

7.4

# COMPUTER BASICS

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**NVKSD COLLEGE OF EDUCATION  
ATTOOR.**





# 1

## COMPUTER FUNDAMENTALS

### Definition

“A computer is an electronic device that accepts input data, manipulates the data and produces the output”

“A device that computes, especially a programmable electronic machine that performs high-speed mathematical or logical operations or that assembles, stores, correlates, or otherwise processes information”

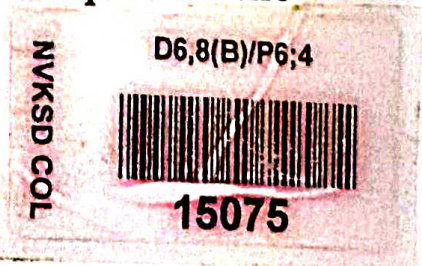
A Computer is an electronic device that performs calculations in tremendous speed and gives the result in a matter of seconds. Computer accepts input through the input devices and gives output through the output devices.

### Input

The data that we give to the computer for processing is called input.

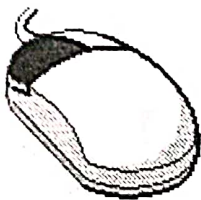
### Input devices

The devices through which we give input to the computer are called input devices.





Eg. Keyboard, Mouse



Mouse

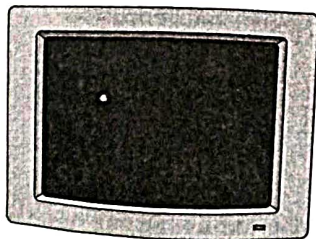
### Output

The processed data that we get from the computer is called output.

### Output devices

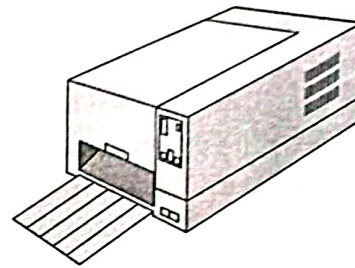
The devices through which we get output from the computer are called output devices.

Eg. Monitor, Printer



Monitor

Book Bank Issu	R21
Book	R20
Bo	



Printer

### CPU

The CPU or Central Processing Unit is the brain of the computer. It does all processing and arithmetic calculations in a computer.

### Hardware

Hardware refers to the physical components of the computer like the monitor, keyboard, mouse, etc.

### Software

Software refers to the programs in the computer that tells the computer to perform particular tasks. Examples of software are Microsoft Word, Microsoft Excel, etc.

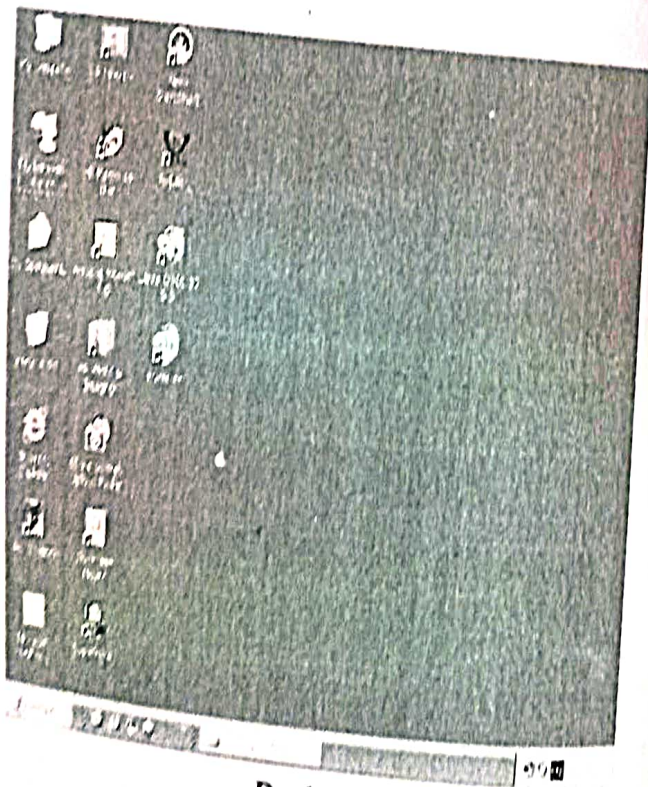
# Operating System

The Operating System (OS) is the program which controls all other programs in a computer. It is the first program installed in a computer. Only after the installation of OS, other programs can be installed.

Eg. Windows, DOS, UNIX

## Desktop

The opening screen of the Windows operating system is called the Desktop. The Desktop contains the icons and the taskbar. The icons are the small graphical representations of the programs installed in the computer.



Desktop

## Taskbar

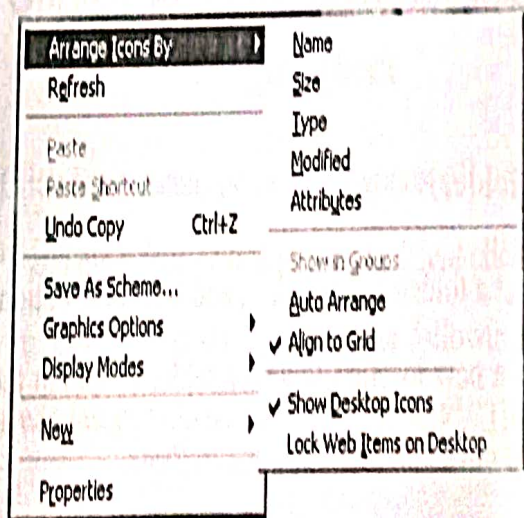
The horizontal bar at the bottom of the desktop is called the taskbar. The taskbar contains the Start menu towards its left and the tray icons and time at the right side. The middle portion of the taskbar contains the icons of the currently open programs.



Taskbar

## Arranging icons

To arrange icons on the desktop, right click and select the option 'Arrange icons by'. We can arrange the icons in order of their name, size, type or modified date. The option 'Auto arrange' automatically arranges the icons in order, if the order of any icon is disturbed.



## Working with Folders

### Creating a folder

A folder is a place where we store files or other folders.

Right click (on the desktop or inside any folder in the explorer) and select the option 'New' and then 'Folder'

### Renaming a folder

Select a folder, right click it, and select the option 'Rename'. Type in a new name for the folder.

### Copying a folder

Select a folder, right click it, and select the option 'Copy'.

Navigate to a new location (another folder or within the same folder), right click and select the option 'Paste'.

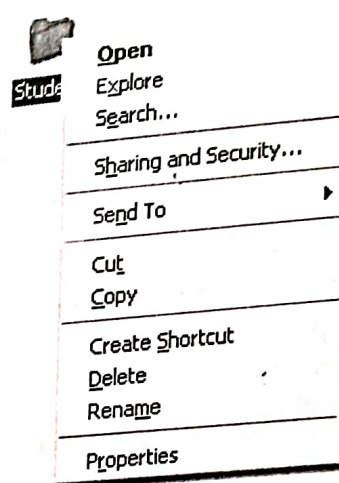
### Moving a folder

Select a folder, right click it, and select the option 'Cut'.

Navigate to a new location (another folder or within the same folder), right click and select the option Paste.

### Deleting a folder

Select a folder, right click it, and select the option 'Delete'. A confirmation dialogue box appears. Select 'Yes' to delete the file.



### Opening a number of programs and arranging them

Click Start menu, point to programs (All programs for Win XP), and open four or five programs. Right click an empty area of the taskbar and select any of the following options : 'Cascade windows', 'Tile windows horizontally', 'Tile windows vertically'.

## Switching over among three states

The minimize, maximize and restore buttons are present at the right side of the title bar of a window.

### Minimize

Click the minimize button of the active window. The window gets reduced to an icon and is displayed on the taskbar.

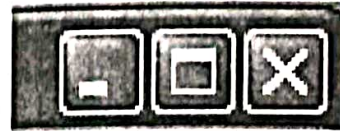
### Maximize

Click the maximize button of the active window. The window gets maximised and it fills the screen.

If the window is in the minimized state, clicking its icon on the taskbar will maximize/restore its state.

### Restore

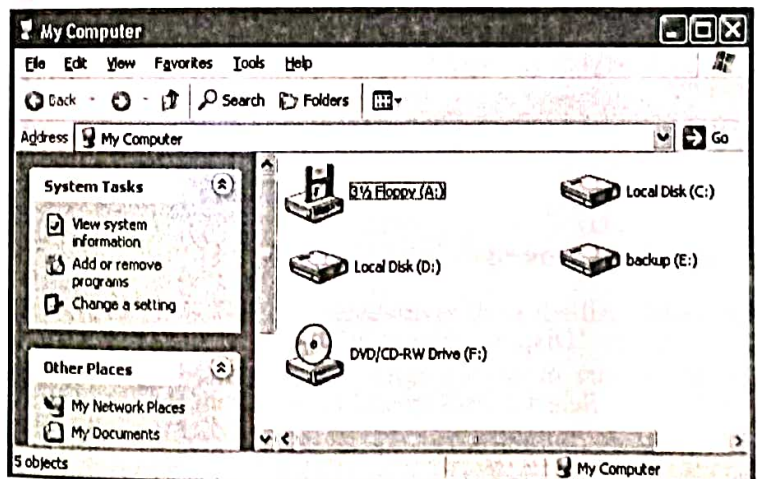
If the window is in the maximized state, a Restore button will be displayed in the place of the maximize button. Clicking the Restore button will restore the window.



