

MAHARASHTRA STATE COUNCIL
OF EXAMINATION, PUNE

**Government Certificate in
Computer Typing**

GCC TBC – English
50 w.p.m

**Govt. Recognized Typewriting
Institutes in Maharashtra and Goa.**

**Government Certificate in Computer Typing
English 50 w.p.m
(GCC-TBC English 50 w.p.m)**

PRECONDITION for GCC- TBC English 50 w.p.m:-

The candidate wish to enrol for this course must have successfully completed the GCC – TBC 40 w.p.m.

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FUNDAMENTAL OF COMPUTER

INTRODUCTION:-

A computer is an electronic device which can perform Arithmetic and logical operations at very high speed. It can also store large amount of data almost permanently. The stored data can be recalled or retrieved as and when required.

HISTORY OF COMPUTERS:-

The history of computers is a story of stage by stage development of this wonderful tool offered by electronics to the human being

GENERATIONS OF COMPUTER:-

The digital computer has evolved through a series series of technical innovations and developments. These are so clearly defined that the computers are said to belong to different generations.

Presently the computers are supposed to be in fourth fifth and sixth generations. The typical characteristics and salient features of each generation of computers are summarized in following paragraphs.

First Generation Computers (1949 to 1959)

Second Generation computers: (1959-1965)

Third Generation Computers (1965-1970)

Fourth Generation Computers (1970-1985)

Fifth Generation Computers : (1985-1990)

Sixth Generation Computers (1990 onwards)

TYPES OF COMPUTERS:

Analog Computers:

Digital Computers:

Mainframe Computers:

Mini Computers

Micro Computers:

COMPUTER:-

Computer is an electronic device which takes some input, stores it, process it to give some meaningful result.

INPUT:-

Input means different characters, figures, numbers, information, charts, etc. which we are providing to computer. Along with this we have to provide instruction to the computer because computer do not have own brain. It is just like an obedient servant. So it will work according to our instruction.

PROCESS:-

In process, computer performs arithmetic and logical operations.

OUTPUT:-

Output means result which we will get after the processing

USES OF COMPUTER:-

- | | | | |
|------------------|-----------------|------------------------|--------------------|
| 1. Entertainment | 2. Calculations | 3. Account | 4. Advertisements |
| 5. Industry | 6. Banking | 7. Printing technology | 8. Hospitals |
| 9. Hotels | 10. Movies | 11. Agriculture | 12. Research, etc. |

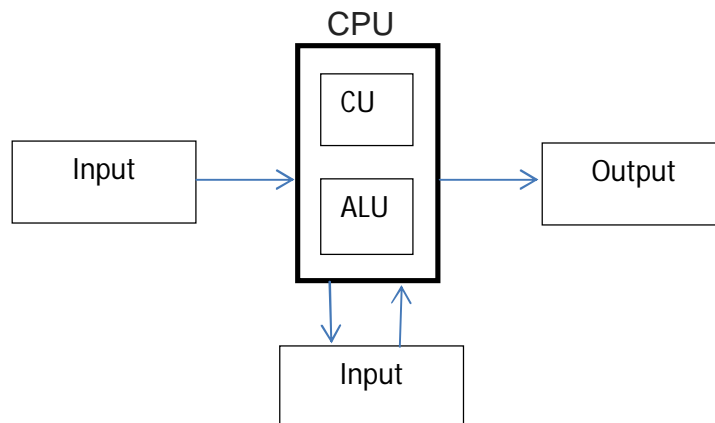
CHARACTERISTICS OF COMPUTERS :-

- a) SPEED
- b) STORAGE
- c) ACCURACY
- d) AUTOMATION
- e) VERSATILITY
- f) DILIGENCE

COMPUTER SYSTEM ORGANISATIONS:-

Mainly Computer System consists of 3 units:

- 1) Input Unit
- 2) Central Processing Unit (CPU)
- 3) Output Unit



a) Memory

This is used to store the data. The given input data is first stored in the memory is BIT (Binary DigiT). When we collect 8 BITS, it is called as 1 Byte.

8 Bits = 1 Byte

1024 Bytes = 1 Kilo Byte (KB)

1024 KB = 1 Mega Byte (MB)

1024 MB = 1 Giga Byte (GB)

1024 GB = 1 Tera Byte (TB)

Arithmetic Logic Unit (ALU)

It is used for arithmetic and logical calculations.

This has 3 subunits.

- 1) Register (2) Adder (3) Accumulator

1) **Register** -It is used for temporary storage of the data.

2) **Adder** -It is used for exact calculations.

3) **Accumulator** -It is used to store the intermediate results.

