
UNIT 7 APPLICATION SOFTWARES

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7.0 OBJECTIVES

After going through this unit you will be able to:

- 1 Create and Work with Word documents;

- 1 Understand the need for spreadsheets and create workbook using MS Excel;
- 1 Create a presentation with text, graphics and other multimedia components using MS PowerPoint; and
- 1 Use MS Access for creating different types of databases.

7.1 INTRODUCTION

Application software is a set of programs written to operate specific tailor made procedure and solve particular problems of users. One of the important factors that influenced application software development is the advent of the Personal Computer (PC), which has created new demands and opportunities. Some of the PC software packages have some unique features that are not available even in larger computer systems.

Some applications programs are available in the commercial market place as software packages where there are a number of requirements that are common to different users. This knowledge may be useful to the users to identify a suitable software package, which may meet their specific requirements.

In today's fast paced world where technology is racing ahead of the times, a welcome respite from Manual typewriters and calculators.

7.2 MS WORD

Word is a powerful and the most popular word processing program today. It includes capabilities to create charts, drawings and databases within documents. Word has capability to link to components that were created in other programs.

7.2.1 Starting Word

Word can be started in several different ways:

- 1 First it can be started by clicking the word icon in the office toolbar.
- 1 The second way of starting Word is by choosing the **Start** Menu and then selecting either New Office Document or Open Office Document.
- 1 The third way of launching Word is by clicking any of the word documents, which has been opened recently, by clicking **Start** and then choosing Documents from the Menu.
- 1 The most common way of starting Word for Windows is by clicking on the Start Menu and choosing the Programs folder. This will list all available programs. Clicking on Microsoft Word will enable Word to be opened.

7.2.2 Word Screen

The Opening screen of Word is shown in fig. 1.

Fig. 1.

1. Control Menu
2. Vertical Scrollbar
3. Title Bar
4. Work Area
5. Menu Bar
6. Cursor
7. Formatting Toolbar
8. Standard Toolbar
9. Drawing Toolbar
10. More Buttons button

When Word is started, it opens a blank document with a menu bar and toolbars with click-on buttons that can be used to work on the document. When the mouse pointer is positioned on a toolbar button, a short description of the button, called the screen tip is displayed. Initially, all the toolbars are not visible. To view the toolbars that are not visible, position the mouse pointer on the menu bar or the toolbars and right-click. The complete set of toolbars appears from which we can choose the desired one.

Exploring the Opening screen

- 1 The title bar displays the name of the file being created or opened.
- 1 The menu bar and the toolbars together enable us to open and close files, edit and perform spelling and grammar checks on text.
- 1 Only the frequently used menu options are listed in the drop-down list of the menu option.

- 1 The control menu is used to close the application
- 1 Formatting toolbar contains all the formatting tools that are used for formatting the text, like changing the font, increasing the font-size, making text bold, italic and underline, aligning the text to left, right and center, etc.
- 1 Standard toolbar contains all the tools required to manipulate a document such as create, open, save, print, cut, copy and paste a document etc.
- 1 Drawing toolbar is used to perform all the drawing operations.
- 1 The More buttons lists all the tools available for that toolbar and also allows the user to add or remove any tools quickly.

7.2.3 Creating a Word Document

There are three ways of creating a word document – using wizards, using templates or by clicking Microsoft Word from Start Programs

Wizards

Wizards are the easiest way to go about creating letters, memos, resumes or other types of documents such as reports, web pages, etc.

From the **File** menu, choose **New**. Select a wizard from the template list; choose the Document option from the **Create New group box** and choose **OK**. Word displays the new document on the screen.

Templates

Templates are blueprints or patterns for documents of a certain type. Every Microsoft Word document is based on a template. A template determines the basic structure for a document and contains document settings such as AutoText entries, fonts, key assignments, macros, menus, page layout, special formatting and styles.

Word provides a variety of document templates. The default template in Word is the normal template, on which all documents, unless otherwise specified, are based. To open a new document based on an existing template, choose **New** from the **File** menu. Select the template on which the document is to be based, choose the document option and click **OK**.

To create a new Template, choose **New** from the **File** menu, select the template option and click **OK**.

By clicking Word Icon in the Start Programs menu

When we start Word, a new blank document called Document1 appears. To begin working, start typing. If new document is to be created at any point of the time, click on the **New** button on the Standard toolbar

Creating Word Document

Click the **Start** button and then select **Word** from the **Programs** menu. A new blank document appears on the screen. The blinking cursor, also called the insertion point, at the top left corner of the white screen indicates the place at which the text will appear when we start typing. When the text reaches the right margin, Word automatically carries or “wraps” the following text to the next line. The ENTER key should not be pressed unless we have

Normal view is basically used for typing, editing and formatting text. Normal view shows text formatting but simplifies the layout of the page so that we can type and edit quickly. If a document is displayed in another view, we can switch to normal view by clicking Normal on the view menu.