*Minimize, Maximise & Restore buttons*

## My Computer

The My Computer displays all the available drives. Floppy Disk Drive (FDD), Hard Disc Drive (HDD) and Compact Disc Drive (CDD) and a few system folders. It provides easy access to each drive in the computer. To open My Computer, double click the 'My Computer icon' on the desktop.



## Recycle Bin

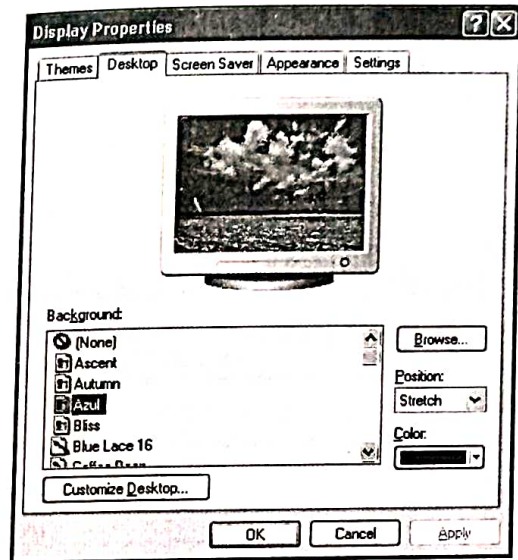
The Recycle Bin is a system folder where all the deleted files are stored. It is like a waste box. The files can be permanently deleted from the Recycle Bin by selecting the files and choosing 'Delete'. To open Recycle Bin, double click the Recycle Bin icon on the desktop.

## Changing Display settings

Click Start menu, Settings->Control Panel (direct access in Win. XP). In the Control panel double click the icon 'Display'.

### Change background

In the 'Display properties' dialogue box, select the Desktop tab. Select a background picture from the list. Click 'Apply' to apply the background picture.

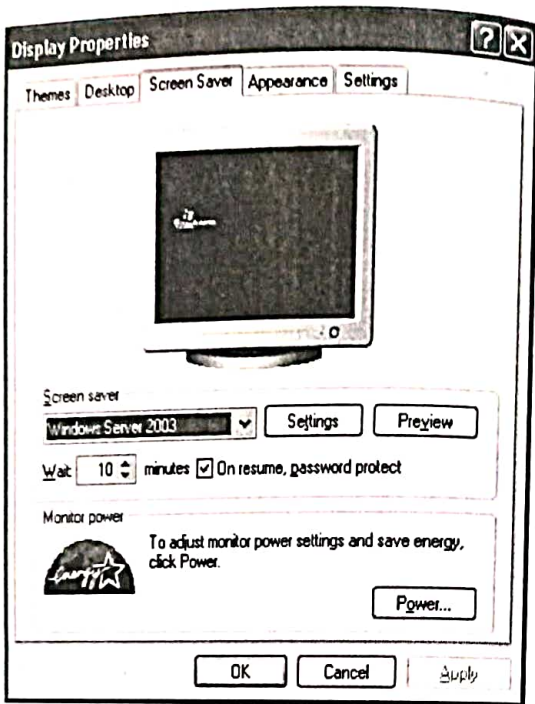


*Changing background*

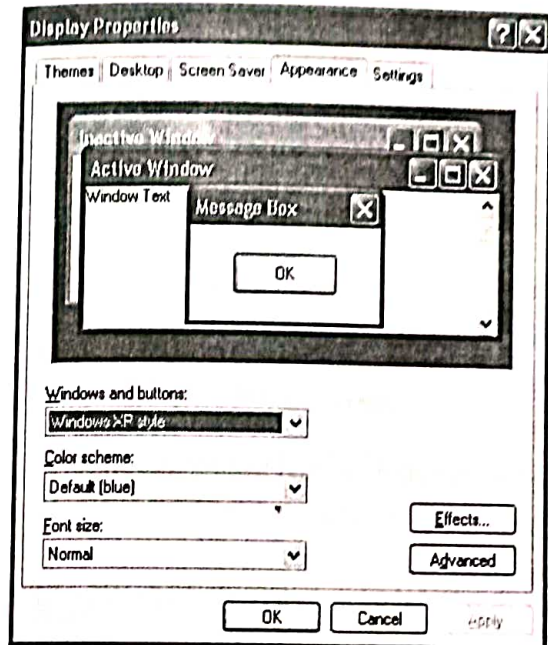
## Changing screensaver

In the 'Display properties' dialogue box select the Screensaver tab. Select a screensaver from the list. Select any options by clicking the settings button to customize the screensaver. Click 'Apply' to apply the screensaver.





*Changing screensaver*



**Run option**

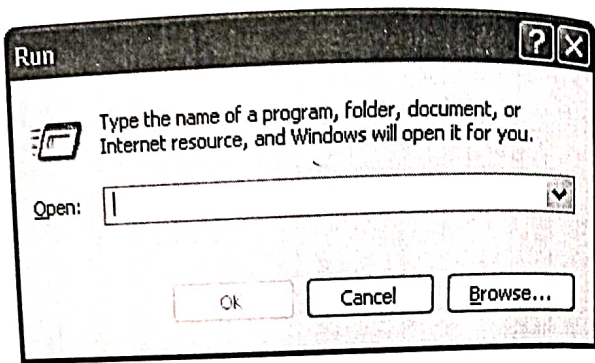


The Run option is used to run a program from the Start menu itself. This option can be used to run programs that are not listed in the Programs menu.

Click **Start**, and then click **Run**. In **Open**, type the path to the item you want to open, or click **Browse** to locate it. Click **OK** to run the program.

**Appearance**

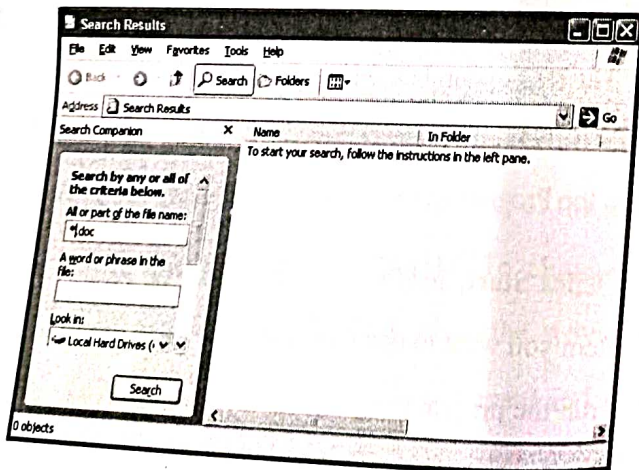
The appearance tab of the Display properties dialogue box is used to change the appearance (Color, font, etc) of the screen elements like desktop, menu, icons, etc. To change the appearance of the individual elements, click the **Advanced** button (in Win XP) and select the individual element and apply the change.



### Search option

The Search option is used to find any files or folders in the system or over the network.

Click **Start**, and then click **Search** (for Win XP) or **Find** (for Win 98). Click **All files and folders**. Type in the name or part of the name of the file/folder you are searching for. Click **Search** (Win XP) or **Find now** (Win 98).

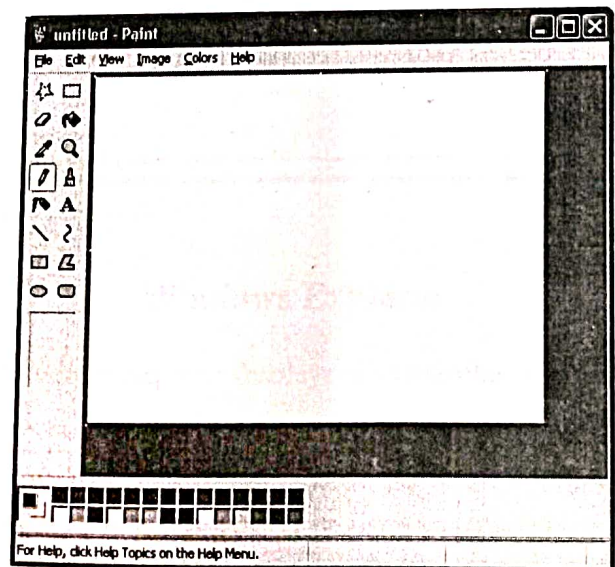


### Paint

Paint is a drawing tool you can use to create black-and-white or color drawings that you can save as bitmap (.bmp) files. To open Paint, click **Start**, point to **All Programs**, point to **Accessories**, and then click **Paint**.