Control Unit

Output Unit

SECONDARY STORAGE DEVICES:-

- Hard Disk
- Optical Disk
- Flash Memory Cards
- Pen Drive

HARDWARE AND SOFTWARE

Hardware

Software

Types of System Software:-

Application Software

System Software

Programming Language

TYPES OF MEMORY

RAM (RANDOM ACCESS MEMORY)

ROM (READ ONLY MEMORY)

INPUT DEVICES :-

KEYBOARD:

MOUSE:

SCANNER

OUTPUT DEVICES:-

VDU (VISUAL DISPLAY UNIT)

PRINTERS

INK-JET PRINTERS

LASER PRINTERS

PLOTTER

Compiler

Interpreter

COMPUTER VIRUSES

What is a virus?

Origin of Virus

Full form of Virus

V- vital

I- information

R-resources

U-under

S-seize

Two types of viruses:

A) File Viruses B) Boot File Viruses

The virus can infect a system by two ways:

- By infecting a boot sector (Boot Sector Virus)
- By infecting other files. (File Virus)

Activities of Virus

How do viruses spread?

Symptoms of virus

Prevention of virus

Detecting viruses

A number of programs are available which can detect the virus and clean the infected disk or program. Such programs are called **Antiviruses**.

One such set of programs that is widely used is **Viruscan**

Viruscan: Removing the virus

Watchdog programs

E.g. Nashmen.com

The Antivirus

OPERATING SYSTEM :-

- 1) Working with Shortcut Keys
- 2) Type of Files
- 3) File Extension
- 4) File Compression
- 5) Arranging Desktop
 - Start Menu
 - Desktop Background
 - Gadgets
 - Taskbar
 - Personalizing your desktop
 - Screen Saver
 - Changing Date and Time
- 6) Working with PDF Files
- 7) File Transfer

Installing Unicode fonts

WINDOWS OPERATING SYSTEM EVOLUTION OF WINDOWS

PRODUCT OF WINDOWS FAMILY:-

WINDOWS 3.1

Windows for Workgroups 3.11

Windows 95

WINDOWS NT

Different Between:-DOS & WINDOWS

Windows 98

Windows 98 is introduced by Microsoft Corporation after the success of Windows 95. It is also a single user, multi-tasking and graphical user interface operating system. The main features

Operating system, user interface and environment

1. Operating System :-

Operating system is the program that makes the computer itself works, allowing the user to run applications and communication with the computer and its peripherals. Peripherals are pieces of hardware connected to and used by computer. e.g. Keyboard, Mouse, Printer, Monitor, Disk drives etc. The operating system management of Hardware and Software is vital for the user. Without an operating system the computer and its application can not perform any task.

2. The User Interface :-

The user interface is the part of an operating system or application that lets the user communicates with the computer. Different user interface let give instructions to the computer by typing words, by using menus, or by choosing pictures of tasks.

3. The Environment:-

The Environment is the part the total computer system i.e. both Hardware and Software, including user interface. The Windows interface provides the user with Pictures, or icons of programs.

TYPES OF WINDOWS :-

It is important to understand the difference between the various types of windows that can appear on window's desktop. There are three types of windows

(1) Application Window, (2) Document Window and (3) Folder Window.

APPLICATION WINDOWS:-

Programs such as Microsoft Word for windows, Aldus Pagemaker run in Application Windows. It is also called as Parent Window.

DOCUMENT WINDOWS-

Within a Application Window there is a sub-window which is called as document window or Child Window.

RECYCLE BIN :-

Recycle bin is a Folder which temporarily holds things (files, folders etc.) that you delete. The items are not actually erased from your computer when you delete them with the delete command. You can get back if you had deleted it by mistake. With the recycle bin you can open the folder, find the item you have accidentally deleted, and choose the RESTORE option from the file menu to undelete it.

MY COMPUTER :-

This is the most important addition to the Graphics User Interface in Windows98. You can access all your programs, documents and data files from one place. It is called MY COMPUTER. Every Windows98 computer screen has an icon by this name. By double-clicking on this icon, you get everything which is available in your computer, Hardware and Software. My Computer makes computing easy and can be easily used even by beginners. With the help of My Computer you can organize the files and folders and run applications.

SCREEN SAVER :-

A screen Saver displays moving images or text that can hide the information on your screen. The screen saver starts automatically if your computer is idle for a specified amount of time mentioned in WAIT.

WALL PAPER :-

The Wallpaper you can use to decorate your desktop. When you click a Wallpaper in the list, a preview of how the Wall paper will look appears on the monitor graphic.

WINDOWS EXPLORER :-

The Windows Explorer helps you to organize and manage the programs and files on your hard disk filing system. With the help of Windows Explorer you can open, copy, move, rename, delete the files and folders.

DESKTOP :-

When we start Windows, the large area we see is called the desktop. We can customize the desktop by adding shortcuts to our favourite programs, documents and prints and by changing its look fit to our mood and personality.

SETTING DATE AND TIME :-

WINDOWS:-

We use the Windows Start menu to start Windows features and applications. When we click on Start Button with the help of mouse, the Window's program menu will be a available on the screen. Menus are Lists of actions we can ask to perform. Dialogue boxes allow us to provide Windows 95/98 and its applications with information.

