CONNECTION ORIENTED & CONNECTIONLESS

SERVICES

CONNECTION ORIENTED

- Similar with telephone system.
- Modeled after the telephone system.
- In telephone system
 - + Pickup the receiver
 - + Dial the number
 - + Communicate
 - + Release the connection

***** CONNECTION-ORIENTED SERVICES OPERATE IN THREE PHASES.

- + The first phase is the *connection setup* phase,
 - ×entities establish the connection
- + The second phase is the data transfer phase,
 - entities exchange messages under the established connection.
- +Finally, the *connection release* phase

CONNECTIONLESS

- Modeled after the postal service
- packet carry with full destination address
- Packets routed independently
- st two massages are send to the same destination at same time the 1^{st} one sent will be arrive 1^{st} one.
- st $1^{
 m st}$ one delayed to arrive then $2^{
 m nd}$ will arrive $1^{
 m st}$

| Sr. No | Connection Oriented | Connectionless Services |
|-----------|--|---|
| 01 | There is physical path between sender and receiver | No such type of connection required |
| 02 | All packets or massages will transmit on that path or connection. | Each packet may route in different paths, and they will choose route independently. |
| 03 | Here only starting packet contain the source address and destination address | All packets must contain the both address. |
| 04 | destination sequentially or in the | The order may not be same i.e. packet 3 may reach before packet 1 or 2 (because each packet takes different path) |

| Sr. No | Connection Oriented | Connectionless Services |
|-----------|--|--|
| 05 | It is a most reliable. | Unreliable services. |
| 06 | | Only the packet which is transmitting on that path will loose remaining all packets will be received correctly |
| 07 | Slow speed because of single connection. | Transmission speed is increased because of several paths. |

TRANSMISSION MODE

Transmission Mode: - The term transmission mode is used to define the direction of signal flow between the linked devices. there are three types of transmission mode:

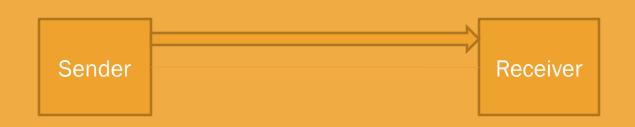
- + Simplex
- + Half Duplex
- + Full Duplex

Network devices use three transmission modes (methods) to exchange data, or "talk" to each other, as follows:

- simplex,
- half duplex, and
- full duplex.

SIMPLEX

- Communication can be done only one side or direction.
- Eg one way street.
- First one device only transfer the data and
- Second one device only receive the data.
- Eg. K-board and monitor.



Half-duplex

- A half-duplex connection transmits data in both directions but only one direction at a time
- Communication can only occur in one direction at a given time
 Only one party can talk at a time.
 - E.g., walkie-talkie
- When one device send data to another the
- Other can only receive





> FULL DUPLEX

- ➤ Communication can occur in both directions simultaneously
- ➤ A full-duplex connection transmits data in both directions and
- > Both parties can talk at the same time.
 - E.g., telephone
 - •Full-duplex mode is faster.



Sender