The Paint window contains the menu bar, toolbox (that lists the tools used for drawing), colour box, (to select colour) etc.

The toolbox contains the following tools -> free form select, select, eraser, fill with colour, pick colour, magnifier, pencil, brush, airbrush, text, line, curve, rectangle, polygon, ellipse and rounded rectangle.

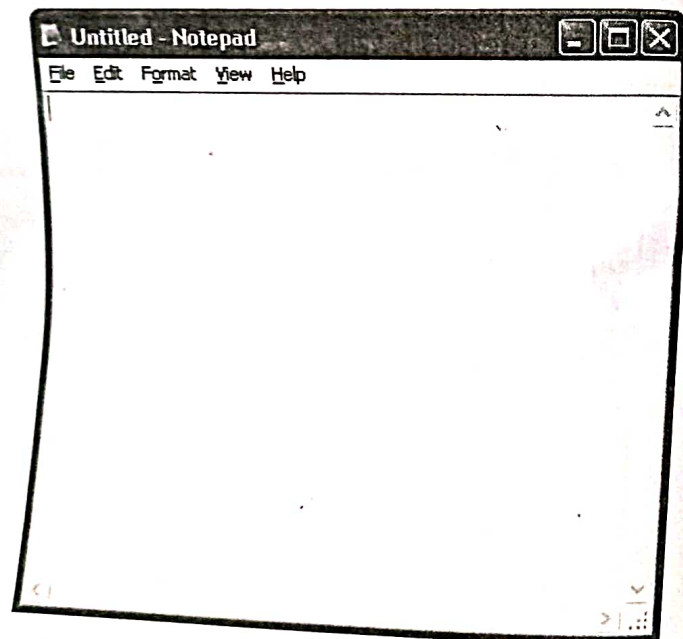


## Notepad

Notepad is a basic text editor we can use for simple documents or for creating Web pages.

To open Notepad, click **Start**, point to **All Programs**, point to **Accessories**, and then click **Notepad**.

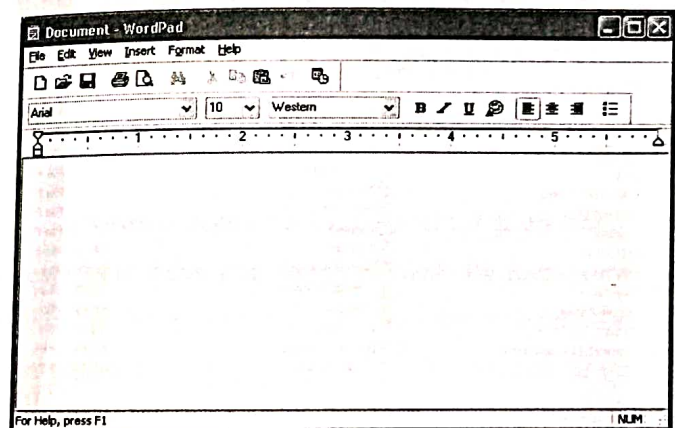
We can type the required information in the notepad window and save it using the option **File - Save**.



## Wordpad

We can use Wordpad to create or edit text files that contain formatting or graphics.

To open Wordpad, click **Start**, point to **All Programs**, point to **Accessories**, and then click **Wordpad**.

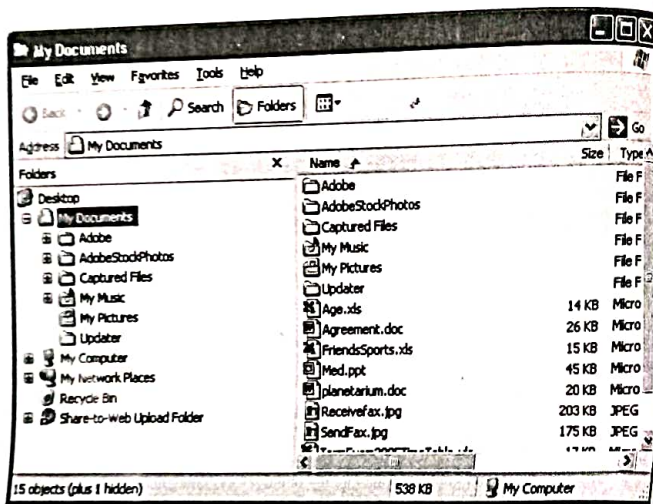


## Windows Explorer

Windows Explorer displays the hierarchical structure of files, folders, and drives on our computer. Using Windows Explorer, we can copy, move, rename, and search for files and folders. There are two panes in Windows Explorer. The left pane

shows the tree structure of all the drives and folders. The right pane shows the listing of all the files of the folder/drive selected in the left pane.

To open Windows Explorer, click **Start**, point to **All Programs**, point to **Accessories**, and then click **Windows Explorer**.



## 2

# MICROSOFT WORD

A word processor is a computer program that enables us to create, edit, print, and save documents for future retrieval and revision. We enter text into the computer by using a keyboard. As we type, our words are displayed on a monitor, or screen, and are stored temporarily in the computer memory as we are creating the document rather than on paper.

One of the chief advantages over a conventional typewriter is that a word processor enables us to make changes to a document without retyping the entire document. For example, we can create a letter in a word processor and then, after we finish, we can go back and change margins, add sentences, delete

words, move paragraphs, correct spelling errors and so on. We can do all these without retyping the original text.

## Microsoft Word

Microsoft Word is a powerful processor designed to help us create letters, memos, reports, other documents in various fonts. We can produce any document quickly and easily. The windows philosophy is to always use a mouse when working. Toolbars, ribbons and other menus allow us to work intuitively.

The checking tools in Word help us produce high-quality documents. We can correct spelling error, check document grammar and style, vary our choice of words (Thesaurus). Word provides several different ways of viewing and layouts documents before we print it.

The page layout view allows us to preview how the page we are actually working with will look: it shows HEADERS and FOOTERS and all margins.

Word also has several more powerful tools to make our daily work with documents much easier than in the past. We can

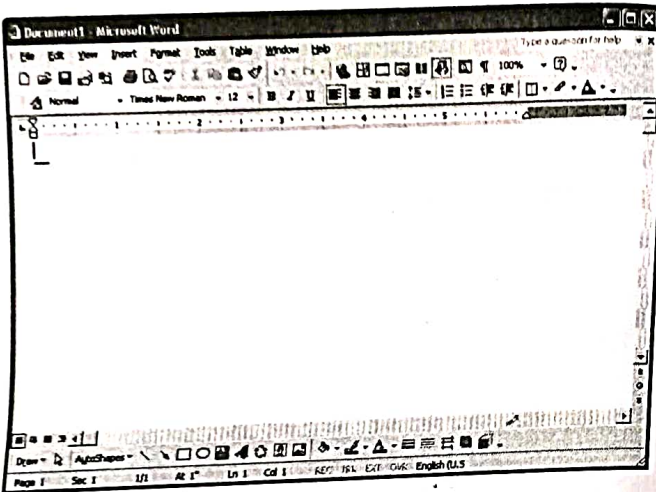
create graphics for our documents using Microsoft Draw. We can create graphs / charts with Microsoft charts.

## Some of the points to remember in word are :

- Start a fresh document
- Edit the document
- Select the required text before applying formats
- Set page setup options before starting any editing
- Save the document before printing.

## Identification of various screen elements

The top most portion of the MS Word window contains the Title bar which displays the title of the current document. Below the title bar, the menu bar is present which contains various menus (File, Edit, etc) to work with the document. The toolbar is present below the menu bar. The toolbar contains picturous representation of the commands present in the menu bar. The white area below the title bar is the document window where we create the document. The status bar is present below the document window.



### Opening as new document

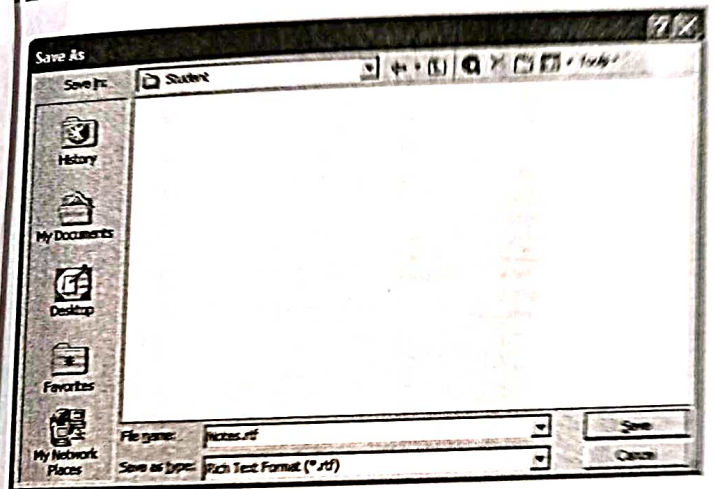
To open a new document, click the File Menu and select the option New.

