FACULTY OF ENGINEERING & TECHNOLOGY

DCS-503 Computer Networks

Lecture-02

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OUTLINE

➢ **INTRODUCTION**

➢ **DATA COMMUNICATION**
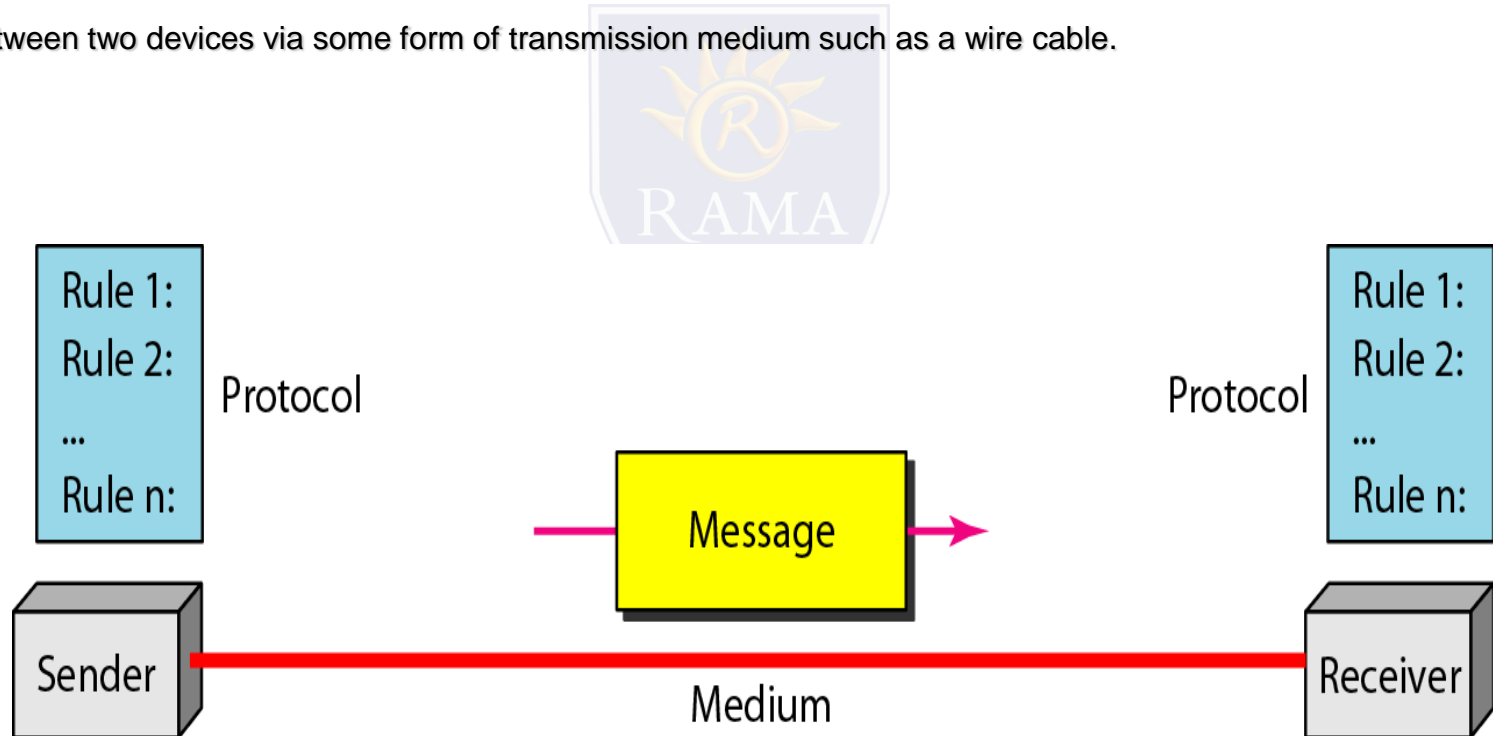
➢ **COMPONENTS OF DATA COMMUNICATION**

➢ **DEFINE NETWORK**

➢ **PHYSICAL STRUCTURE**
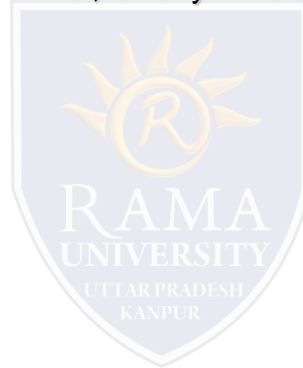
DATA COMMUNICATION

The term telecommunication means communication at a distance. The word data refers to information presented in whatever form is agreed upon by the parties creating and using the data. Data communications are the exchange of data between two devices via some form of transmission medium such as a wire cable.

INTRODUCTION

A network is a set of devices (often referred to as nodes) connected by communication links. A node can be a computer, printer, or any other device capable of sending and/or receiving data generated by other nodes on the network. A link can be a cable, air, optical fiber, or any medium which can transport a signal carrying information

- Network Criteria

- Physical Structures

- Categories of Networks

Performance

- Depends on Network Elements

- Measured in terms of Delay and Throughput

Reliability

- Failure rate of network components

- Measured in terms of availability/robustness

Security

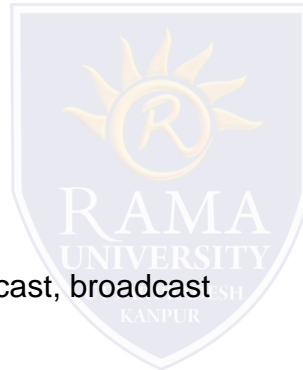- Data protection against corruption/loss of data due to:

- Errors

- Malicious users
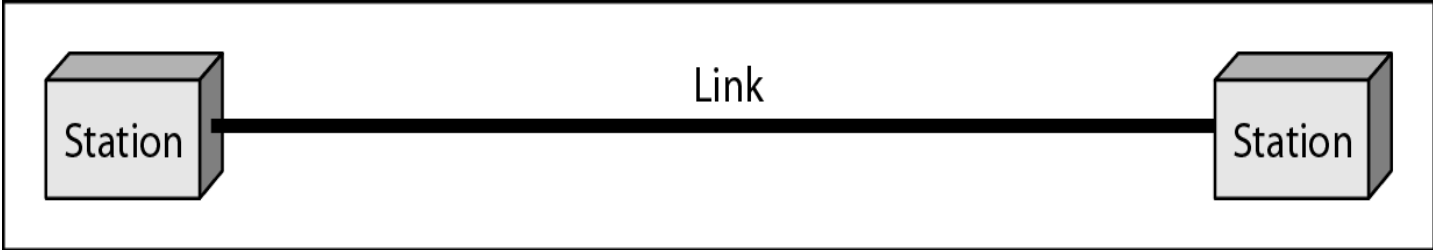
TYPE OF CONNECTION

1.   Point to Point - single transmitter and receiver

2.   Multipoint - multiple recipients of single transmission
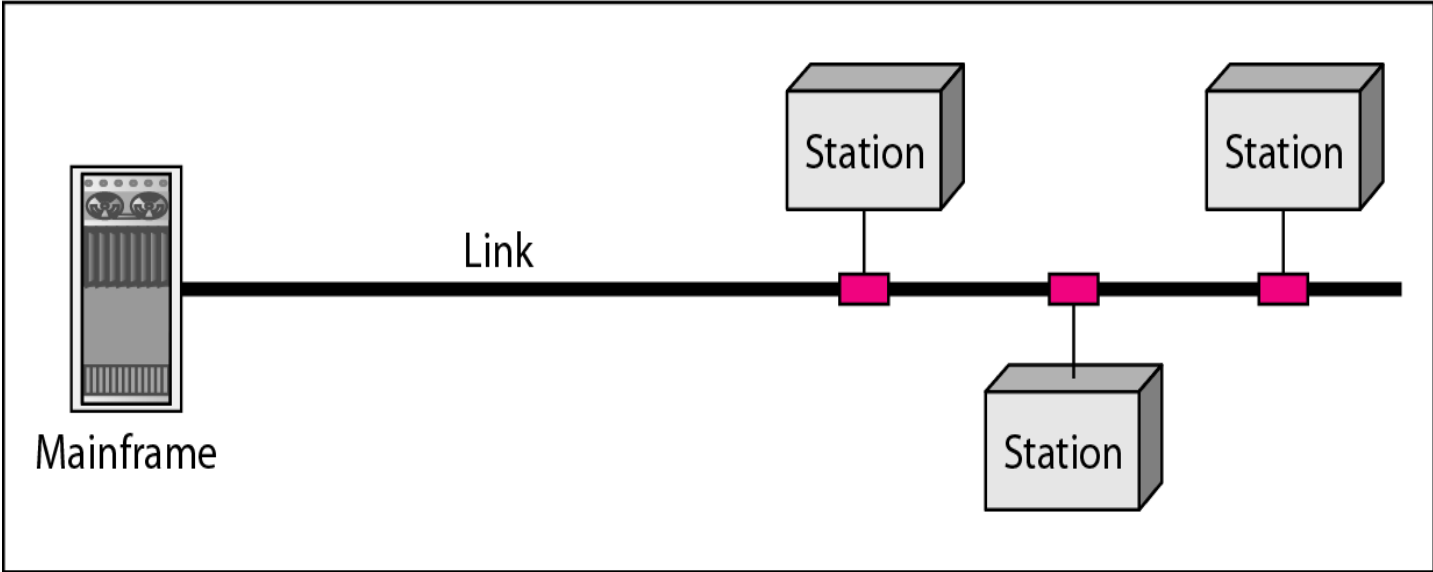
PHYSICAL TOPOLOGY

1. Connection of devices

2. Type of transmission - unicast, mulitcast, broadcast

TYPES OF CONNECTIONS

a. Point-to-point

b. Multipoint

MUTIPLE CHOICE QUESTIONS:

1.A Computer Network permits sharing of

A) Resources   B)Information   C)Both a & b   D)None of these

2. The First operational computer network in the world was the.................for the United State Department of

   Defence

A) ARPANET   B)ERNET   C)SKYNET   D)DARPANET

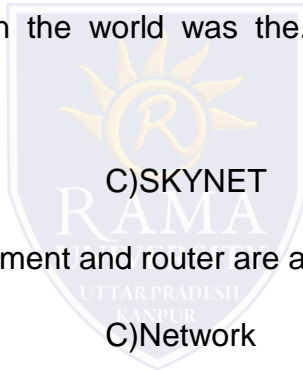3.If single computer network is divided into segment and router are added between them if form an

A)Internet   B)Internetwork   C)Network   D)Internetworking

4. Network of Networks is known as...........................

A) Intranet   B)internet   C)Local Area Network   D)WAN

5. An Interconnection of ....computer is called an INERNET.

A)Distributed   B)Co-Ordinated   C)Autonomous   D)Integrated

- http://www.engppt.com/2009/12/networking-fourozan-ppt-slides.html