

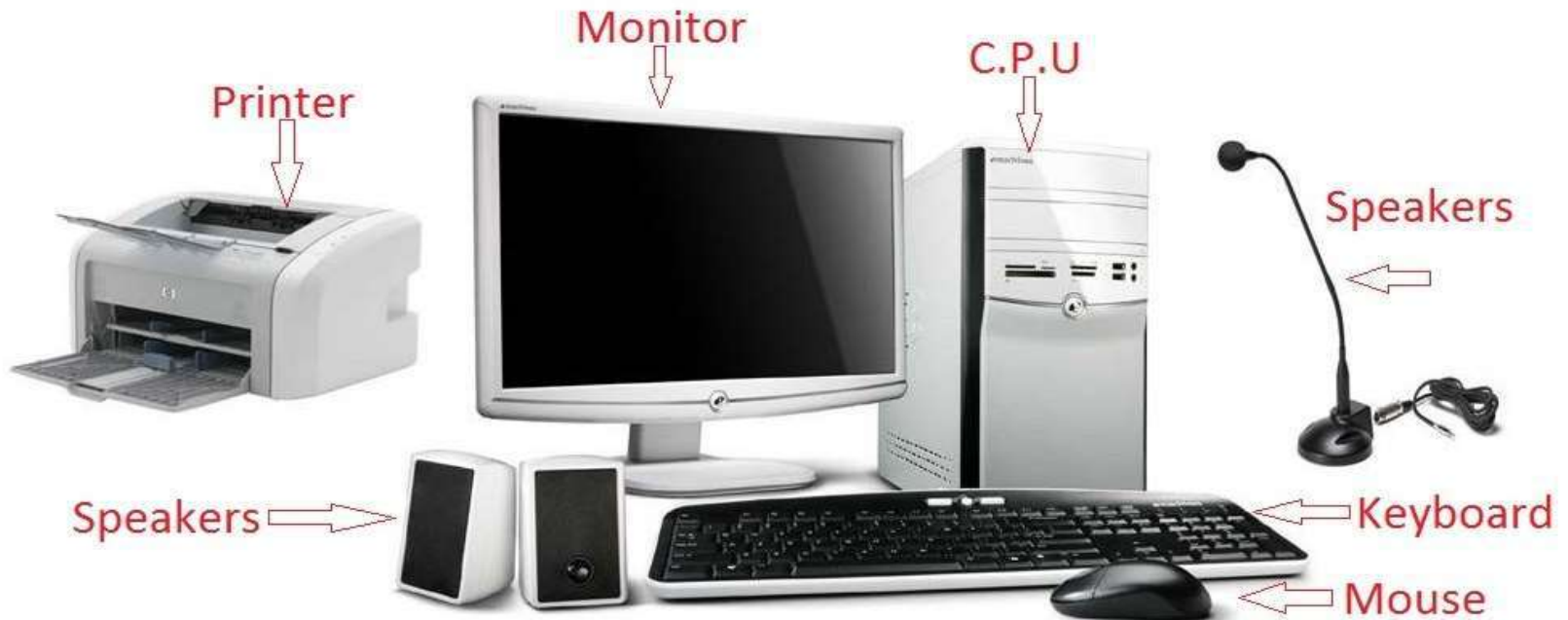
# **BASICS OF COMPUTER AND INTERNET**

K.V.Nithya,  
Department of Computer Science

# *COMPUTER*

Common Operating Machine  
Particularly Used for Trade  
and Education Research.

# PARTS OF COMPUTER



Basic parts of a Computer

# INPUT DEVICE

An *input device* for a computer allows you to enter information.

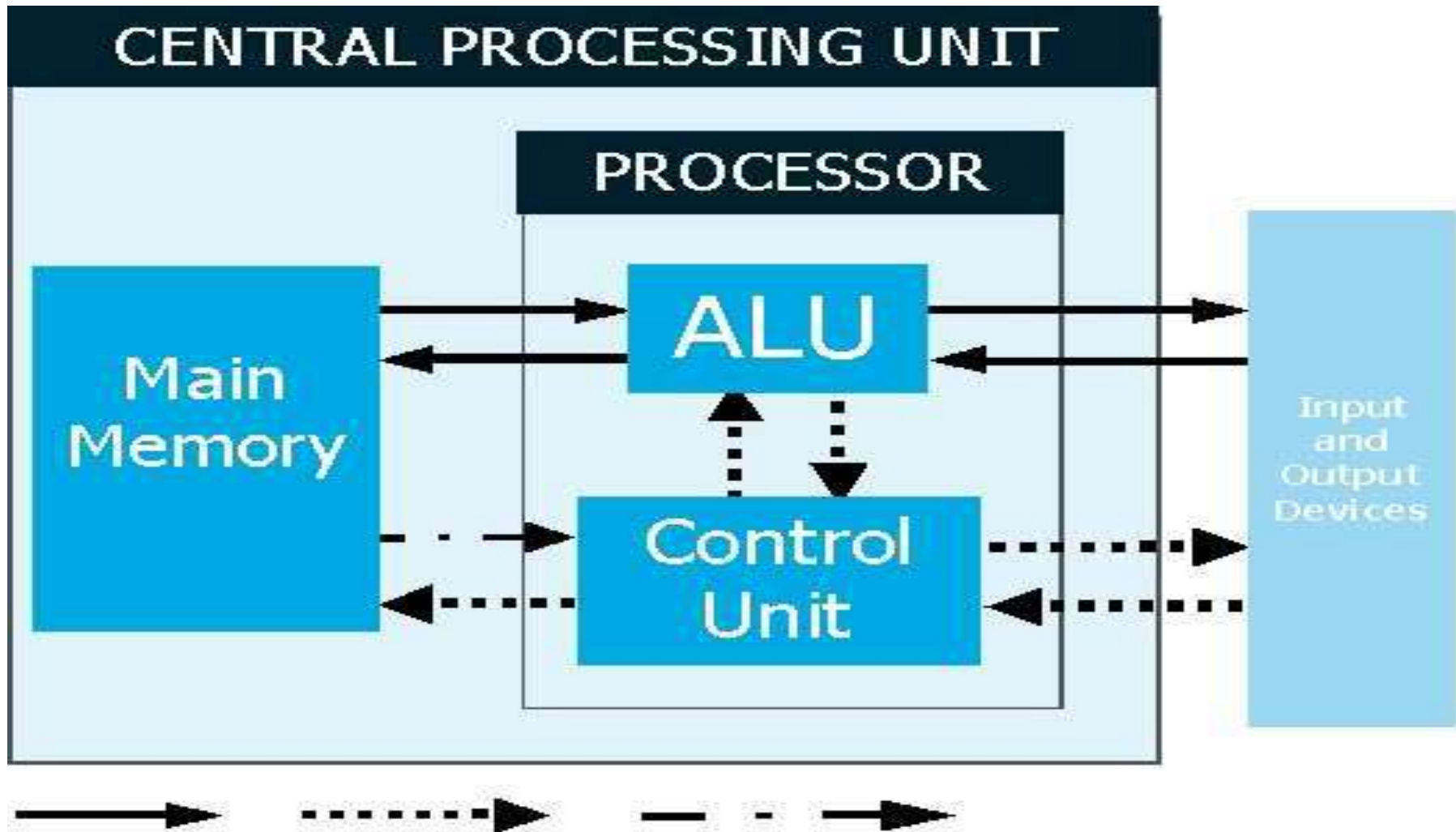
- Keyboard.
- Mouse.
- Webcam.
- Image scanner.