### Opening an existing file

To open an existing file, click the File Menu and select the option Open. From the dialogue box that appears, locate file and click Open button.

### Saving a file

On the File menu, click Save. In the File name box, enter new name for the file. Click Save.



### Using the Save As command

The Save As command is used to save a copy of a file.

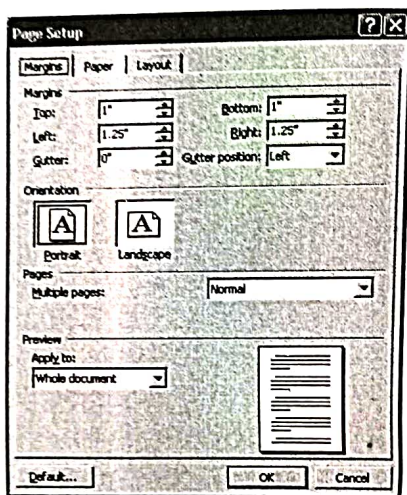
On the File menu, click Save As. In the File name box, enter a new name for the file. Click Save.

### Setting up the page using Page setup command

The Page Setup option is used to setup a page for printing. In the Page Setup dialogue box we can setup the Page

margins, Paper size(Letter, Legal, A4 etc), Orientation (Portrait or landscape), etc.

To setup a page, On the File menu, click **Page Setup**.



### Using Print Preview command

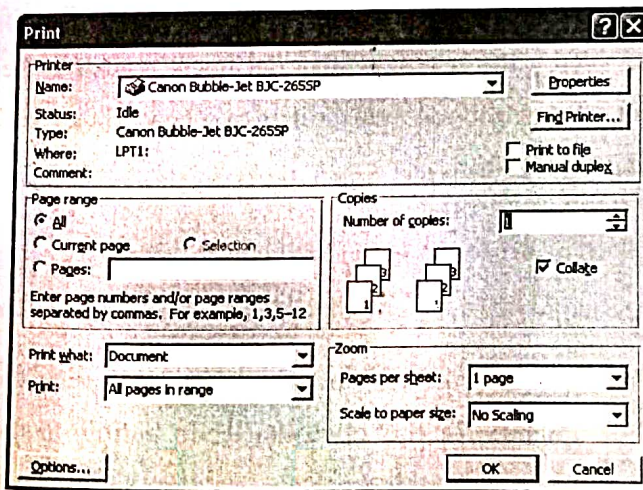
The Print Preview command is used to preview a page before printing.

On the File menu, click **Print Preview**. Use the button on the toolbar to look over the page or make adjustments before printing.

### Using the Print command on the File menu and Toolbar

You can print the active document by selecting **Print** command on the File menu or by clicking **Print** on the Standard toolbar.

In the Print dialogue box, you can specify the options like the name of the printer, number of copies to print, number of pages to print, etc.



## Moving contents to and from a document using the Cut command

Select the item you want to move.

To move the item, click **Cut** on the Standard toolbar. If you want to move the item to another document, switch to the document. Click where you want the item to appear. Click **Paste** on the Standard toolbar.

## Copying contents to and from a document

Select the item you want to copy.

To copy the item, click **Copy** on the Standard toolbar. If you want to copy the item to another document, switch to the document. Click where you want the item to appear. Click **Paste** on the Standard toolbar.

## Usage of Undo command

You can undo the very last action you did using the 'Undo' command. For this click the **Undo** button on the Standard toolbar.

## Hiding and displaying the Ruler and Status bar

To display or hide the Ruler, select the option **View-Ruler**.

To display or hide the Status bar, select the option **View- Status bar**.

## Inserting Page Breaks

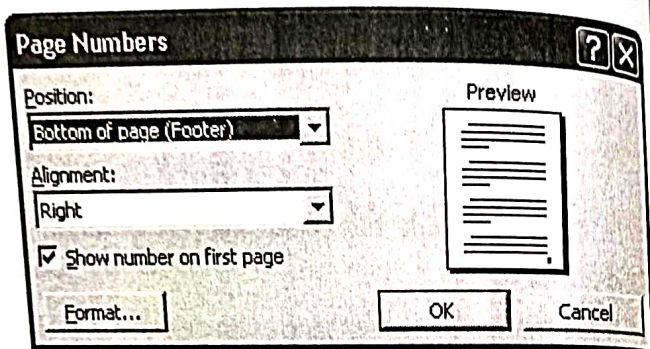
The Page Break draws the boundary between two pages.

To insert a page break, use the option **Insert-Break** or press the key combination **Ctrl-Enter**.

## Inserting Page Numbers

On the **Insert** menu, click **Page Numbers**. In the **Position** box, specify whether to print page numbers in the header at the top of the page or in the footer at the bottom of the page. In the **Alignment** box, specify whether to align page numbers left, center, or right relative to the left and right margins.





### Insert pictures in a document

To insert pictures in a document, use the option **Insert-Picture-Clipart**.

### Drawing toolbar

The drawing toolbar contains tools used for drawing. The tools include circle, rectangle, line, text boxes, autoshapes etc.



### Changing the font, font size, font style and font color of the text



### Changing the font

Select the text you want to change. On the Formatting toolbar, click a font name in the Font box.

### Changing the font size

Select the text you want to change. On the Formatting toolbar, type or click a point size in the Font Size box.

### Changing the font style and underlining

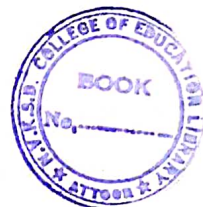
Select the text you want to change. On the Formatting toolbar, click **Bold**, **Italic** or **Underline**.

### Changing the font color

Select the text you want to change.

To apply the color most recently used for text, click **Font Color** on the Formatting toolbar.

To apply a different color, click the arrow next to the **Font Color** button, and then select the color you want and click on it.



## Formatting the line spacing and indentation of the paragraph

### Changing line spacing

Select the text you want to change line spacing. On the Format menu, click Paragraph. Under Line Spacing section, enter the spacing you want.

### Indentation of paragraph

Indentation is the distance between the margin and the body of the text.

Select the paragraph you want to indent. On the horizontal ruler, drag the First Line Indent, Left Indent, Right Indent or Hanging Indent marker to the position to apply a First Line Indent, Left Indent, Right Indent or Hanging Indent respectively.

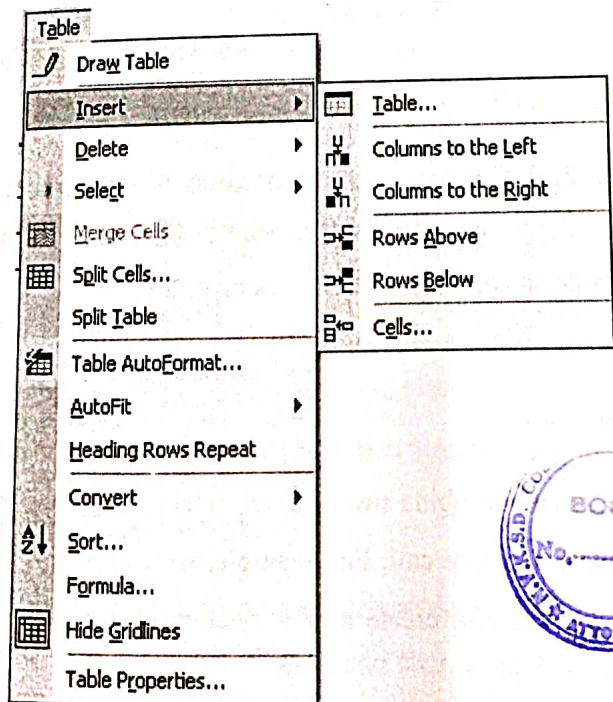
You can also set the indentation using the Format Paragraph option.

## Applying Bullets and Numbering

Select the items you want to add bullets or numbering to. On the Formatting toolbar, click Bullets or Numbering.

## Working with tables

### Inserting tables



A table is made up of rows and columns of cells that you can fill in with text and graphics. Tables are often used to organize and present information.

Click where you want to create a table. Click **Insert Table** on the Standard toolbar. Drag to select the number of rows and columns you want. (OR)

Click where you want to create a table. On the **Table** menu, point to **Insert**, and then click **Table**. Under **Table size**, select the number of columns and rows.

### **Adding rows and columns**

Select the same number of rows or columns as the number of rows or columns you want to insert. On the **Table** menu, point to **Insert**, and then click an option.

### **Merging cells**

We can combine two or more cells in the same row or column into a single cell. For example, we can merge several cells horizontally to create a table heading that spans several columns.

