



# **SNS COLLEGE OF ENGINEERING**

Kurumbapalayam (Po), Coimbatore – 641 107

**An Autonomous Institution**

Accredited by NBA – AICTE and Accredited by NAAC – UGC with ‘A’ Grade  
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai

## **DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING-IOT Including CS&BCT**

**COURSE NAME : 19SB402- NETWORKING AND CYBERSECURITY**

**II YEAR / III SEMESTER**

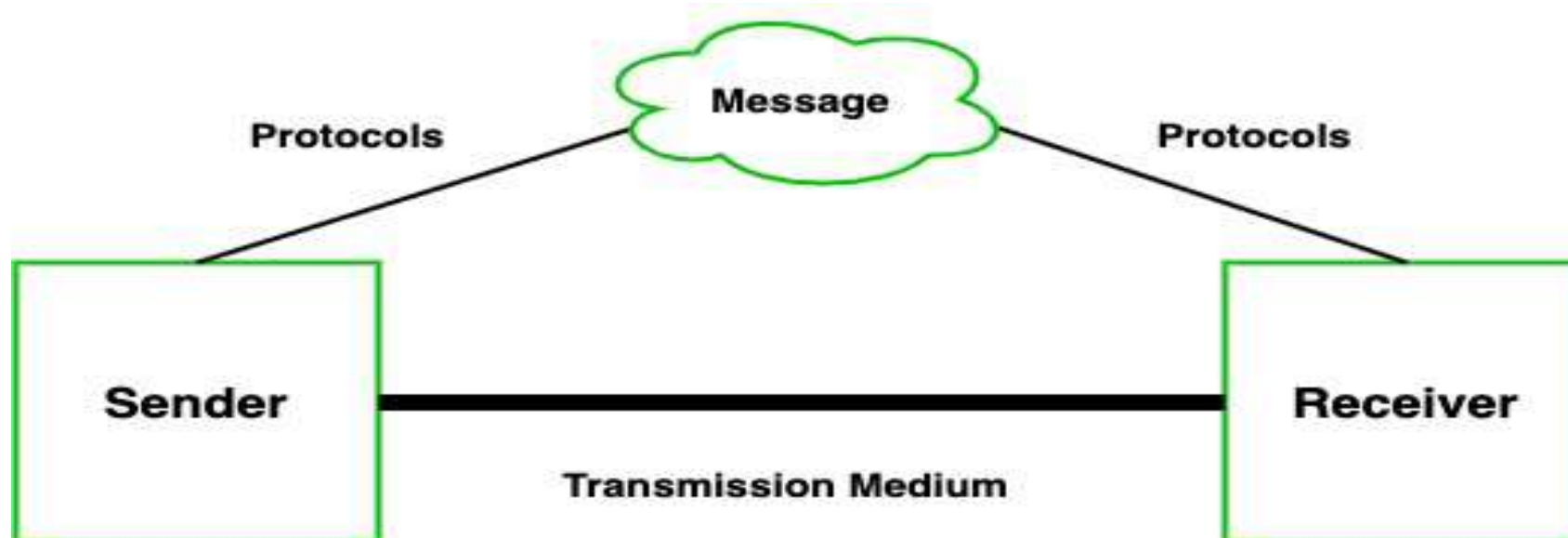
**Unit I- NETWORK AND OSI LAYER**

**Topic : Theoretical Basis of Data Communication**



# Theoretical Basis of Data Communication

- It is defined as a Process.
- More than one computer transfers Information, instructions to each other and for Sharing resources.





# Theoretical Basis of Data Communication Cont..



## Components of Data Communication:

### 1. Message:

- Data (or) Piece of information.
- Transmitted from one person to another.
- Text file, Audio, video, etc.

### 2. Sender:

- It is a device.
- Send data.
- Device -> computer, mobile, tab, laptop, etc.,.

### 3. Receiver:

- It is also a device.
- Receive data.
- Device -> Computer, mobile, tab, laptop, etc.,.



# Theoretical Basis of Data Communication Cont..



## 4. Transmission Medium:

- It Connect two (or) more devices (or) workstation.
- May be wired (or) wireless.

## 5. Set is Rules (protocol):

- Some one sends the data. It should be understandable to receiver.
- Computer network follows set of rules.