# OUTPUT DEVICE

An **output device** used to communicate the results of data processing .

- *Monitor*
- *Printer*
- *Speaker*

# CPU



# CPU

A central processing unit (**CPU**) is the electronic circuitry perform the basic arithmetic, logical, control and I/O operations.

## Components of CPU

### ALU

It performs simple arithmetic and logical operations.

### CU

Control unit which manages the various **components** of the computer. It reads and interprets instructions from memory.

# CPU

## MU(Memory unit)

- Used to stored data in computers.

### MEMORY

```
graph TD; MEMORY --> PrimaryMemory[Primary Memory]; MEMORY --> SecondaryMemory[Secondary Memory]; PrimaryMemory --> RAM[RAM]; PrimaryMemory --> ROM[ROM]; SecondaryMemory --> FloppyDisk[Floppy Disk, CD]; SecondaryMemory --> MagneticTape[Magnetic Tape, Pen drive];
```

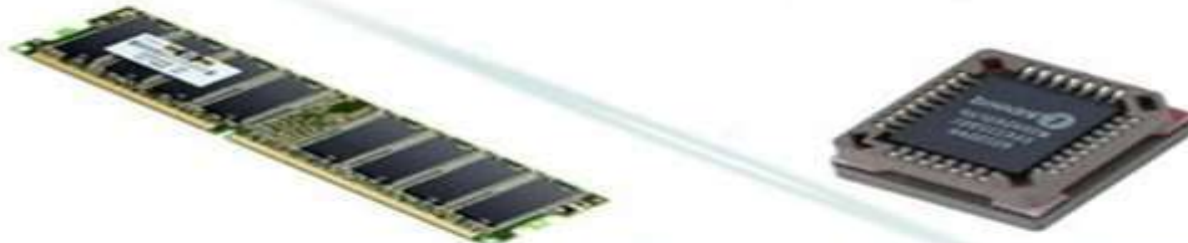
#### Primary Memory

- RAM
- ROM

#### Secondary Memory

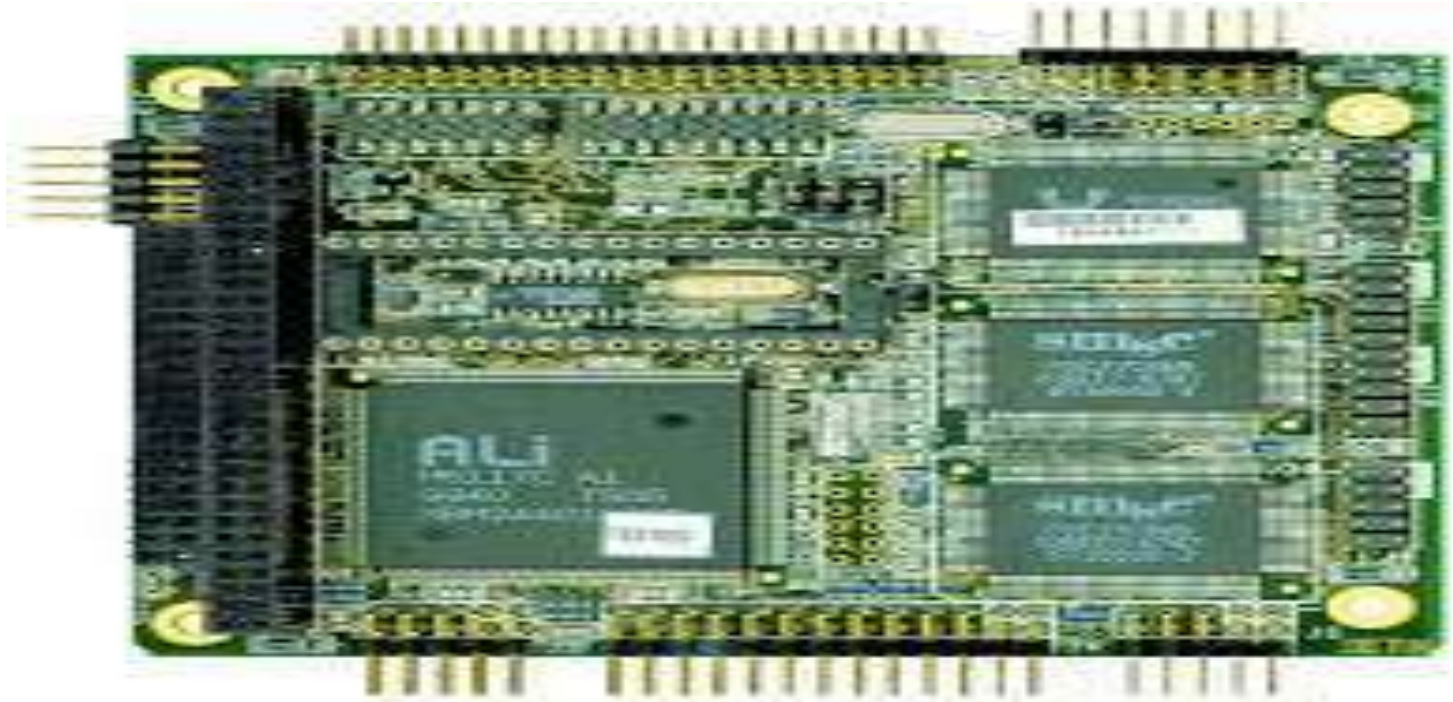
- Floppy Disk, CD
- Magnetic Tape, Pen drive