Select the cells you want to merge. On the **Table** menu, click **Merge Cells**.

### **Splitting cells**

Click in a cell you want to split. On the **Table** menu, click **Split Cells**. Select the number of columns or rows you want to split. The selected cell will split.

### **Deleting cells, rows and columns**

Select the cells, rows, or columns you want to delete. On the **Table** menu, point to **Delete**, and then click either **Columns**, **Rows**, or **Cells**.

### **Altering height of a row and width of a column**

#### **Changing row height**

Rest the pointer on the row boundary you want to move until it becomes a resize pointer, and then drag the boundary.

#### **Changing column width**

Rest the pointer on the column boundary you want to move until it becomes a resize pointer, and then drag the boundary until the column is in the width you want.

## Creation of Autotext

### How to create an autotext :

- Step 1 : Type a format
- Step 2 : Highlight the typed text and Click **Insert > Autotext > Autotext .....**
- Step 3 : Then type a name for the format and click **Autotext**

### How to place the autotext entry on the toolbar :

- Step 1 : Click **Tools > Customize**
- Step 2 : Click **Commands** tab.
- Step 3 : Scroll through the categories box to find out the Autotext
- Step 4 : Scroll through the corresponding commands of Autotext menu in the commands box.
- Step 5 : Highlight your entry and drag it to the toolbar and click **Close**.

## Mail Merge

### Creating Mail Merge Documents

- Step 1 : Go to **Tools > Mail Merge .....**
- Step 2 : Click **Create > Form Letters .....**
- Step 3 : You'll get a message box as below :

To create from letters, you can use the active document window <filename> or a new document window

Active document window	New Document window
------------------------	---------------------

Select Active document window if you are in a blank document or New document window if you have not opened a blank document.

- Step 4 : Click **Data Source > Create Data Source....**

Now you are going to create an Address Format. In the Create Data Source dialog box, you will find a

set of default field names for your address format. If you want to have your own field names, you can remove some or all of the default field names by selecting the field names in the 'Field Names in the Header Row' box and clicking the 'Remove field name' button. Then you can type your own field names in the 'Field Name' box and pressing enter key on the keyboard.

Finally after typing all the field names, click OK. This format has to be saved in a file. Type a filename and click save.

**Step 5 :** You'll get a message box as below :

The data source you just created contains no data records. To add new data records, click 'Edit Data Source' button or you can enter into the main document by clicking 'Edit Main Document' button.

Edit Data Source

Edit Main Document

Select Edit Data Source button to add some addresses for the format you created. The Edit Data Source dialog box will be opened. You can type some addresses. After typing all the addresses, click OK.

**Step 6 :** Now you are in the Main document. You can type a letter. In the 'To' address part, you can merge the field names by clicking the 'Insert Merge Field' button on the Mail Merge toolbar.

**Step 7 :** Finally to see the merged document, click 'Merge to new document' icon on the Mail Merge toolbar.

This concept will be useful for mailing invitations, greetings, interoffice memos, etc.



### 3

## MICROSOFT EXCEL

### Introduction

A spreadsheet is a grid of rows and columns and it is called as a worksheet. Earlier, spreadsheets were created manually with paper and pencil. And people had to use either lined paper or graph paper or regular paper with lines drawn on it manually to organize the columns of numbers on the sheet and manipulate them.

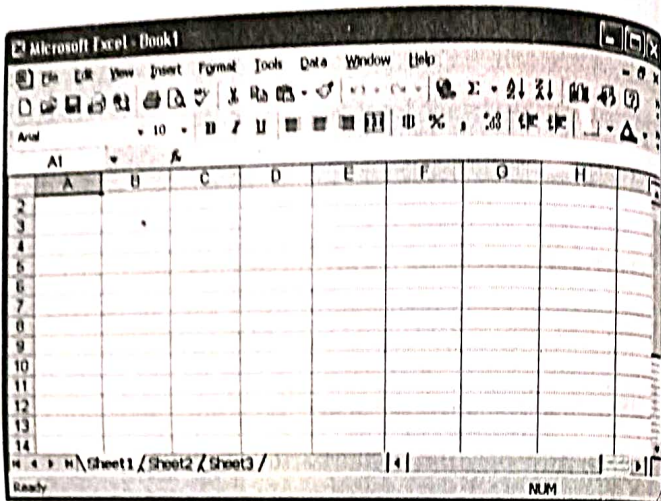
### Spreadsheet Programs

Spreadsheet programs are developed to automate tasks such as technical calculations, statistics, analyzing data

Production planning details can be stored using a spreadsheet program. This can be used to plan production schedules on a weekly or monthly basis. Eg. Microsoft Excel.

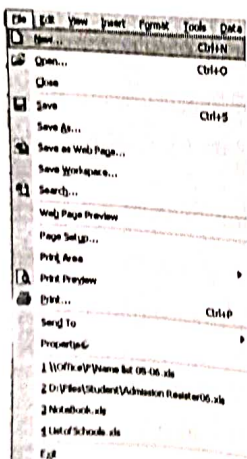
### Identification of various screen elements.

The top most portion of the MS Excel window contains the Title bar which displays the title of the current workbook. Below the title bar, the menu bar is present which contains various menus (File, Edit etc) to work with the workbook. The toolbar is present below the menu bar. The toolbar contains a pictorial representation of the commands present in the menu bar. The formula bar is present below the tool bar. The formula bar displays the address of the current cell towards its left and the contents of the current cell towards its right. Below the formula bar, the worksheet is present. It contains row and column headers. The column headers are from A to IV and the row headers are from 1 to 65536. The intersection of row and column is known as a cell. A work book may contain more than one sheet. The sheets are represented by the sheet tabs at the bottom of the workbook. The status bar is present below the sheet tabs.



### Opening a new workbook

To open a new workbook, use the option File-New



### Opening a saved workbook

To open a saved workbook, use the option File-Open. From the Open dialogue box that appears, select a file and click Open.

### Entering data into a sheet

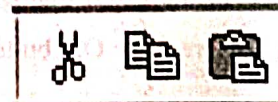
To enter data into the sheet, click a cell and type the data.

### Saving the workbook

To save a workbook, use the option File-Save or File-Save As. In the save As dialogue box, enter the name of the file and click Save.

### Moving and copying cell contents between cells

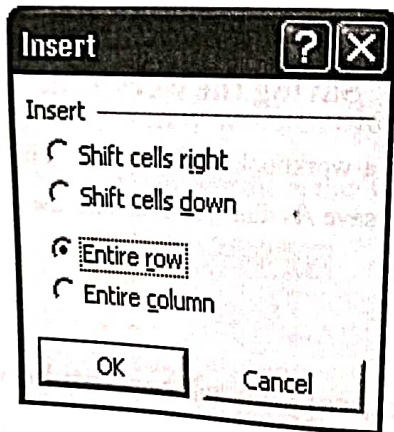
Select a cell and click the copy or the cut button on the toolbar. Select a destination cell and click the paste button.



## Inserting new cells, rows, columns and sheets

To insert a new cell, select a cell and right click. Select the option **Insert**. In the Insert dialogue box, select the option **Shift cells right** or **Shift cells down** and press the **OK** button.

To insert a new row, select a cell and right click. Select the option **Insert**. In the Insert dialogue box, select the option **Entire row** and press the **OK** button.



To insert a new column, select a cell and right click. Select the option **Insert**. In the Insert dialogue box, select the option **Entire column** and press the **OK** button.

## Using the summation icon

Type a few numbers in adjacent cells. Select the cell next to the last number and press the **Autosum** icon on the Standard toolbar. The sum of the numbers will be displayed in the current cell.



Summation icon



## Inserting graphics

To insert objects into the sheet, select the option **Insert-Picture**. From the sub menu select an item. Follow the steps on the screen to insert the graphics.

## Formatting a cell's content, alignment, etc.

You can format a cell by selecting the cell and using the font, font size, font style, alignment buttons, etc. on the formatting toolbar.





## Formatting the row height and column width

To change the height of a row, select a row and use the option **Format-Row -Height**.

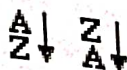
To change the width of a column, select a column and use the option **Format- column - width**.

## Renaming the sheets

To rename a sheet, select the sheet on the sheet tab, right-click and select **Rename**. Type in a new name.

## Sorting the table

To sort a table of items, click a cell in the table and click the **Sort Ascending** or **Sort Descending** button on the standard toolbar.



*Sort Ascending & Descending buttons.*

# 4

## MICROSOFT POWERPOINT

Microsoft Powerpoint is a software used to create presentations. The presentation may contain one or more slides. Each slide contains the objects or text, or even audio and video that is to be presented to the audience.