WHAT IS WORDPAD? :-

WordPad is a word processing applications program included with Windows

WHAT IS PAINT? :-

Microsoft Paint is one of the Windows Accessories. We can use Paint to create, Paint, Print, Save, Edit bitmap graphics. Default File name is "UNTITLED". Extension of Paint file is ".Bmp"

CHARACTER MAP :-

The Character Map utility helps you to locate and insert special characters, including symbols and non-English language characters, into your documents. You can keep this utility open on the desktop while you work with any window applications. Character Map do-es not work with non-Windows DOS application.

CLOCK:-

The clock accessories provide three views, Analog, digital and minimized. You can change and set Time and date by clock's setting menu.

CALCULATOR :-

The Windows Calculator comes in two versions, a Standard Calculator and a Scientific Calculator. Use the Standard Calculator for basic calculations it has a memory feature for storing and accumulating numbers. The Scientific Calculator includes advanced features such as number base conversions, statistical analysis and trigonometric functions.

NOTEPAD :-

Notepad creates simple text files that do not include the special codes that define character and paragraph formatting, therefore, Notepad is good tool to use for editing your system startup files. Since Notepad, requires less memory than a more advanced word processor you can leave Notepad open all the time.

MICROSOFT WORD

(More detailing than GCC-TBC 30 w.p.m.)

MS-Word is the application software which is normally used for word processing. It is under the software MS Office. It is useful for words processing the word editing, formatting and other processing works and printing. There are certain commands that have great control over word processing which are the basic features of word.

INTRODUCTION

Microsoft word for windows is a powerful and features-rich word processor it can practically do everything that one desires from a word processor. It can user friendly interface, simple techniques and more often intuitive ways of getting your work done.

RIBBON TABS :-

These are the major categories of commands located across the top of the Word window, such as Home, Insert, View, and Review. Each Ribbon tab contains groups of related commands for different tasks. You can access the most commonly used commands by clicking on the appropriate tab.

RIBBON :-

The Ribbon is a user interface element, introduced in MS-Office, located below the Tabs and Quick Access Toolbar, that organizes commands into tabs (like Home, Insert, Page Layout) and groups (like Font, Paragraph) to help users quickly find and execute tasks

THE RULERS :-

A ruler allows you to adjust your text the way you want.

THE SCROLL BARS :-

There are two Scroll bars a vertical scroll bar on the right edge of the screen and horizontal one at the bottom of the screen.

THE PAGE VIEW BUTTONS :-

On the left end of the horizontal bar you will see a set of four buttons. These are page view buttons.

Normal View

- Online Layout View
- Page Layout View
- Outline View

RETRIEVING SAVED DOCUMENT :-

Description:-

Whenever you create or modify your document, you should save it before closing your document so that you can continue your work in the next session. Thus, the documents that are saved previously can be opened again.

EXITING WORD

CREATING A NEW DOCUMENT

SAVING THE DOCUMENT

CLOSING THE DOCUMENT FILE

INSERTING AND DELETING TEXT
INSERTING TEXT IN A SENTENCE
INSERTING TEXT AS A PARAGRAPH

UNDO & REDO

SELECTING TEXT

SELECTING TEXT USING MOUSE

SELECTING FROM THE KEYBOARD

COPY, MOVE & DELETE TEXT

COPYING THE TEXT BY COPY AND PASTE METHOD.

DELETING THE TEXT

SPELLING & GRAMMAR CHECKING

REPLACING THE TEXT

FORMATTING THE TEXT

- ◆ Character formatting
- ◆ Paragraph formatting
- ◆ Page formatting

CHARACTER FORMATTING:-

CHANGING FONT & FONT SIZE:-

Font is the term used to refer to the shape and style of characters in text.

APPLYING BOLD, ITALIC AND UNDERLINE ATTRIBUTE:-

[Using keyboard: Ctrl+B for Bold, Ctrl+I for Italic, Ctrl+U for underline]

CHANGING THE CASE OF CHARACTERS :-

Case of text refers to the style of characters used, either lower case or Upper case

Case options are as :-

| CASE OPTION | SAMPLE TEXT |
|---------------|----------------------|
| Sentence case | My country is great. |
| Lower case | my country is great |
| UPPER CASE | MY COUNTRY IS GREAT |

| | |
|-------------|---------------------|
| Title Case | My Country Is Great |
| Toggle Case | mYcOUNTRYISgREAT |

PARAGRAPH FORMATTING

JUSTIFICATION OF TEXT

KEYBOARD SHORTCUTS

Ctrl+L - Left Align
 Ctrl+R - Right Align
 Ctrl+E -Center Align
 Ctrl+J - Justify

CHANGING LINE SPACING

KEYBOARD SHORTCUTS

Ctrl + 1 - Single Line Spacing.
 Ctrl+2 - Double Line Spacing
 Ctrl+5 - One and a half line spacing.