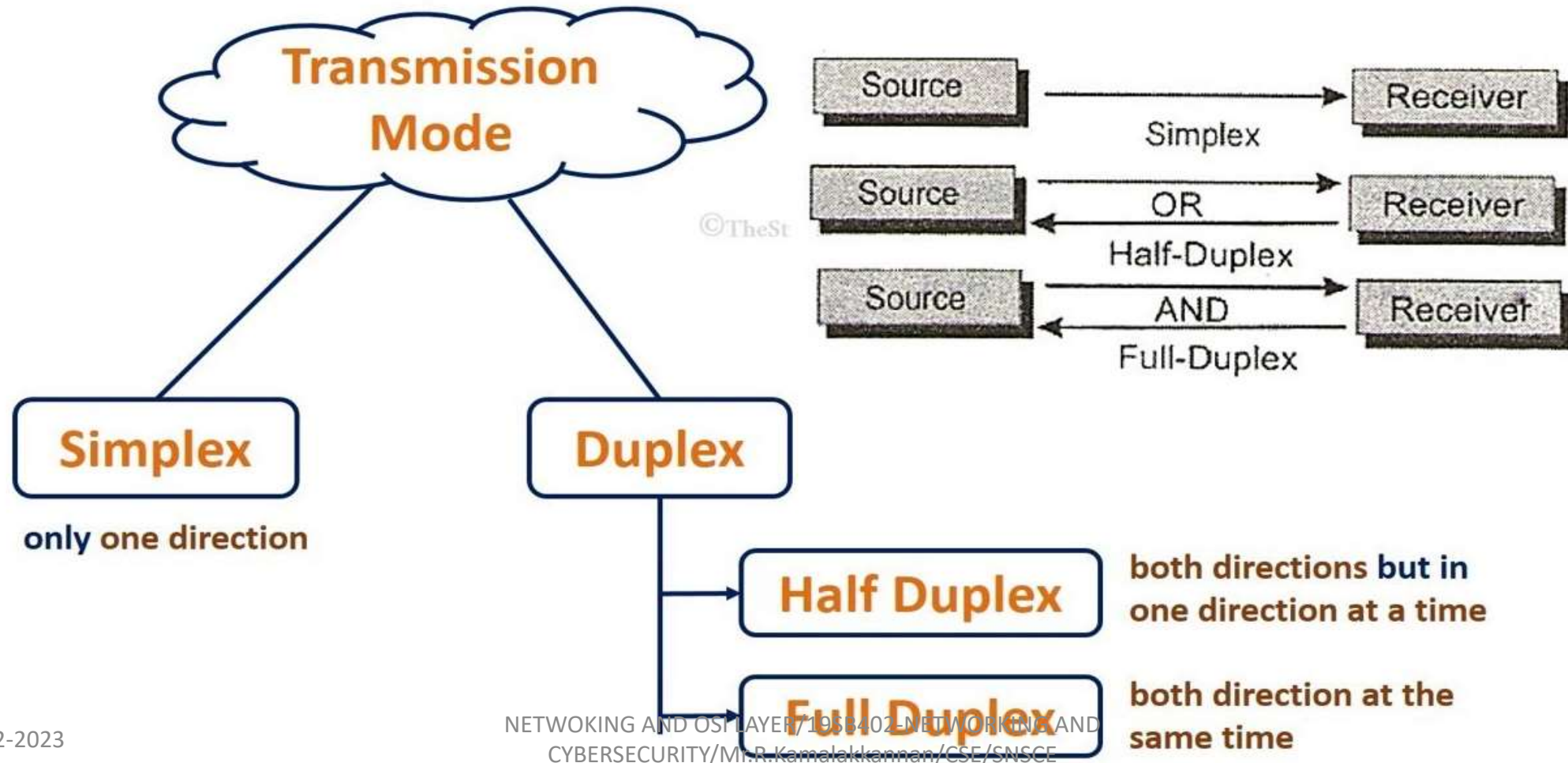
## 6. TCP (Transmission Control Protocol):

- Responsible for dividing Msg into packets ( sender side).
- Reassembling the received packet at the destination (Receiver side).

## 7. IP (Internet Protocol):

- It describe the exact destination.
- So packets is sent to its proper destination.

## Type of Communication:





# Theoretical Basis of Data Communication Cont..



## Communication Channel:

- It Connect two (or) more workstations.
  1. Guided Media -> Wire.
  2. Unguided Media -> Wireless.



**Any Queries**



**Thank You!**