## Opening a new file

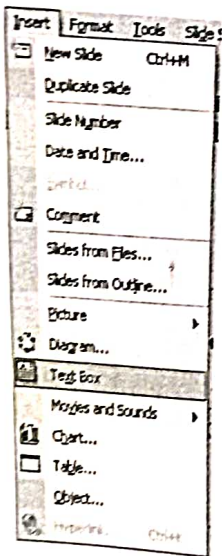
A new PowerPoint file is opened by using the option **File-New**. Usually a blank presentation with a slide is created.

## Incorporating slides in the presentation

Initially a single slide is present in the PowerPoint. To insert more slides, use the option **Insert-New slide**.

## Inserting and animating objects in the slide

After a blank slide is created, we have to insert objects like text, pictures, word art, autoshapes, etc. We can use the **Insert** menu to insert objects, diagrams, movies and sounds.



## Enhancing the presentation

Enhancing involves changing the design, colour and fonts of the slides. If you want to do this you should select the menu

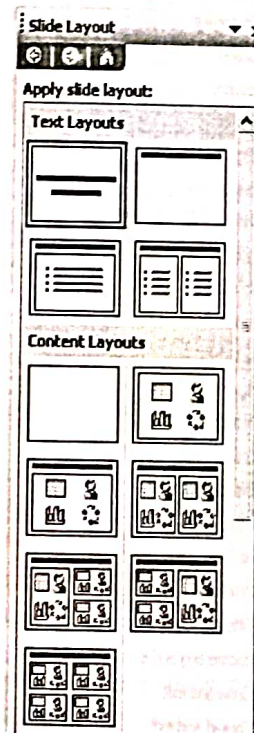
'Format' the window will appear in several design templates you can select anyone as you wish.

The options present in the format menu are Font, Slide design, Slide Layout and Background.

The font option is used to change the font in the present slide

Slide design is used to apply predefined design to the present slide or the whole presentation

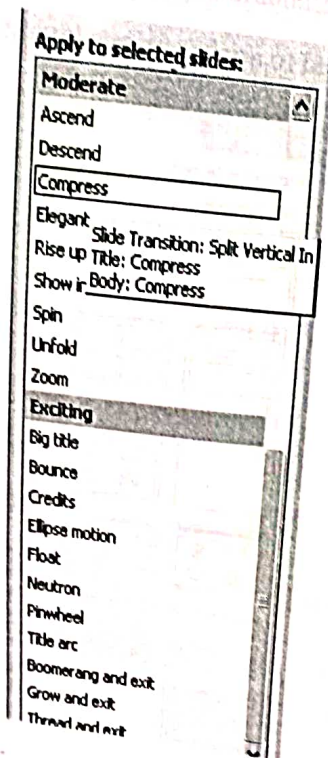
Slide layout is used to apply various layouts to the slide



Background option helps us to give various background or fill effects to the background of the slide

### Adding Animation

With the help of this option, you can add animation in the text available in the slides or selected slides. This is done by clicking the option "Animation Schemes" from the slideshow menu.



### Slide Transition

This particular option is used to add or change the special effect that introduces a slide during a show. To apply this option, click the option "Slide transition" from the slideshow menu



### Running the slide show

To run the slide show, select Slide show -View show or press the F5 key. To stop the slide show, press the Esc key.

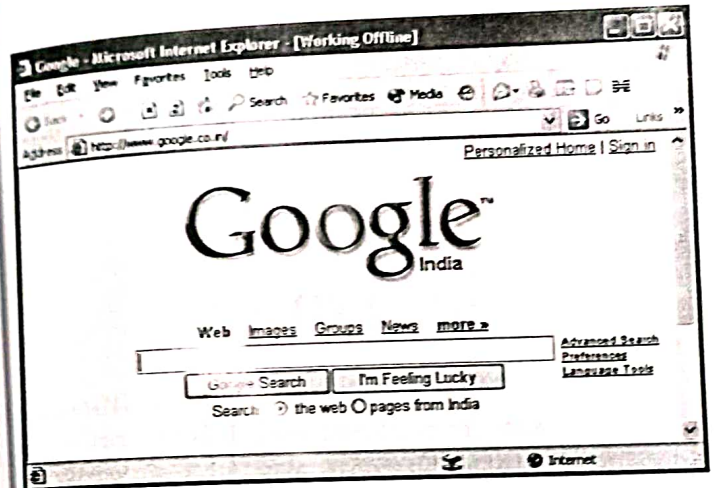
# 5

## INTERNET

Internet is the biggest network which connects millions of computers around the world. It is called the network of networks.

To connect to the internet you need a computer with a modem, telephone line and an internet account. A modem is a device that converts electronic signals from your computer into telephone signals and vice versa. Internet accounts are usually provided by Service providers like BSNL, Dishnet, etc.

To get into the Internet you must first connect to your Internet Service Provider (ISP) using the username and password supplied by their account.



After connecting to the Internet, you can browse the World Wide Web (WWW) using the software called Internet browsers. Popular internet browsers are Internet explorer, Netscape, etc.

In the internet browser, type the address of the site, like [www.yahoo.com](http://www.yahoo.com) to open the home page of the site. You can click the links in the home page to open other pages of the site. The address of a site can also be called as its Uniform Resource Locator (URL).

## 6

### E-MAIL

E-mail stands for electronic mail. It is the method of sending mails through the internet. It sends messages across the world in a matter of few minutes.

To use e-mail, you must have an e-mail address. For example, [mvksdcollege@rediffmail.com](mailto:mvksdcollege@rediffmail.com). Almost all the sites now have provisions to create e-mail address. To create a simple e-mail address, you don't have to pay any money.

To send or receive e-mail, you must first login into your e-mail box using your e-mail address as the user name and password that is known only to you. After entering your e-mail box, you can create and send mails, read mails, or even delete unwanted mails from the mail box. You can also send attachments along with your mail. Attachments are extra files like photographs, sound files, movie files, etc. you attach with the original file.

## 7

### E-RESOURCES

#### E-LEARNING

E-learning is a tool for using information technology to enable user to learn any time and anywhere in the world. E-learning is the convergence of learning process through internet. It has brought out profound changes in world over in the way of learning and training of users anytime and any where E-learning is increasingly perceived by government and educators.

#### E-BOOKS

E-books or electronic books are published electronically and accessed through internet. It can be described that the entire flow of information from author to reader in machine readable form. Full text of the books will be available either fee based or free of cost. The term e-book is defined broadly to include electronic reference works, monographs and textbooks. They may be delivered via the web or a hand-held device.



### Advantage of e-books

1. First advantage of the e-books is that the readers can browse the pages with cross reference to other pages.
2. There will not be any problem with regard to storage.
3. Need not go to a particular place to pick up the books. Hence it saves time.
4. Unlike the printed books, there is no possibility for the books to get damaged because of frequent usage.
5. A reader can send some important pages to someone else through his e-mail.

### E-Resources

E-resources are resources in which information is stored economically and which are accessible through electronic systems and network. E-resources is a very broad term that includes a variety of different published models, including CD-ROM'S, online databases, e-journals, e-books, internet resources and so on.

### N-List E-resources

The N-List programme can permit the subscribing institutions to access more than 2100 electronic books and bibliographic

database through the proxy server of UGC – INFLIBNET (<http://nlist.inflibnet.ac.in>). Some examples of electronic journals available are from American Institute of physics, American Physical society, Annual Reviews, Cambridge University press, Economic and political weekly, Indian Journals, Institute of physics, Oxford University press, Royal Society of chemistry, Math SciNet and e-books.

### E-Journals

The journals which are web based and available online are known as electronic journals or e-journals. This has been the real wonder of the web based technology. These e-journals have been considered to be one of the significant applications of computer in the field of education.

### Definitions

An electronic journal is defined as “any serial publications journal, magazine, newsletter in digital format and made available on CD-ROM's online system and in the internet”

MC Millan has defined the term electronic journal as “any serial produced, published and distributed nationally or internationally via electronic network such as Internet”

From the above definition e-journal is nothing but a journal available in electronic format using internet technology. Though it has the same characteristics as the printed journal it is available electronically. CDROM and Internet are used for the dissemination of electronic journals.

### Types of e-journals

The electronic journals are categorized in many types according to purpose.

On the basis of accessibility, e-journals are divided into two categories.

1. Commercial E-journals: These e-journals are not available free. Readers and libraries have to pay for the subscription of these journals. Many big publishers publish commercial e-journals.
2. Open Access E-journals: Open access journals are those which use a funding model that does not charge readers or their institution for access. Open access provides users the right to read, download, copy, distribute, print, search, or link to the full text of these articles.

## 8

# SIMPLE OPERATIONS

## To find out files in the computer

Start

Search

Files & Folder

Type the name of the File

Enter.

## Cleaning the Disk

Programme

Accessories

System tools

Disk Cleaner

(By this, the unwanted files saved in the hard disk will be cleaned)

### **Cut and Paste**

Highlight the text

Cut

Move the Cursor to the Place needed

Click Paste

### **Copying**

Highlight the text

Click copying icon

Place the cursor where to the copied

Click Paste.