SETTING INDENTS (Left, Right, First Line) VIA RULER LINE

ALIGNING TEXT VERTICALLY

NUMBERING OR BULLETING EXISTING TEXT

CHANGING THE TYPE AND SHAPE OF BULLETS

BORDERING AND SHADING TEXT

SETTING PAGE BORDERS

SHADING TEXT

USING TABS

YOU CAN SET TAB STOPS VIA RULER LINE OR VIA FORMAT-TABS OPTION

PAGE FORMATTING :-

Page formatting applies to whole pages and include, setting up of page, page size, page orientation, headers and footers, page numbering etc.

SETTING PAGE MARGINS

**CHANGING FONT (USING FONT DIALOG BOX)
 (TO CHANGE FONT, FONT SIZE OR STYLE, FIRST OF ALL SELECT THE TEXT
 TO WHICH THE EFFECTS ARE TO BE APPLIED)**

CHANGING FONT SIZE:-

To choose the font size click the down arrow key at the font size option and then select the desired size or type it directly.

CHANGING THE FONT STYLE:-

There are different font styles as Regular, Bold, Italics etc. Choose it from the font style option.

USING DROP CAP:-

It is generally used for the first character of the beginning paragraph of your document to give it an attractive look.

HEADERS AND FOOTERS

PAGE NUMBERING

SETTING PAGE SIZE AND ORIENTATION

INSERTING PAGE BREAKS

COLUMNS FORMAT

DIFFERENT VIEWS

There are different views with which you may view your different ways.

1. NORMAL VIEW
2. PAGE LAYOUT VIEW
3. OUTLINE LAYOUT VIEW
4. PRINT PREVIEW

WORKING WITH TABLES :-

MS Word Table Tables are made up of rows and columns or data entered in cells. The cells contain individual paragraphs and can be formatted. A table consists of rows (no limit) and columns (maximum limit 63) of cells that you can fill with text and graphics. Cell expands vertically to fit the amount of text you type. You can create a new table and fill new empty cells or you can convert existing paragraphs to a table. After you create a table you can modify it in a vertical way by deleting/editing rows and columns, adjusting column width, sorting text and adding borders and shading. You can also set up simple data basics, perform calculations.

Tables are used to arrange information in rows and columns, that is in the table format.

1. INSERTING A TABLE
2. ADDING OR INSERTING ROWS
3. INSERTING OR ADDING COLUMNS
4. DELETING COLUMNS AND ROWS
5. MERGING OF THE CELLS
6. FORMATTING TABLE WITH AUTOFORMAT
7. ROTATING TEXT IN TABLES

AUTOCORRECT FEATURE :-

To make changes in the Auto Correct dictionary....

AUTOTEXT FEATURE :-

- (1) To see all the Auto Text entries follow steps....
- (2) To delete an Auto Text entries, Follow steps...

INSERTING SPECIAL SYMBOLS AND CHARACTERS.

MAIL MERGE

Insert a picture from the Clip Gallery

- Letters
 - Use a Microsoft Word Template
 - Create Custom Templates.
- Working with Mathematical Equations
- Working with Columns
- Working with Pictures

MICROSOFT EXCEL

(More detailing than GCC-TBC 30 w.p.m.)

INTRODUCTION TO MS EXCEL:-

Excel is a general purpose Application program software under MS OFFICE program group Excel is collection of Workbooks. Each workbook is the collection of several spread-sheets or work-sheets.

WORKSHEET (Excel sheet)

Workbooks

ROWS, COLUMNS & CELLS

UNDERSTANDING EXCEL SCREEN ELEMENT

RIBBON TABS :-

These are the major categories of commands located across the top of the Excel window, such as Home, Insert, View, and Review.

Each Ribbon tab contains groups of related commands for different tasks.

You can access the most commonly used commands by clicking on the appropriate tab.

RIBBON :-

The Ribbon is a user interface element, introduced in MS-Office, located below the Tabs and Quick Access Toolbar, that organizes commands into tabs (like Home, Insert, Page Layout) and groups (like Font, Paragraph) to help users quickly find and execute tasks

Standard Toolbar :- The standard toolbar contains most common tasks as Opening. Saving, and printing worksheet. Cut or copy and paste information etc.

Formatting Toolbar :- Formatting is the process of making you worksheet look visually attractive. The formatting toolbar contains the tools required to format the worksheet. These include fonts, font style, size, alignment, borders, colors etc.

The formula Bar :- Formula bar is the most important toolbar. It will be the focus of your attention while working in Excel. It consists of an area known as Name box an Edit formula area and a contents box.

The Status Bar:- The Status bar indicates the status of the current worksheet.

The Worksheet Area:- The area between the toolbars at the top and the status bar at the bottom is the worksheet area or the primary working area. It is a grid of rows and columns. The work area is bounded at top by column headings,

The Scroll Bars:- Owing to the large size of the worksheet, at any given time you will be seeing only a small part of it -

The Vertical Scroll bar:- The vertical scroll bar graphically represents the total length of current worksheet.

