Data communication

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CHAPTER-2

Network Model

Two types

7 Layer → OSI – Open system inter connection.

5 Layer → TCP / IP – Transmission control protocol / Internetworking protocol.

Total Layer – 7

5 Layers are common in each other.

7 Layer
- (7) Application
- (6) presentation
- (5) Session
- (4) Transport
- (3) Network
- (2) Data link
- (1) Physical

Appln

By sequence

① physical এর কাজ – Hoping.

- physical characteristics of interface and medium.
- Representation of bits.
- Data rate.
- Synchronization of bits.
- Line configuration
- physical topology.
- Transmission mode.

② Datalink

- Framing
- physical addressing → Hardware address.
- Flow control
- Error Control
- Access Control

③ Network

- packet Transfer.
- Logical Addressing. (IP add)
- Routing.

④ Transporting

- process to process
- service point addressing
- Segmentation and reassembly
- connection control
- flow control.
- Error Control.

⑤ Session

- Dialogue control. (2)
- Synchronization.
  ↳ resume support.

⑥ presentation

- Translation.
- Encryption.
- compression.

⑦ Application

- Email
- File transfer
- Virtual Network terminal.

TCP/IP

ARP – Address Resolution protocol.

RARP – Reverse " " ".

ICMP – Internet control Meehanism protocol.

IGMP – " Group Msg Protocol.

Addressing

- Physical
- Logical
- Port
- Specific