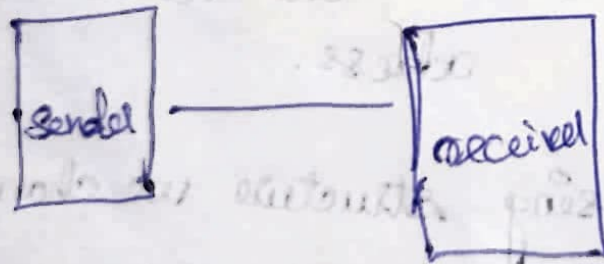


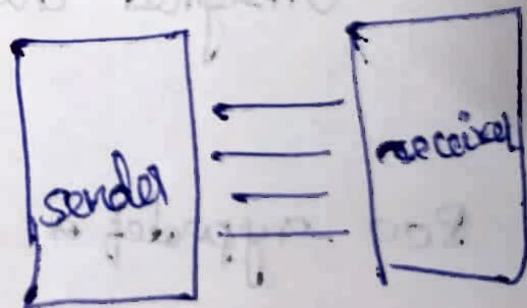
21.02.23

UART

Serial communication



Parallel Communication



MSB - Most Significant Bit

LSB - Least Significant Bit

11001011
 ↓ ↑
 MSB LSB

which one goes to decided is depend on the protocol.

Serial communication uses two methods:-

* Synchronous

* Asynchronous

Synchronous:

* clock is transmitted with the data

* data is synchronous with the clock.

Asynchronous:

No clock is transmitted

transmitted and receiver agree on the clock speed for the data transmission (Baudrate).

UART - (Universal Asynchronous Receiver / Transmitter).

It follows the serial communication.

Mode:-

Rx and Tx mode.

Duplex :-

data can be transmitted and

Ex: Mobile phone . received

Simplex :- data can be transmitted only or
received only.

one direction only.



Ex: FM.

Half Duplex :-

data can be transmitted in only
one way at a time.

Ex: walky talky.

Full Duplex :-

UART - It is a full duplex

data can be transmitted in both
way at a time.

Baudrate :-

connection speed expressed in bits per

second

Parity :-

It's use for error detection

two type

* odd parity

* even parity.