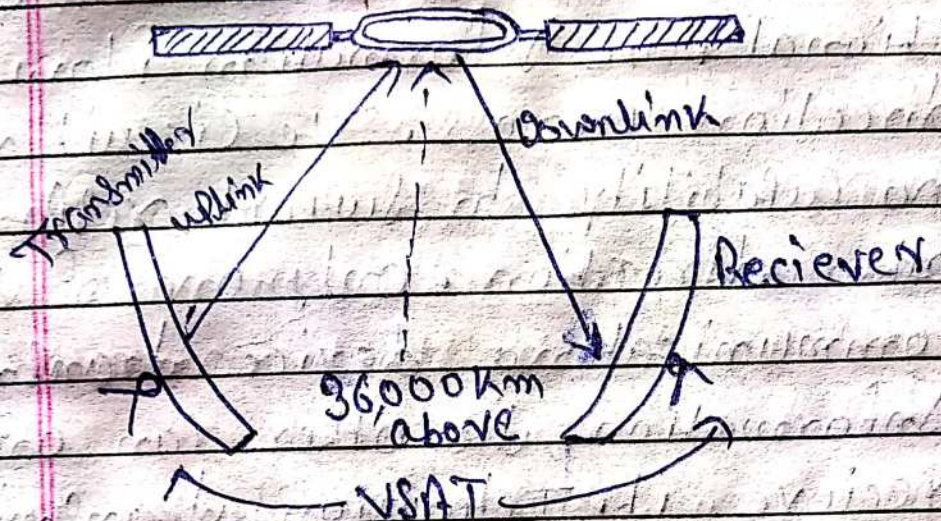


On the earth, uplink transmits the data to the satellite and downlink receives the data from the satellite.

Satellite in space (transponder)



(Very Small Aperture Terminal)

VSAT:-

⇒ VSAT is a satellite communication that serves home and business users. A VSAT end user needs a box that interfaces between the user's computer and an outside antenna with a transceiver.

~~Point~~ - Data Transmission Mode.

⇒ The transmission of data between source to destination is called data transmission.

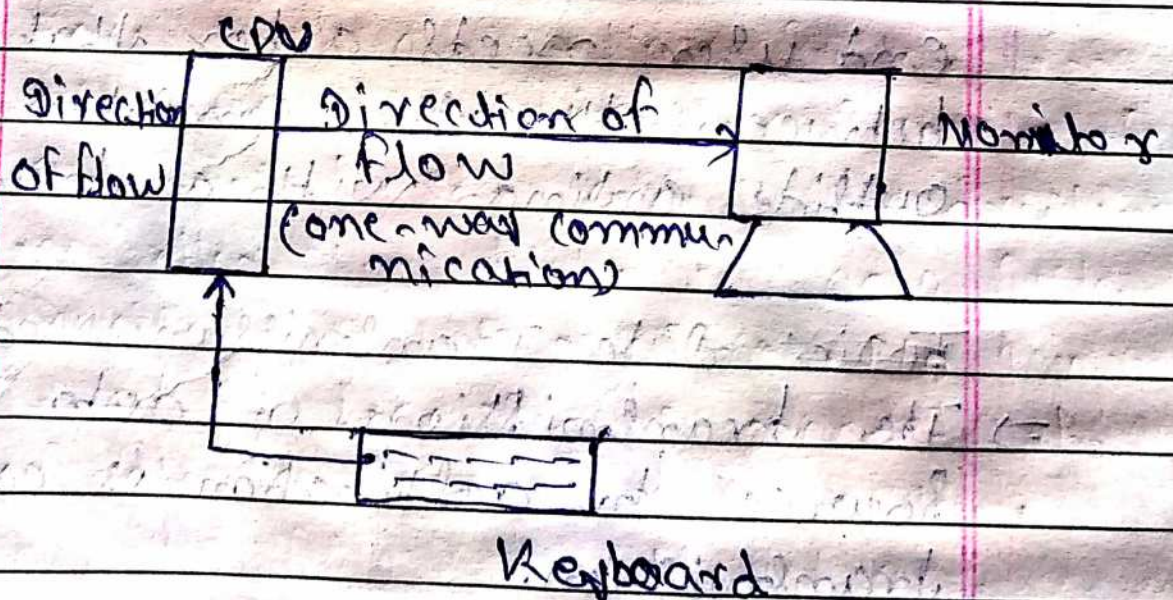
Data transmission mode refers to the direction of signal flow between two link devices. There are



three types of transmission mode-

i) Simplex:-

⇒ Simplex transmission is a unidirectional. The information flow in one direction across. The circuit with no capability to support response in other direction. Only one of the communicating device transmits information, the other can only receive it. Television transmission can be considered as an example of simplex mode of transmission where the satellite only transmits the data to the television, vice versa is not possible.