# PRIMARY MEMORY



**RAM - ROM**

# MEMORY CHIP



# SECONDARY MEMORY



**USB Flash  
Memory**

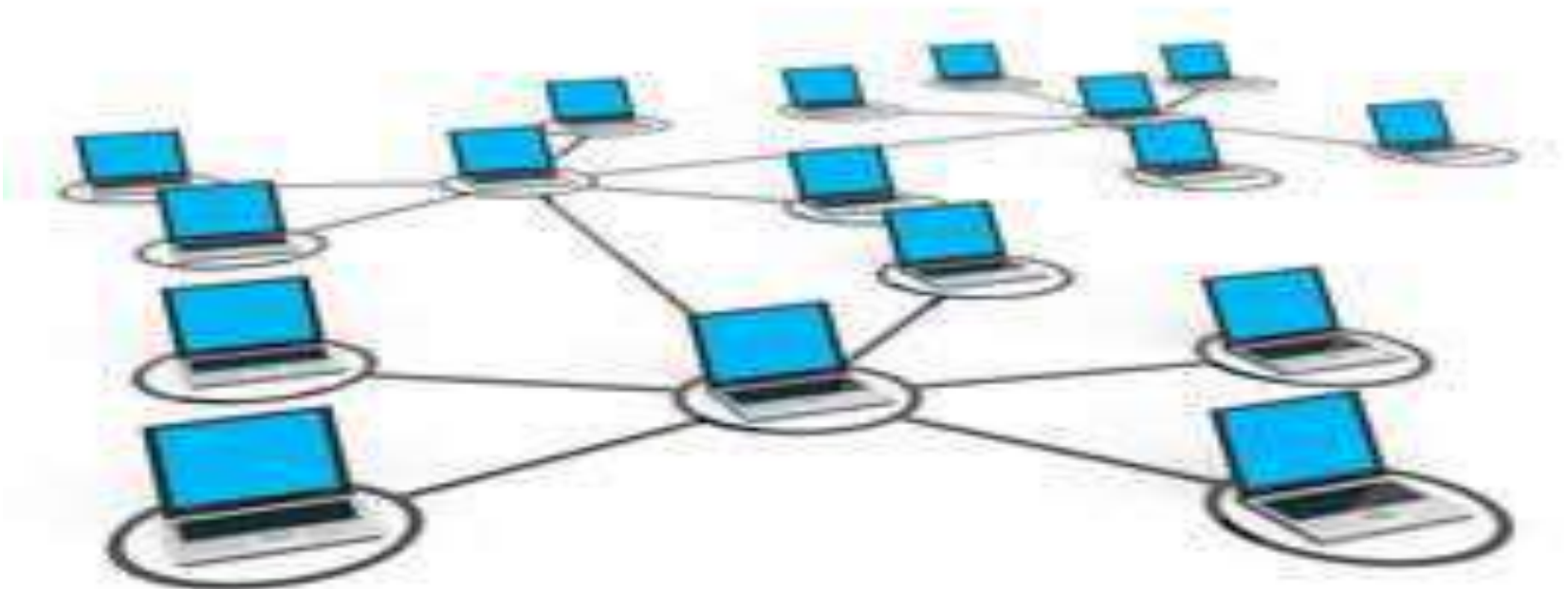


**Memory Card Reader**



# NETWORK

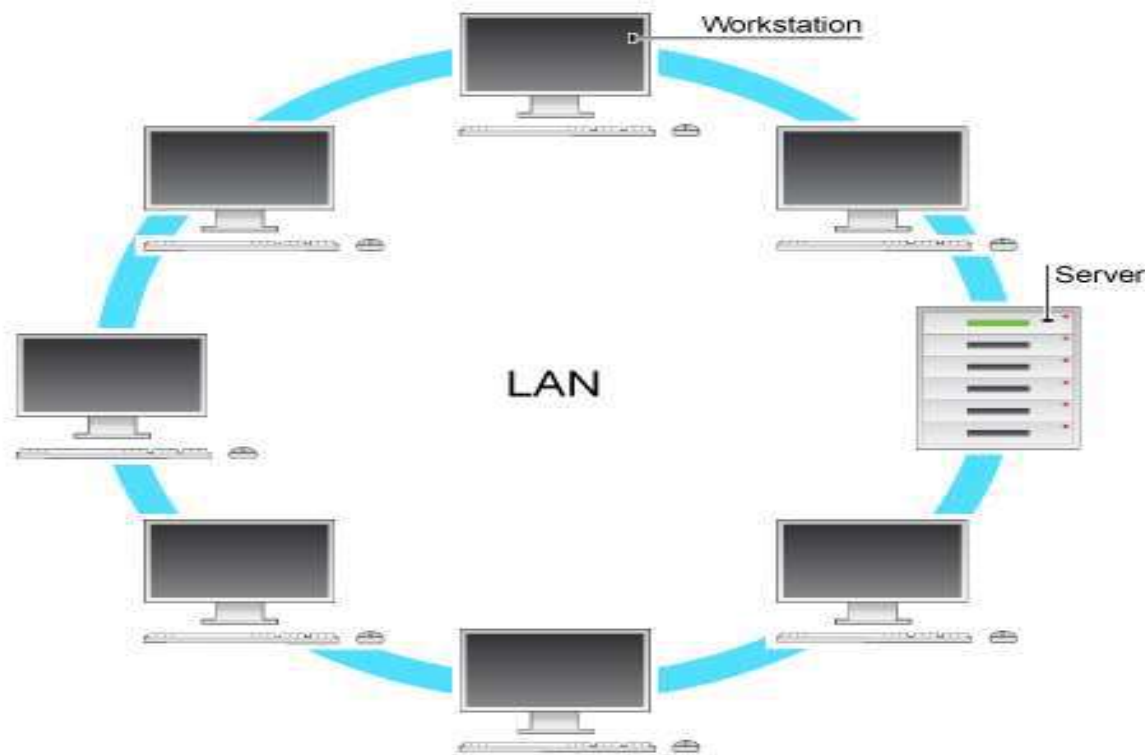
- Interconnection of computers.