The Horizontal scroll bar:- The Horizontal scrollbar covers the right-half of the bar at the bottom of the screen.

The Sheet Tabs:- Excel uses the concept of Book to store your information. A book is nothing but a signal file folder for holding a number of individual worksheets. In Excel, a file is termed as a "Workbook", and has an extension of XLS. To the left of the horizontal scroll bar, you will find a set of tabs marked as sheet1, sheet2, sheet3. These are the individual worksheets, which make up the Workbook.

The Scroll Buttons:- By default, you can see only three sheet tabs. To display other sheet tabs, if any, you can make use of "Tab Scrolling" buttons provided to the left of the sheet tabs. You can move among the sheet tabs using the Scrolling buttons.

MOVING AROUND THE WORKSHEET USING KEYBOARD

DATA TYPES SUPPORTED BY EXCEL :-

There are three types of data.

1. Label:- Labels, also known as text or character types is descriptive type of information, not meant for performing calculations.

2. Values:- Numbers represent data, which can be used for performing calculations. This includes data and time type of information, since excel converts these into numbers and stores them as such. We can perform date arithmetic on dates like adding and subtracting

3. Formulas and functions:- The formulae or functions which perform calculations using data in other cells.

SAVING THE WORKSHEET

Choose File->Save or Ctrl + s

EDIT KEY: If you have changes to do in the entered data then

- Position your pointer on the cell
 - Press F2 function key
 - Make changes
- Hence F2 is called as the Edit key.

CLEARING CELL ENTRY :-

Select the cell to be cleared, and choose EDIT -> CLEAR from menu options

ENTERING FORMULAS:-

One of the important reasons for the popularity of spreadsheets is their ability to perform automatic calculations using formula and functions. This activity introduces you to the use of formula and in the next activity you will get to know about functions.

Mathematical operators that can be used in formulas:

| | | | |
|---|---|----------|---|
| + | : | Plus | - Adds two numbers or concatenating two strings |
| - | : | Minus | - Performs subtraction |
| * | : | Asterisk | - Performs multiplication |
| / | : | Divide | - Performs division |
| ^ | : | Caret | - Performs Exponentiation |

SELECTING ROWS, COLUMNS, AND RANGE BY SHORTCUTS

Excel provides many convenient ways by which you can select rows, columns, ranges, etc using mouse.

INSERTING ROW

INSERTING COLUMN

DELETING ROW

DELETING COLUMN

CHANGING COLUMN WIDTH

SETTING COLUMN WIDTH WITH AUTOFIT

CHANGING ROW HEIGHT

ALIGNING DATA IN CELL

Merge & Center :-

RENAMING A WORKSHEET

INSERTING A NEW WORKSHEET

DELETING A WORKSHEET

MOVING AND COPYING THE WORKSHEET IN SAME WORKBOOK

FREEZING TITLES

ENTERING DATA WITH AUTOFILL

Filling a Text series.

Filling Numbers

CREATING A CUSTOM SERIES

FORMULAS AND FUNCTIONS

*USING FORMULAS

1. Sum: Place pointer cell address G4 and give formula as

= C4+D4+E4 + F4

Or =SUM(C4:f24) (Use of function)

2. Percentage: Place pointer at cell address H4 and give formula as

=G4/4 & then apply the percent format

Note: Using Fill Handle, Calculate the total & Percentage for further Records

USING FUNCTIONS

| |
|-----------------------------|
| 1. SUM(Range) |
| 2. AVERAGE (Range) |
| 3. MAX(Range) 4. MIN(Range) |

| |
|-------------------------------|
| 5. IF(Condition, True, False) |
| 6. TODAY() |
| 7. NOW () |
| 8. FACT (No) |
| 9. INT (No) |
| 10. MOD (No. 1, No. 2) |
| 11. SQRT (No.) |
| 12. ROUND |

DATABASE MANAGEMENT IN EXCEL:-

Database is the third component of Microsoft excel, the other two being Worksheet and Graphics.

A database is simply a collection of data or information stored in the computer in a well-defined manner. Some of the routine management operations which are frequently required are:

- Adding of new data to the database
- Editing and updating of the existing data
- Sorting of data in any desired manner
- Searching and retrieving of any type of stored data
- Printing of selected data

SORTING THE DATABASE:-

A) Sorting on Single Field:-

Ascending Order

B) Sorting on Multiple Fields :-

CREATING REPORTS :-

1. Area Chart:-

In this type we can represent the data components which are changing.

2. Column Chart :-

A column chart is graphical collection of vertical column representing the corresponding data item or data list.

3. Bar Chart :-

Bar chart consists of horizontal bars representing the corresponding data item or list. Each bar in chart is a single data series.

4. Line Chart :-

The data item or list are represented in line format in increasing or decreasing line vibrated lines.

5. Pie Chart :-

Pie chart is the collection of arc parts representing percent wise correspondance data item. The pie chart is divided into slices depending upon the data item list.