### **To read from the Floppy**

My Computer

3½ Floppy icon

The File names

The Clicked file will open.

### **Password**

Start

Settings

Control Panel

Password icon

Type in the two places the new password

Click O.K.

### **To Change date**

Start

Setting

Control Panel





- Double click on the date and time icon
- Get Sub-menu calendar year
- Make necessary changes
- Click Apply to apply the changes.

### Printing

- To get a single copy, just take the document to be typed and click on the printing icon, it prints.
- To get a view of the matter to be printed -> File - print preview -> see the pages if necessary.

### Copying picture to word

- Right click on the picture
- Copy
- Open word
- Place cursor where to be copied
- Edit menu
- Paste

### Internet

- Click internet
- Type username and Password
- Click connect button
- After connection, close, if needed.

### Chatting

- Click chat icon
- Type email address
- Type Password
- Click next
- After finishing chatting logoff

# 9

## WORD EXERCISES

### EXERCISE - 1

Identify the following screen elements. Application window, Document window, title bar, Menu bar, Ruler line, Standard toolbar, Formatting toolbar, View buttons, Status bar, Control - menu box, Maximize / Restore buttons, Minimize buttons, Scroll bars.

1. Type the following matter

## Introduction

People have always needed to count. Earlier they counted with their fingers and probably through scratch markings on trees or bones or on the walls of their caves. Over the centuries the science of numbers and computing has changed dramatically. People are now able to solve very sophisticated problems, and increasingly so with the aid of computers.

Today we use computers in virtually every environment, even in areas unconnected with number manipulation. From the executive in an office to the housewife and her washing machine to the teenager recording his / her favourite television programme, computers have entered into practically every sphere of human activity.

The history of computing can be traced to the Abacus (2000 BC). Used primarily by merchants, the Abacus was a mechanical device used to add, subtract, multiply and divide numbers. Centuries later, mechanically operated devices were developed. These machines could add and subtract numbers (in 1642 Blaise Pascal's Calculating machine), as well as multiply and divide numbers (in 1671 Leibniz's Calculator).

2. Save the document as exer1
3. Press the following keys to move through the document using keyboard.
  - 3.1. Home, End, Ctrl Home, Ctrl End, Page Up, Page Down, Ctrl left arrow, Ctrl right arrow
  - 3.2. Point the mouse pointer to the selection bar and select the first paragraph and make it bold.
  - 3.3. Underline the word Introduction.
4. Hide the Status bar from the Application window and later on display it.
5. Hide the Drawing toolbar.
6. Open a blank document and later on closes it.
7. Save the current changes in the document exer1

## EXERCISE - II



### Importance of Computers

Almost a century ago a spate of inventions ushered in the first Industrial Revolution. Within a short span of time many countries became industrialised. Now, we are in the beginning of another Industrial revolution. The major cause of the second Industrial Revolution is the invention of computers. Man has invented many electronic devices but the computer has made a greater impact on society than any other single device. They have made a potentially significant contribution to the society during the last three decades.

The spate of innovations and inventions in computer technology during the last decade has led to the development of micro and personal computers. They are so versatile that they

have become indispensable to engineers, scientists, business executives. They have strengthened man's powers in numerical computations and information processing and thereby increased the effectiveness of organisations.

Computers have helped automation of many industrial and business system. They are used extensively in manufacturing and processing industries, power distribution systems, airline reservation systems, transportation systems, banking systems, and so on. Computer - aided design (CAD) and Computer - aided manufacture (CAM) are becoming popular among the large industrial establishments.

### Do the following :

1. Save the document as Exer2
2. Copy the first paragraph as the fourth paragraph.
3. Select the first sentence of the fourth paragraph and increase the font size to 16.
4. Select the fourth paragraph and delete it.
5. Restore the deleted paragraph using the Undo command.

Copy all the matter to the second page.

Insert the current Date and Time at the top right corner of the page.

set the line spacing of the second paragraph to DOUBLE.

Change the alignment of the whole document to JUSTIFY.

Change the color of the word 'Computer - aided design' to red.

Insert page numbers at the bottom center of the page.

Increase the font size of the word 'Computer' to 16.  
Change the Font style to Bold, Italics.

Find the word 'Business' in your document and replace it with 'establishments'.

Undo the replace command.

Open a blank document and type two or three lines in it then close without saving it.

Save the document before exiting from Word.

## EXERCISE - III

1. Type the following passage

### Drug Traffic

How much good drugs and drinks have done to human beings who are their most avid consumers only some supercomputer of the next century with its subtle mechanism of calculation will tell us. What we presently know about them is that they have done incalculable harm to both individuals and nations by making the former physical wrecks and releasing a tidal wave of terrorism striking the latter with the fury of a tornado. There is no hospital accommodation for the swelling numbers of drug-addicts in many countries, and running battles are being fought between security forces and hired agents of mafia

lords in Italy, Colombia and some other countries of Latin America where drug trade is largely concentrated.

AK-47's machine guns and other deadly weapons purchased with narco-dollars are being used by guerrilla armies in some countries to topple established regimes, and by rival gangs of drug mafias to liquidate each other. Some Prime Ministers, Attorney Generals, officials of investigating agencies and thousands of police officers have fallen a prey to the bullets of narco-terrorists. This nexus between drug traffic and narco-terrorism is a global phenomenon which even a super power like America is finding beyond its resources to tackle.

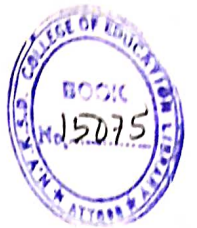
2. Increase the Top, Bottom, Right, Left margin by one inch.
3. Point to the File - Print menu and see the options printer name, page range, print.
- 3.1. Click on the properties and see the Orientation - Portrait and Landscape.
4. Copy the format of the second paragraph to the third paragraph (Using the Format Painter)
5. Save the document as Exer3

## EXERCISE - IV

Try out the EFFECTS in the Format - Font menu.

1. Superscript-  $a^2+2ab+b^2$
2. Subscript-  $H_2SO_4$
3. Strike through - Word processor
4. Double strike through - Word Processor
5. Shadow - Introduction.

## EXERCISE - V



## WORKING WITH TABLES

Student Name	Mark 1	Mark 2	Mark 3	Mark 4
Arun				
Reena				
Ali				
Smitha				
Priya				
Mohammed				
Judy				
Hussain				
Samir				

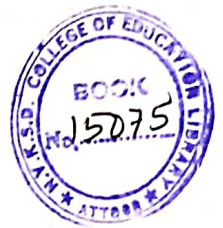
## EXERCISE - IV

Try out the EFFECTS in the Format - Font menu.

1. Superscript-  $a^2+2ab+b^2$
2. Subscript-  $H_2SO_4$
3. Strike through - Word processor
4. Double strike through - Word Processor
5. Shadow - Introduction.

74

## EXERCISE - V



## WORKING WITH TABLES

Student Name	Mark 1	Mark 2	Mark 3	Mark 4
Arun				
Reena				
Ali				
Smitha				
Priya				
Mohammed				
Judy				
Hussain				
Samir				

75

1. Create the above table and enter the marks (Out of 100)
2. Insert a column at the last for Total marks and find the total marks for each student.
3. Add Borders and shading to the Table of your choice.
4. Sort the table in the alphabetical order.
5. Create a page break after the table.
6. Save the document as Exer5

Sl. No.	Name	Marks	Total
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			



## EXERCISE - VI

1. Type the following passage

### Pollution

Our beautiful sunbright ecosystem is being systematically damaged by industrial pollution channelled into rivers like the Ganga and Jamuna, nuclear wastes from atomic plants routed into the world's oceans, and poisonous gases such as carbon dioxide mixed with the ozonosphere. Besides, tropical rain forests and green pastures are disappearing under the pressure of a proliferating population. Rivers like the Narmada are being dammed to change nature's well-balanced surface equations between flora and fauna, and sloping mountainous terrain is being converted into mini oceans to supply electricity to the ever starving industrial stomach of our age. Elephants, tigers, the wild rhinos of South Africa and many other forest creatures have become endangered species.



Oil tankers spilling their leaking cargo on the world's watery surface have already killed millions of sea animals. More than 600 oil wells billowing fire and smoke which the Iraqi army retreating from Kuwait burnt have not only changed weather conditions in the Middle East and some parts of Asia, but created what scientists call the greenhouse effect. All these vandalistic activities of industrial man are destroying the virginal neatness of nature so well orchestrated into the soul of our ecosystem.

2. Center the HEADING.
3. Allign all the paragraphs to justify (i.e. all line should be equal)
4. Make 2<sup>nd</sup> paragraph with 0.4 and 0.4 for left and right margin respectively and make spacing to 6 pts and after, in 'special' create a first line 0.5" indent.