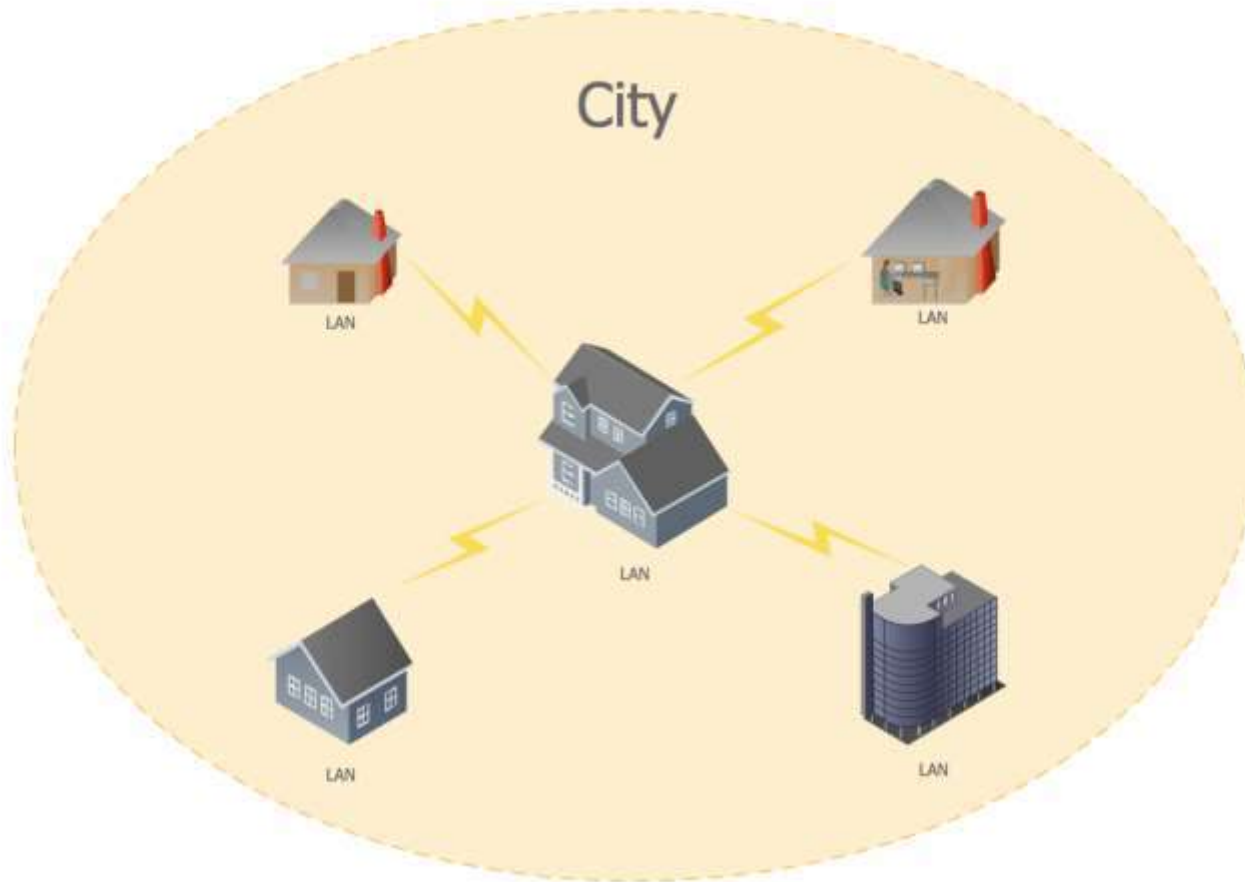
© Can Stock Photo

# TYPES OF NETWORK

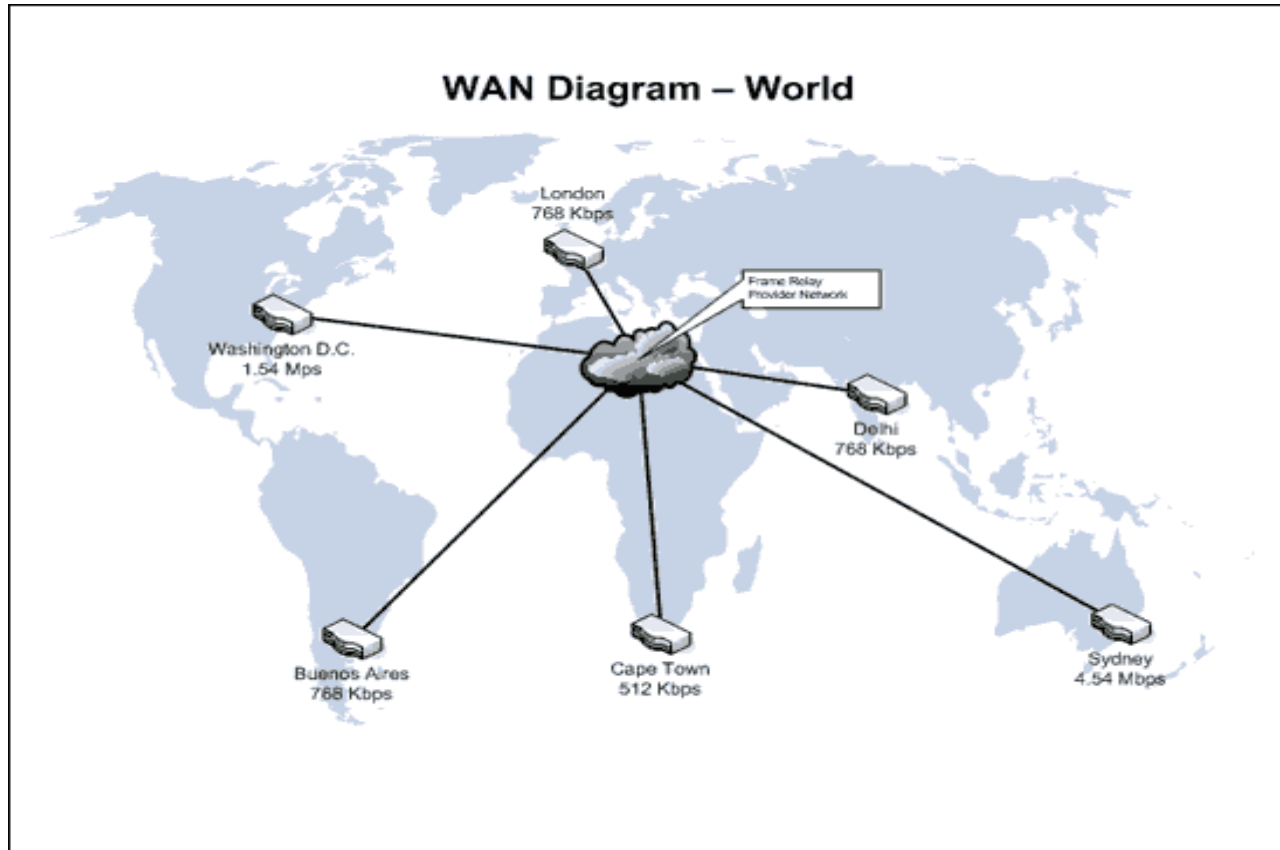
- LAN-Local Area Network



# MAN-Metropolitan Area Network



# WAN-Wide Area Network



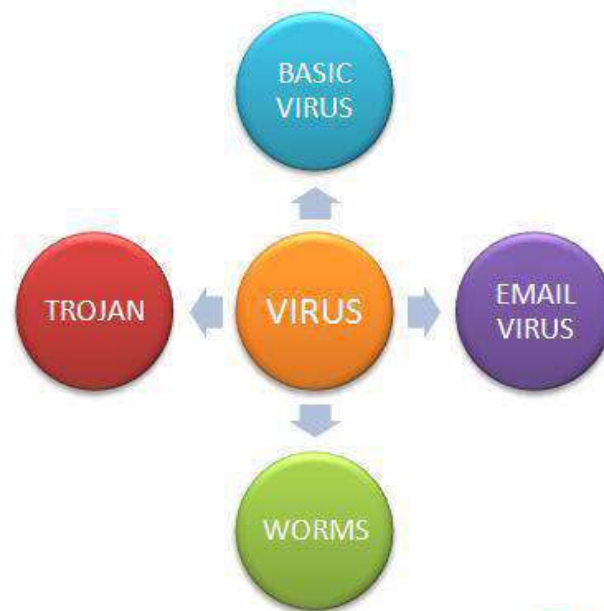
# INTERNET

- Interconnection of Networks.



# VIRUS

- Vital Information Resource Under Siege



# Most Dangerous Virus

1. **ILOVEYOU** - The virus transmitted via email. Infecting almost 10% of the world's PC
2. **MELISSA** -spread in the form of an email attachment by the name "list.doc."
3. **MY DOOM** -It transmitted itself via email by an error message that read "Mail Transaction Failed."

# Most Dangerous Virus

4. **CODE RED** - It didn't need you to open an email attachment or execute a file; it just required an active Internet connection.
5. **SASSER** -It would slow down and crash the PC.

# CREATING A MAIL

Create your Google Account

One account is all you need

One free account gets you into everything Google.



Take it all with you

Switch between devices, and pick up wherever you left off.



Name

rubi

ns

Choose your username

nsrubhi

@gmail.com

Create a password

••••••••

Confirm your password

••••••••

Birthday

June



28

2004

Gender

Female



Mobile phone



+91

Your current email address

Location

India (English)




Next step

# SIGN IN



One account. All of Google.