6. Radar Chart :-

Radar chart shows data changes in relation to centre point to each other. Radar chart can be used to plot several interrelated series and easily make visual comparison

7. Scatter Chart :-

In scatter chart the data items are expressed int X and Y axis with relationship of consolidate pair of number. This chart type is especially used for numerical data analysis.

8. 3D Chart:-

In to this type of chart we can view the created chart into all possible directions into three dimensions.

Creating Chart :-

We can create chart using chart wizard for creation of charts,

(1) Select the data range (cell range) you want to include into chart then.

(2) Click on Insert Menu

(3) Then click on Chart

(4) It will have option

(a) On this sheet (b) As new sheet

(a) On this sheet

Through this option the chart is embedded on the current worksheet.

(b) As new sheet

It inserts new worksheet with sheet name 'chart' and will embed the chart into that chart sheet.

CHART SHEET:

A sheet in a workbook containing a chart. When you create a chart sheet, Microsoft Excel inserts it in the workbook to the left of the worksheet it's based on. When a chart sheet is activated, you can add data and select, format, move and size most items.

- Working with Charts
- Pivot Table
- Linking Word Documents with Excel
- Working with formula
- VLookupand Hlookup Functions

MICROSOFT POWERPOINT

(More detailing than GCC-TBC 30 w.p.m.)

MS-POWERPOINT is a package which used most useful to learn basic about multimedia. It will help you to create good looking overhead transparency, 31 mm. slide and even video slide show, PowerPoint helps you to quickly create up to and sort slide based professional looking presentable material.

SUDEDS:- You can create and edit individual pages, called slides sliders are individual format of your presentation slides can have title, text graphs, drawing, object, shapes, clipart and visual. In slide you can create just small animation film.

PLACE HOLDER:- The boxes with dotted outline that appear when you create a new line. Thus boxes serve as place holder for objects such as title, text, charts, tables and clip arts. Just click to add text in any place holders or double click to add the specified object.

SPEAKER NOTES:- The speaker notes are visually printed are paper and can be either the exact text of speech or some important points thereof You can create and print speakers note but in clide show you can not see speakers note.

HANDOUTS:- Handouts are paper copy of all or some of the slides to be given to the audience.

SLIDE SHOW

The Screen Elements OfPowerpoint

The Main Window

A window is rectangular area on the screen, in which you view a program or a slides. Power Point uses two windows, one nestled within the other. The outer window is called the application window. It contains The Powerpoint program's main option and commands, Scroll bar, Status bar, Ruler Etc.

RIBBON TABS :-

These are the major categories of commands located across the top of the PowerPoint window, such as Home, Insert, View, and Review. Each Ribbon tab contains groups of related commands for different tasks. You can access the most commonly used commands by clicking on the appropriate tab.

RIBBON :-

The Ribbon is a user interface element, introduced in MS-Office, located below the Tabs and Quick Access Toolbar, that organizes commands into tabs (like Home, Insert, Page Layout) and groups (like Font, Paragraph) to help users quickly find and execute tasks

Status bar :- Give information about the currently selected commands.

View slide button:- Give information about the current slide and view.

New slide button :- Used to create a new presentation slide.

Layout button:- Used to change the slides layout.

Template button:- Used to apply the design template to your presentation.

To create a new presentation

Open An Existing Presentation

To Start a slide show

THE POWER POINT VIEWS :-

In Powerpoint you can view your presentation in five different ways. These are

- Slide view outline view slide sorter view
- notes page view slide show

SLIDE VIEW:-

Slide view allows you to view and work on one slide at a time. By default, this is the view you will be using for creating your slides and to modify existing slides. In this view, you can type text, copy and move text, draw insert clip arts and pictures, arrange and change the look of your text and objects.

OUTLINE VIEW:-

Outline view allows you to look at your presentation in formatted or plain text in an outline manner. Pictures and other objects included in that slide will not be displayed. However, when you click on any of the outlined item, the actual slide will be displayed in a miniature form. Outline view is very good for organising various slides of your presentation in an orderly manner. In this view, you can conveniently make changes in the text, re-arrange slides by copying or moving. delete or hide unwanted slides etc.

SLIDE SORTER VIEW:-

Slide Sorter View is an overall view of your presentation in which all your slides are displayed in miniature form complete with graphics and text. In this view, you can add transitions, set timing for slide transitions, hide slides, change the order of slides, copy, move or delete slides etc. You can have an overall view and feel of your presentation.

NOTES PAGE VIEW :-

Notes Page View allows you to create speaker's notes. It displays a box below the slide so that you can make some notes, if required, to refer to during presentation. This is for your use only and will not be displayed to the audience.

SLIDE SHOW VIEW:-

Slide Show View is the final electronic presentation on your computer as seen by the audience. This is the culmination of your ideas and efforts. Each slide fills the screen. The effects of transition, animation and timing will be displayed. You can move from slide to slide by clicking mouse button or PgUp and PgDn keys. If you press the right mouse key, a short menu pops up with many options including Next and Previous slide option. You can stop the presentation any time by pressing the Esc key.

