIBER.**

It is a technology that allows light to travel along thin glass or plastic wires. This type of cable is used most commonly in the communication industry, because digital information can be converted into light pulses that move along the length of the wire. Examples of the kinds of information that can pass through a fiber-optic cable are : Telephone calls, the internet and television.

Means of transmitting information

1. Fax Machine
2. Mobile Phone
3. Telegraph
4. Television
5. Radio
6. Satellite
7. Internet