Sign in to continue to Gmail



Next

☒ Stay signed in

[Need help?](#)


[Create account](#)


# SIGN IN



One account. All of Google.

Sign in to continue to Gmail











rubhiakshai@gmail.com

Sign in

☐ Stay signed in

[Forgot password?](#)

# INBOX



Compose

Inbox (35)

Drafts (282)

Sent

Archive

Spam (105)

Trash

Smart views

Important

Unread

Starred

People


Social

Shopping


Travel


Finance


Folders


☐ 


Archive

Move 

Delete 


Spam 

More 

Sort by date 

Yesterday

☐





Facebook

Sri Sarada Niketan, you have 19 new notifications and 2 messages.

Jul 12


☐






Joint Director Of Col

RTI - Subash - reg (2)



Jul 12

☐




MAILER-DAEMON@y

Failure Notice


Jul 12

☐




me...royalfle, me

MATHEMATICS FLEX (4)



Jul 12

☐





MAILER-DAEMON@y

Failure Notice

Jul 12


☐






Joint Director Of Col

RUSA - Reg. (2)



Jul 12

☐




Personal Loan

EMI starts from 2007/Lakh|| Approval in 5 Min.

Jul 12

☐




Google

New sign-in from Firefox on Windows


Jul 12

☐




prabhadevi prabhade


alumni july 17



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All India Council for Technical Education (AICTE) - Clarification on Eligibiliti (2)



Jul 12

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Reliance Mutual Fund

Making Wealth Was Never So Easy. Invest in Balanced Fund!