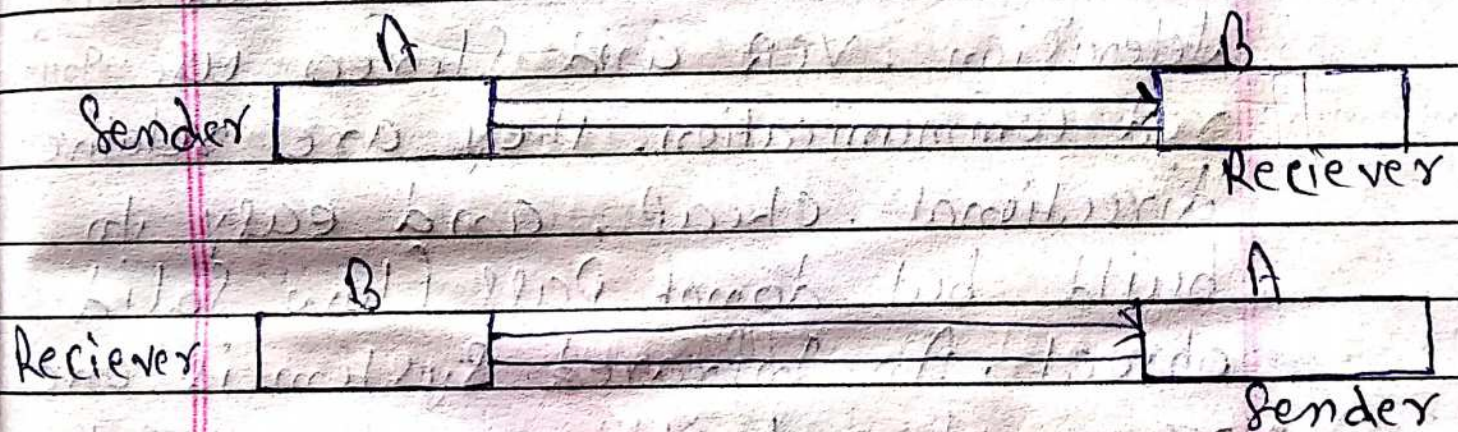


ii) Half Duplex:-

⇒ In half duplex mode, each communi-



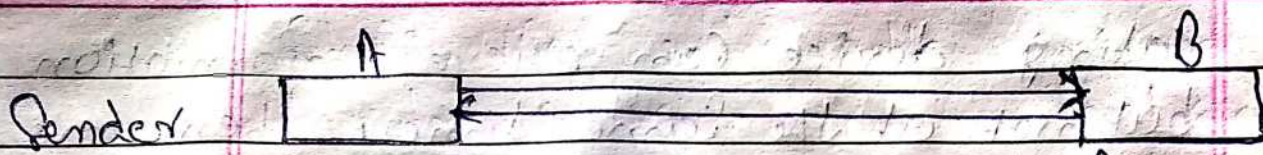
Communicating device can receive information but not at the same time. When one device is sending the other can only receive at a time. In this transmission entire capacity of the transmission medium is taken over by the device which is transmitting at that movement. For example walkie-talkie is used in half duplex.



### iii) Full Duplex:

Full duplex is a transmission mode also known as the duplex mode allow both communicating device to transmit and receive data simultaneously. A full duplex mode can be compare to a two way road with traffic following in both direction. It A standard voice telephone call is a full duplex call because both parties can talk at the same time and can be heard.




  
 Both can ~~stan~~ Send and Recieve

### 3) Topic:- Infrared:-

⇒ Unguided Infrared and millimeters wave are used for short range communication. The remote control used in television, VCR and Stereo use Infrared communication. They are relatively directional, cheap, and easy to build but do not pass through solid objects. An Infrared system in one room of a building will not interfere with a similar system in adjacent room. Further, security of Infrared system against jamming is better than that of radio system. Precise for this reason, no government licence is needed to operate an Infrared system.