Slide Masters

Transitions and Animation

Inserting Sound and Videos in Slide

MS-OFFICE OUTLOOK

What is MS Outlook?

Microsoft Outlook is a personal information manager developed by **Microsoft**. It is mainly used as an **email client**, but also includes features like:

- Calendar
- Task Manager
- Contact Manager
- Notes
- Journal
- Web browsing

💡 Key Features of Microsoft Outlook

| Feature | Description |
|----------------------------|---|
| Email Management | Send, receive, organize, and search emails. |
| Calendar | Schedule meetings, appointments, and events. |
| Contacts | Save and manage personal and professional contacts. |
| Tasks | Create to-do lists and assign deadlines. |
| Notes | Write quick notes or reminders. |
| Integration | Works with Word, Excel, Teams, OneDrive, and SharePoint. |
| Rules & Filters | Automate email organization. |
| Security | Built-in spam filtering, encryption, and security tools. |
| Multiple Accounts | Add and manage several email accounts (Gmail, Yahoo, etc.). |

📅 Uses of Microsoft Outlook

1. **Professional Email Communication**
 2. **Scheduling meetings and appointments**
 3. **Project and Task Management**
 4. **Sharing calendars with team members**
 5. **Organizing emails with folders and categories**
 6. **Setting up automatic replies during vacations**
 7. **Synchronizing mobile and desktop mail**
-

Security Features

- Email encryption (S/MIME)
- Anti-spam and anti-phishing filters
- Protection against malware and unsafe attachments
- Two-factor authentication (2FA)

Difference Between Outlook and Other Email Clients

| Feature | Outlook | Gmail | Thunderbird |
|----------------------|------------|-------------------|--------------------|
| Professional Use | ✓ Yes | Limited | Moderate |
| Office Integration | ✓ Strong | ✗ None | ✗ None |
| Calendar Integration | ✓ Built-in | ✓ Google Calendar | ✗ Add-ons required |
| Offline Access | ✓ Yes | ✓ Limited | ✓ Yes |
| Security | ✓ High | ✓ High | ✓ Moderate |

Advantages of MS Outlook

- User-friendly interface
- Works offline
- Centralized dashboard for email, calendar, and tasks
- Secure and encrypted emails
- Easy integration with Microsoft 365 apps
- Powerful email search and filtering options
- Supports automation using "Rules"

Disadvantages of MS Outlook

- Costly (as part of Microsoft Office Suite)
- Requires regular updates
- May feel complex to new users
- Can use a lot of system resources
- Customization is limited compared to some other tools

Outlook is Available On:

- **Windows & macOS**
- **Web (Outlook.com)**
- **Mobile apps** (Android, iOS)

Outlook for Business (Outlook 365)

For organizations, Outlook offers:

- Integration with **Microsoft Exchange Server**
 - Shared mailboxes and calendars
 - Microsoft Teams meeting integration
 - IT admin tools
 - Enhanced security and compliance features
-

File Types Used in Outlook

- .pst (Personal Storage Table)
 - .ost (Offline Storage Table)
 - .msg (individual message file)
 - .ics (calendar file)
-

Outlook Alternatives

- Gmail (Google Workspace)
- Mozilla Thunderbird
- Apple Mail
- Zoho Mail
- ProtonMail (for privacy-focused users)

INTERNET & CYBER SECURITY

1. What is Cyber Security? Cyber Security means protecting computers, mobile phones, and networks from online threats. Its main job is to keep information safe, correct, and available when needed.

2. Types of Cyber Threats

- **Malware:** Harmful software like viruses that damage your computer.
- **Phishing:** Fake emails or messages that try to steal your personal details.
- **MITM Attacks:** Someone secretly listens to your online communication.
- **DDoS Attacks:** Too much traffic is sent to a website to crash it.
- **SQL Injection:** Hackers attack websites to steal data.
- **Zero-Day Exploits:** New attacks that happen before the software company knows about the problem.
- **Insider Threats:** People inside a company who leak or misuse data.

3. Common Cyber Threats You Should Know

- **Spyware:** Software that secretly watches what you do on your device.
- **Adware:** Shows too many unwanted ads and slows down your system.
- **Keyloggers:** Records everything you type, including passwords.
- **Botnets:** Group of infected computers controlled by hackers.
- **Fake Apps or Websites:** Used to steal your data or install viruses.
- **Social Engineering:** Tricking people into giving away confidential info.

4. Common Cyber Attacks (Examples)

- **Phishing:** You get a fake message pretending to be your bank.
- **Ransomware:** Hackers lock your files and ask for money.
- **DDoS:** Websites stop working due to too many fake visitors.