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Swami Saradhananda

Swami Saradhananda changed his cover photo

Jul 12

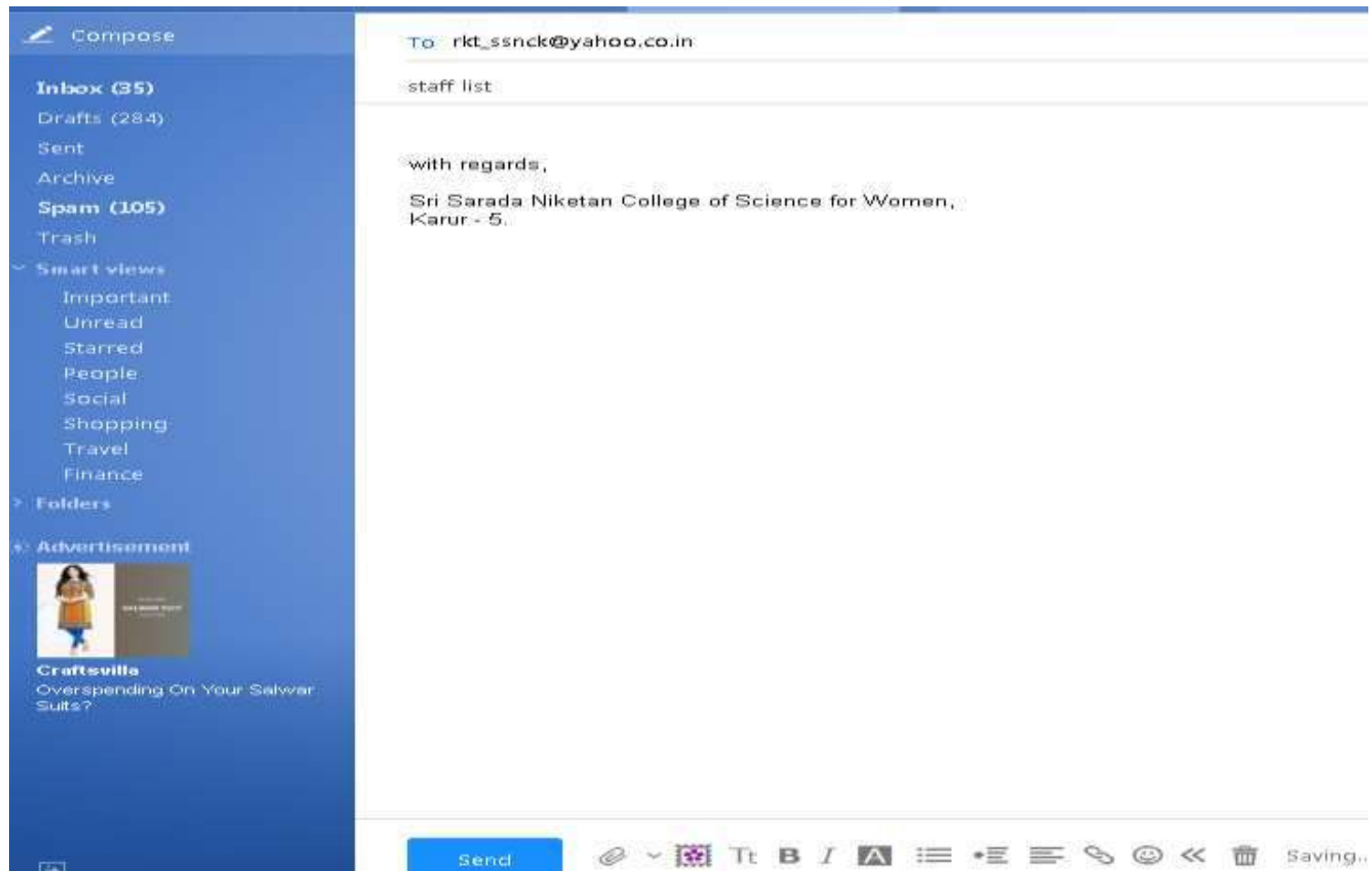
# AVAILABLE TABS

- **Inbox** -Incoming messages are stored in Inbox
- **Draft** -If you are sending an email to someone and you don't have all the information available to finish the email off then you can save it to Drafts.
- **Sent** -Sent items are stored here.
- **Spam**- Deleted mails are stored here.
- **Archive**-You can remove messages from your Gmail inbox but keep them in *archiving*.

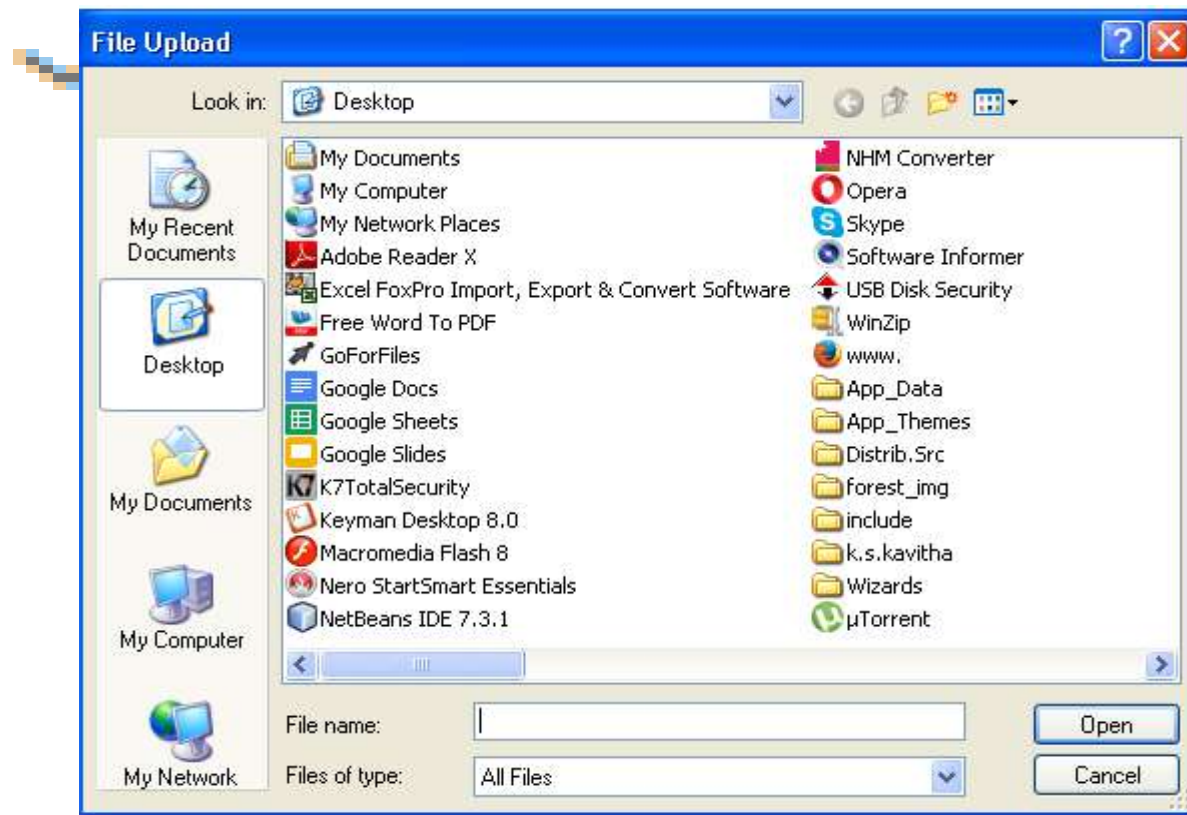
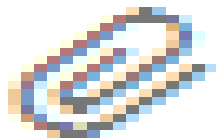
# AVAILABLE TABS

- **unread** -Messages which are not read.
- **Starred**- *Use stars* to easily mark certain messages as *important* or to indicate that you need to reply to them later
- **Shopping**-Using this option we can shop online.
- **Travel**- Using this option we can book tickets online.
- **Finance**- Using this option we can know the account details.
- **Compose**-To send a particular documents or folder.