# 10

## EXCEL EXERCISES

### EXERCISE - I

Identify the following screen elements :

Application window, Title bar, Menu bar, Standard toolbar, Formatting toolbar, Formula bar, Name box, Sheet window, Row / Column headers, Sheet tab, Vertical / Horizontal Scroll bars, Status bar, Minimize / Maximize / Restore / Close buttons, View buttons.

	A	B	C	D	E	F	G
1	JAN	MAR	MAY	JUL	SEP	NOV	JAN
2	MON	TUE	WED	THU	FRI	SAT	SUN
3	Q1	Q2	Q3	Q4			
4	A	A	A	A	A	A	A
5	10.00 AM	10.15 AM	10.30 AM	10.45 AM	11.15 AM	11.15 AM	11.30 AM
6							
7							
8							
9							

1. Save the exercise.
2. Select the first row by clicking at the row header.
3. Select the third column by clicking at the column header.
4. Copy the contents of the cell A3 to E8.
5. Move the contents of 2<sup>nd</sup> row to 9<sup>th</sup> row.
6. Insert a blank row after 4<sup>th</sup> row.
7. Insert a blank column after column D.
8. Save the changes made to the exercise.



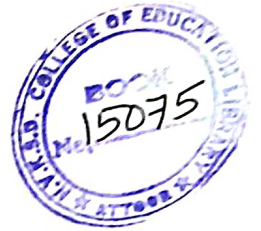
## EXERCISE - II

	A	B	C	D	E	F	G
1	<b>Student Status Report Standard - X</b>						
2	<b>Name</b>	<b>Mark 1</b>	<b>Mark 2</b>	<b>Mark 3</b>	<b>Mark 4</b>	<b>Mark 5</b>	<b>Total</b>
3	Philip						
4	Jack						
5	Billa						
6	Beena						
7	Tom						
8	Huck						
9	Diana						
10	Simon						
11	Arthy						
12	Ajay						

1. Save the exercise.
2. Enter your own data for the marks columns.
3. Calculate the total marks for the first student.
4. Copy the formula for all the students.
5. Add some more data to the table.
6. Do the necessary formatting.
7. Save the changes.

### EXERCISE - III

	A	B	C	D	E	F
1	NAME	BASIC PAY	HRA	DA	DEDUCTIONS	NET PAY
2	Samir	350				
3	Ashish	600				
4	Srivatsav	250				
5	Pankaj	175				
6	Kaurav	800				
7	Dev	450				
8	Seema	425				
9	Guru	150				
10	Ajith	200				



1. Save the exercise.
2. Calculate the HRA as 10% of the Basic Pay for the First employee.
3. Calculate the DA as 8% of the Basic Pay for the first employee.
4. Calculate the Deductions as 15% of the Basic Pay for the first employee.
5. Calculate the Net Pay as Basic Pay + HRA + DA - Deductions for the first employee.
6. Copy the formula for all the employees.
7. Switch off the Automatic Calculation button and later on switch it on.
8. Hide the gridlines and later on display it.
9. Do the necessary formatting to the table
10. Add the Header as 'Employee Status Report' and Footer as 'End of Report'
11. Save the changes.

## EXERCISE - IV

	A	B	C	D	E	F	G
1	Rainfall Regions in India from 1993 in cms.						
2		Delhi	Mumbai	Calcutta	Madras	Goa	Agra
3	1993	21	22	21	23	25	21
4	1994	31	32	30	29	28	27
5	1995	25	26	21	24	23	22
6	1996	21	21	22	23	22	23
7	1997	20	23	24	21	22	21

1. Prepare a column chart based on the above data.
2. Use the tool button to change the type of chart to pie chart.
3. Add the following data to the table and modify the chart using the chart Add Data ...

1		Delhi	Mumbai	Calcutta	Madras	Goa	Agra
2	1998	21	25	21	23	24	26
3	1999	20	23	21	24	25	21

4. Prepare a column chart based on the following data:

Students Performance Report for Computer Applications Examination 1999						
	Rajesh	Ravi	Salim	Ibrahim	Lincoln	Kennedy
Windows 98	66	65	72	73	68	70
Ms Office 2000	58	59	60	65	70	72
Oracle 8.0	70	72	56	60	58	52
Visual Basic 6.0	55	65	58	57	59	52

5. Save the exercise before you exit Excel.

## KEYBOARD SHORTCUTS

### Keyboard Shortcuts (Microsoft Windows)

1. CTRL+C(Copy)
2. CTRL+X(Cut)
3. CTRL+V(Paste)
4. CTRL+Z(Undo)
5. DELETE(Delete)
6. SHIFT+DELETE (Delete the selected item permanently without placing the item in the RecycleBin)
7. CTRL while dragging an item (Copy the selected item)
8. CTRL+SHIFT while dragging an item (Create a shortcut to the selected item)

9. F2 Key (Rename the selected item)
10. CTRL+RIGHT ARROW (Move the insertion point to the beginning of the next word)
11. CTRL+LEFT ARROW (Move the insertion point to the beginning of the previous word)
12. CTRL+DOWN ARROW (Move the insertion point to the beginning of the next paragraph)
13. CTRL+UP ARROW (Move the insertion point to the beginning of the previous paragraph)
14. CTRL+SHIFT with any of the arrow keys (Highlight a block of text)
- SHIFT with any of the arrow keys (Select more than one item in a window or on the desktop, or select text in a document)
15. CTRL+A (Select all)
16. F3 key (Search for a file or a folder)
17. ALT+ENTER (View the properties for the selected item)
18. ALT+F4 (Close the active item, or quit the active program)
19. ALT+ENTER (Display the properties of the selected object)
20. ALT+SPACEBAR (Open the shortcut menu for the active window)

21. CTRL+F4 (Close the active document in programs that enable you to have multiple documents opensimultaneously)
22. ALT+TAB (Switch between the open items)
23. ALT+ESC (Cycle through items in the order that they had been opened)
24. F6 key (Cycle through the screen elements in a window or on the desktop)
25. F4 key (Display the Address bar list in My Computer or Windows Explorer)
26. SHIFT+F10 (Display the shortcut menu for the selected item)
27. ALT+SPACEBAR (Display the System menu for the active window)
28. CTRL+ESC (Display the Start menu)
29. ALT+Underlined letter in a menu name (Display the corresponding menu) Underlined letter in a command name on an open menu (Perform the corresponding command)
30. F10 key (Activate the menu bar in the active program)
31. RIGHT ARROW (Open the next menu to the right, or open a submenu)

32. LEFT ARROW (Open the next menu to the left, or close a submenu)
33. F5 key (Update the active window)
34. BACKSPACE (View the folder one level up in My Computer or Windows Explorer)
35. ESC (Cancel the current task)
36. SHIFT when you insert a CD-ROM into the CD-ROM drive (Prevent the CD-ROM from automatically playing)

**Main Window Keyboard Shortcuts**

1. CTRL+O (Open a saved console)
2. CTRL+N (Open a new console)
3. CTRL+S (Save the open console)
4. CTRL+M (Add or remove a console item)
5. CTRL+W (Open a new window)
6. F5 key (Update the content of all console windows)
7. ALT+SPACEBAR (Display the MMC window menu)
8. ALT+F4 (Close the console)
9. ALT+A (Display the Action menu)
10. ALT+V (Display the View menu)

11. ALT+F (Display the File menu)
12. ALT+O (Display the Favorites menu)

**MMC Console Window Keyboard Shortcuts:**

1. CTRL+P (Print the current page or active pane)
2. ALT+Minus sign (-) (Display the window menu for the active console window)
3. SHIFT+F10 (Display the Action shortcut menu for the selected item)
4. F1 key (Open the Help topic, if any, for the selected item)
5. F5 key (Update the content of all console windows)
6. CTRL+F10 (Maximize the active console window)
7. CTRL+F5 (Restore the active console window)
8. ALT+ENTER (Display the Properties dialog box, if any, for the selected item)
9. F2 key (Rename the selected item)
10. CTRL+F4 (Close the active console window. When a console has only one console)

**Microsoft Internet Explorer Keyboard Shortcuts:**

1. CTRL+B (Open the Organize Favorites dialog box)
2. CTRL+E (Open the Search bar)

3. CTRL+F (Start the Find utility)
4. CTRL+H (Open the History bar)
5. CTRL+I (Open the Favorites bar)
6. CTRL+L (Open the Open dialog box)
7. CTRL+N (Start another instance of the browser with the same Web address)
8. CTRL+O (Open the Open dialog box, the same as CTRL+L)
9. CTRL+P (Open the Print dialog box)
10. CTRL+R (Update the current Web page)
11. CTRL+W (Close the current window)







**NVKSD COLLEGE OF EDUCATION,  
ATTOOR.  
KANYAKUMARI DISTRICT, TAMIL NADU**