5. How to Stay Safe (Cyber Security Tools)

- **Antivirus:** Removes harmful software.
- **Firewalls:** Blocks bad internet traffic.
- **Encryption:** Scrambles data so others can't read it.
- **MFA (Multi-Factor Authentication):** Extra step when logging in.
- **Security Protocols:** Keeps internet data safe (like HTTPS).
- **Software Updates:** Fix problems in apps.
- **Security Checks:** Finds weak areas in a system.

6. Areas of Cyber Security

- **Network Security:** Keeps internet connections safe.
- **Information Security:** Keeps your personal data safe.
- **Application Security:** Protects apps from being hacked.
- **Cloud Security:** Keeps your online storage safe.
- **Operational Security:** Company rules to protect data.
- **User Training:** Teaching people how to avoid online risks.

7. Cyber Laws and Ethics These are rules for using the internet safely and legally:

- **IT Act 2000:** Indian law for cyber crimes.
- **GDPR:** Law in Europe to protect user data.
- **Ethics:** Doing the right thing, like not stealing data or spying on others.

8. What Organizations Do

- Governments have cyber safety teams (like CERT-IN in India).
- Private companies give security services.
- Many teach people about online safety.

9. Cyber Security Jobs

- **Ethical Hacker:** Finds security problems before bad hackers do.
- **Security Analyst:** Watches systems for threats.
- **SOC Analyst:** Works in a team that handles security.
- **Cybersecurity Engineer:** Builds strong security systems.
- **CISO:** Leader who handles all cyber security in a company.

10. Future of Cyber Security

- **AI (Artificial Intelligence):** Helps find and stop threats faster.
- **Zero Trust:** No one is trusted automatically.
- **Quantum Cryptography:** Stronger way to keep data safe.
- **Blockchain:** A safe way to store data.
- **IoT Security:** Protects smart devices (like smart TVs, cameras).

11. Advantages of Cyber Security

- **Protects Personal Data:** Keeps your photos, passwords, and bank info safe.
- **Prevents Financial Loss:** Stops hackers from stealing your money.
- **Builds Trust:** Companies with good security gain customer trust.
- **Prevents Downtime:** Keeps websites and apps working without problems.
- **Fights Cyber Crime:** Stops criminals from doing bad things online.
- **Protects Reputation:** Prevents bad publicity caused by data leaks.
- **Supports Digital Growth:** Helps people use digital services safely.

12. Disadvantages of Cyber Security

- **High Cost:** Setting up and maintaining good cyber security systems can be expensive.
- **Complexity:** It can be hard to understand and manage all security tools.
- **False Sense of Safety:** People may think they are 100% safe and ignore risks.
- **Updates Required:** Cybersecurity tools need regular updates to stay effective.
- **Slower Systems:** Some security programs can slow down devices.
- **User Resistance:** People might avoid using strong passwords or extra login steps.

MOBILE COMPUTING

Mobile Computing contains introduction to the following

- Android
- I Phone
- Windows Phone

It is the Process of computation on a mobile device. In Mobile Computing, a set of distributed computing systems or service provider servers participate, connect and synchronise through mobile Communication Protocol.

There are at least three different classes of mobile computing items:-

Portable computers, compacted lightweight units including a full character set keyboard and primarily intended as hosts for software that may be parametrized, as laptops, notebooks, notepads, etc.

mobile phones including a restricted key set primarily intended but not restricted to for vocal communications, as cell phones, smart phones, phonepads, etc.

wearable computers, mostly limited to functional keys and primarily intended as incorporation of software agents, as watches, wristbands, necklaces, keyless implants, etc.

A portable computer is a general-purpose computer that can be easily moved from place to place, but cannot be used while in transit, usually because it requires some "setting-up" and an AC power source. Portable computers are also called a "transportable" or a "luggable" PC.

A **tablet computer** is shaped like a slate or a paper notebook. Instead a physical keyboard it has a touchscreen with some combination of virtual keyboard, stylus and/or handwriting recognition software. Tablets may not be best suited for applications requiring a physical keyboard for typing, but are otherwise capable of carrying out most of the tasks of an ordinary laptop.

A **personal digital assistant (PDA)** is a small, usually pocket-sized, computer with limited functionality. It is intended to supplement and to synchronize with a desktop computer, giving access to contacts, address book, notes, e-mail and other features.

An **ultra-mobile** PC is a full-featured, PDA-sized computer running a general-purpose operating system.

A **smartphone** has a wide range of features and installable applications.

A **Carputer** is installed in an automobile. It operates as a wireless computer, sound system, GPS, and DVD player. It also contains word processing software and is Bluetooth compatible

□ **Duration of the Course :-**

Duration of proposed course is 6 months, which includes theory and practical. Have to complete theory and practical of proposed course within 6 months. Timing of course will be 2 hour theory and 2 hour practical. In each month 4 Sundays and average 2 holidays since we will get 300 to 350 hours duration to complete syllabus.

First Term : July ToDecember

Admission Period : 15 June to 15 July

Exam : December

Second Term : January ToJune

Exam : 15 December to 15 January

Admission Period : June