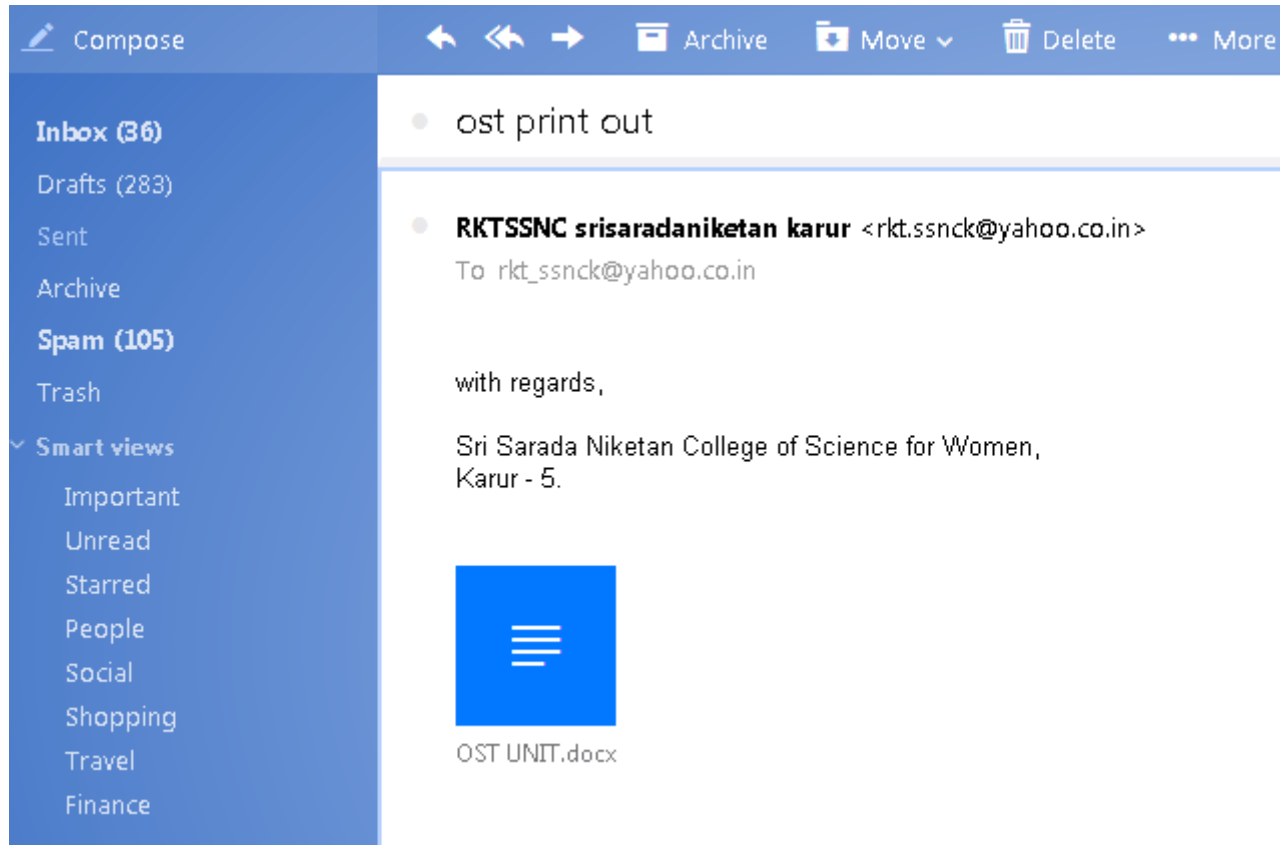
# HOW TO SEND A MAIL



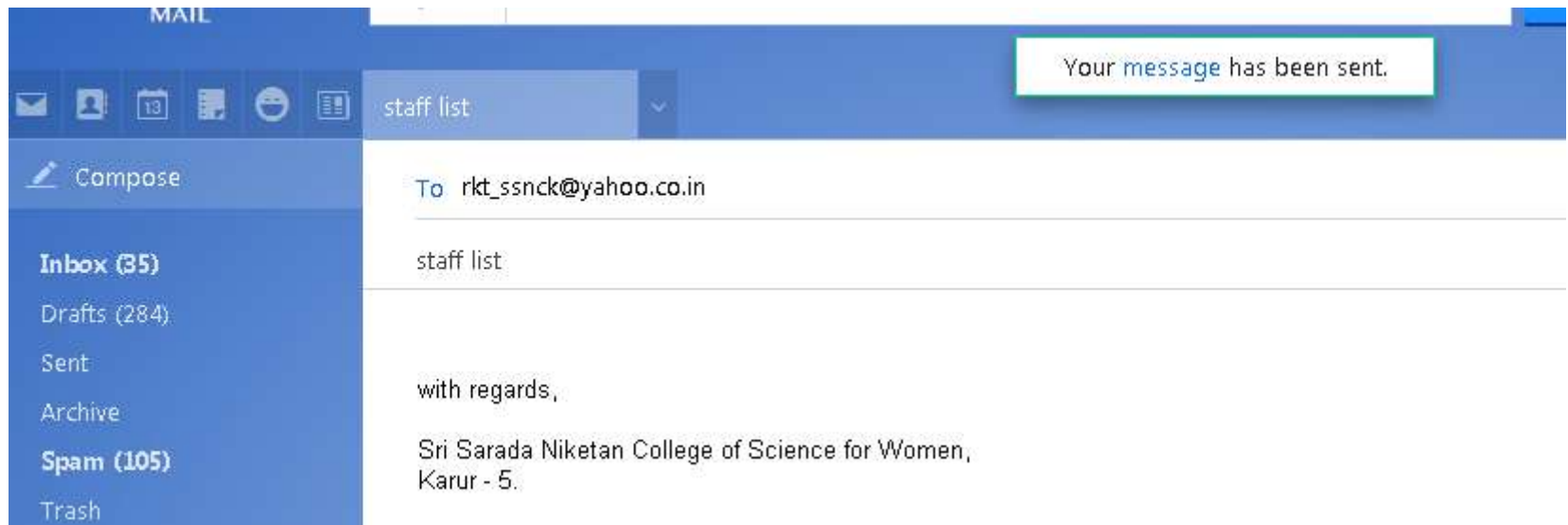
# HOW TO SEND A MAIL



# HOW TO SEND A MAIL



# HOW TO SEND A MAIL





# FUNDAMENTALS OF INFORMATION TECHNOLOGY

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MS.S.KAVITHA  
HEAD OF THE DEPARTMENT OF COMMERCE  
SRI SARADA NIKETAN COLLEGE OF SCIENCE FOR WOMEN,  
KARUR

# INTRODUCTION

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- Computers were first invented to process text data and execute certain large numerical calculations with greater accuracy. But later on, the depth of usage of computers increased and man found that computers could play a vital role in everyday life. Internet is now the heartbeat of many people today.

# COMPUTERS – WHAT ARE THEY?

---

- Computers are large electronic machines that can manipulate data in the desired way by executing a detailed set of instructions called as programs.
- A computer can be defined to be a fast and accurate electronic system that is designed to accept, process and output data by means of instructions.

# CHARACTERISTICS OF A COMPUTER

---

- Speed
- Memory
- Diligence
- Versatility
- Accuracy
- Storage
- Automation
- Reliability
- Convenience
- Flexibility
- Efficiency
- Lack of decision making

# CLASSIFICATION OF COMPUTERS

---

## **Classification based on Purpose**

Special purpose

General purpose

## **Classification based on operating principles**

Digital computers

Analog computers

Hybrid computers

# CLASSIFICATION OF COMPUTERS

---

## **Classification based on storage and capability**

Micro computers

Mini computers

Mainframe computers

Super computers

Laptop computers

# DATA BASE MANAGEMENT SYSTEM

---

Database Management System is a system for operating the database.

DBMS is a set of rules and methods, allows for the definition, creation, updation, reusing, maintenance and protection of the database.

The DBMS interprets user commands so that the computer system through the host operating system can perform the task required.

# BENEFITS OF DBMS

---

- Helps in decision – making
- Quick information
- Effective business transaction
- Information from outside
- Adhoc inquiry
- Rapid sorting or indexing
- Creation of screens for input and output

# CLASSIFICATION OF DBMS

---

- Hierarchical Database Model
- Network Database Model
- Relational Database Model

# DATA BASE MANAGEMENT SYSTEM

---

- Creation of a Database
- Opening a Database
- Closing a Database
- Entering data into Records
- Retrieving Database Records
- Listing the contents of Database file
- Entering the values using Append command

# DIFFERENTIAL CALCULUS AND TRIGNOMETRY

S.Thilagavathy,  
Department of Mathematics

# HYPERBOLIC FUNCTION

## DEFINITION:

The hyperbolic function are defined by

$$\text{Sin } hx = \frac{e^x - e^{-x}}{2}$$

$$\text{Cos } hx = \frac{e^x + e^{-x}}{2}$$

$$\text{Tan } hx = \frac{\sin hx}{\cos hx}$$

$$\text{Cosec } hx = \frac{1}{\sin hx}$$

$$\text{Sec } hx = \frac{1}{\cos hx}$$

$$\text{Cot } hx = \frac{\cos hx}{\sin hx}$$

## RELATION BETWEEN HYPERBOLIC FUNCTIONS AND CIRCULAR FUNCTION

- i)  $\text{Sin } (ix) = i \sin hx$
- ii)  $\text{Cos } (ix) = \cos hx$
- iii)  $\text{Tan } (ix) = i \tan hx$

## INVERSE HYPERBOLIC FUNCTION

### DEFINITION:

Consider the function  $y = \sinh x$ . This is a 1 – 1 into map from  $\mathbb{R} \rightarrow \mathbb{R}$  given any  $y \in \mathbb{R}$ , there exists unique  $x$  such that,

$$\sinh x = y$$

$$\Rightarrow x = \sinh^{-1}(y)$$

Similarly, if

$$\cosh x = y$$

$$\Rightarrow x = \cosh^{-1}(y)$$

And if

$$\tanh x = y$$

$$\Rightarrow x = \tanh^{-1}(y)$$

## PROBLEM: 1

IF  $X + iY = \sin (A + iB)$  PROVE THAT  $\frac{x^2}{\sin^2 A} - \frac{y^2}{\cos^2 A} = 1$ .

## SOLUTION:

Given that

$$x + iy = \sin (A + iB)$$

$$x + iy = \sin A \cos (iB) + \cos A \sin (iB)$$

$$x + iy = \sin A \cos (hB) + i \cos A \sin hB$$

Equating the real and imaginary terms on both sides.

$$x = \sin A \cos hB$$

$$\Rightarrow \frac{x}{\sin A} = \cos hB \quad \dots\dots\dots 1$$

$$y = \cos A \sin hB$$
$$\Rightarrow \frac{y}{\cos A} = \sin hB \quad \dots\dots 2$$

Squaring and subtracting

$$\frac{x^2}{\sin^2 A} = \cos^2 hB,$$
$$\frac{y^2}{\cos^2 A} = \sin^2 hB$$
$$\frac{x^2}{\sin^2 A} - \frac{y^2}{\cos^2 A} = \cos^2 hB - \sin^2 hB$$

$$\frac{x^2}{\sin^2 A} - \frac{y^2}{\cos^2 A} = 1$$

Hence the solution.



# DEPARTMENT OF CHEMISTRY

## Isomerism in coordination chemistry

by

T.M. Saranya




# ISOMERISM IN COMPLEXES

Molecules or ions having the same chemical composition but different structures are called isomers and the phenomenon is known as isomerism coordination compounds exhibit different types of isomerism as follows;



# TYPES OF ISOMERISM

- ❖ Structural isomerism
  - ❖ Stereo isomerism
- 

# STRUCTURAL ISOMERISM IN 4 AND 6 CO-ORDINATE COMPLEXES:


- Ionization isomerism
- Hydration isomerism
- Co-ordination isomerism
- Linkage isomerism
- Polymerization isomerism
- Legend isomerism

# IONIZATION ISOMERISM:

- ❖ Compounds which have the same composition but yield different ions in solution are called ionization isomers.
- This types of isomerism is due to the exchange of groups between the complex ion and the ions outside it.




# POLYMERIZATION ISOMERISM

- Polymerization isomerism is exhibited by compounds which have the same stoichiometric composition but whose molecular compositions are multiples of the simple stoichiometric arrangement.
- 



# STEREOMERISMS

- The phenomenon is called stereoisomerism.
  - Molecules of ions having same molecular formula same structural formula but different configurations are called stereoisomer.
- 



# Types of Stereoisomerism

- Geometrical isomerism
  - Optical isomerism
- 

Thank you