Entering text and Correcting Mistakes

Word document can be created by typing text into the document and can be saved in a file by giving a name for that document. The user can set some editing options while typing text. For instance, if the user wants to type some text over existing and the old text should get deleted as he types the new text then the option can be set on the **Tools** menu by clicking **Options**, and selecting the options needed from the Edit Tab.

Click-n-type

Word 2000 contains a new feature called click-n-type. This feature allows the user to type text, graphics, tables and other items in a blank area of the document. To accomplish this task double click in a blank area, and click and type automatically applies the formatting necessary to position the item where the user double-clicked.

If an error occurs while typing, backspace key on the keyboard is used to erase characters to the left of the cursor one at a time. The Delete key can also be used to delete characters. The difference is that delete key deletes characters one at a time to the right of the cursor position. Another way to delete text is by selecting a word using shift and right arrow key and then pressing the **Delete** key.

To replace existing text with new text, select the text to replace and begin typing new text or paste the contents from another file.

Using UNDO

“What is done cannot be undone”- T.S. Elliot wrote. But it can be in Word. To undo the last action, choose **Undo** from the **Edit** menu, or click the button on the standard toolbar. Undo reverses the last action performed. Each click reverses one more action. The command name changes to Can't undo if the previous action cannot be undone.

Self Check Exercises

1) State whether the following statements are True or False:

- 1) Word provides only two toolbars
- 2) Word automatically gives an extension .doc to all its files.
- 3) File name can have more than eight characters as primary name.
- 4) the title bar displays the name of the file being created or opened
- 5) The control menu is used to close all the applications.

2) Fill in the blanks:

- 1) Menu bar is locatedthe title bar

- 2) Templates are or for documents of a certain type.
- 3) Toolbar is used to perform all the drawing operations
- 4) Reverses the last action performed

Note: i) Write you answers in the Space given below.
 ii) Check your answer with the answer given at the end of this unit.

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Paragraphs and Page Breaks

In Microsoft Word, a paragraph is a distinct unit of information that has its own formatting characteristics, such as alignment, spacing, and styles. A paragraph is always followed by a paragraph mark. The way you format paragraphs in a document depends on how you intend to use the document and how you want it to look.

Formatting Paragraphs with ruler

The ruler shown in fig.2, is useful for quickly setting indentation and tabs with a click of the mouse. By default, tabs are left aligned. If a different tab style is needed the style can be selected and then positioned on the ruler.

Fig. 2

Setting Indents:

Indents can be set either by choosing **Paragraph** in the **Format** menu or by using the ruler. The indent markers on either side of the ruler can be used to set the indents. The top triangle on the left margin represents the first-line indent, the triangle in the middle represents the hanging indent and the square at the bottom represents the left indent. The two triangles move independent of each other, whereas, the square at the bottom can be used to move them together.

Adjusting Line Spacing

The spacing between lines can be adjusted to make a paragraph more presentable. The steps involved to adjust the line spacing are elucidated below.

- 1 Select the text to be spaced.
- 1 Click Paragraph from the Format menu. The Paragraph dialog is as given in fig. 3.
- 1 Choose the Indents and Spacing tab.
- 1 Choose one of the options in the Line Spacing box according to the requirement.

Fig. 3

A sample of the option selected in the Line Spacing box appears in the preview box, i.e., if **single** is selected, the text appears with single line spacing in the **Preview** box, if **double** is selected, text appears with double line spacing and so on.

Page Break

You can insert a page break any point on the page. To insert a page break,

- 1 Position the insertion point where the page break is to start.
- 1 Choose **Insert** —> **Break....** The **Break** dialog box appears as shown in fig. 4.

Fig. 4

- 1 Select the **Page break** option.
- 1 Choose **OK**.

Copying and Pasting

The Cut command on the Edit menu removes text and places the text in the Windows Clipboard. Before using the Cut command, ensure that the text is selected. After selecting the text, press Ctrl+X or right click and choose Cut from the popup menu as shown in fig. 5.

Fig. 5

The Copy command copies the selected text and places the text in the Windows Clipboard. The same methods used to cut text are used when copying text. Select the text and press Ctrl+C, or right click and choose Copy from the pop-up menu.

The Paste command inserts the contents of Windows Clipboard into the document at the place where the user placed the cursor. Decide where the contents in the Windows clipboard has to pasted and press Ctrl+V or right-click and choose Paste.

If the user wants to move text from one place to another place, he uses keystrokes for cut (Ctrl+X) and Paste (Ctrl+V). But to move text with the mouse, select the text that needs to be moved. Place the cursor to the middle of the selected text and hold down the mouse button and drag the text. As user drags the text, the mouse pointer displays a small box around its tail. A vertical line appears above the pointer and move the insertion point to the desired position on the document and release the mouse button.

Copying multiple items with Office Clipboard

When copying or moving items within Microsoft Office applications, the windows clipboard and the Office Clipboard will be available to the user. The Office Clipboard is a new feature allowing the user to copy up to 12 items at a time and paste them into an office program. The difference between the Office Clipboard and the Windows Clipboard are:

The windows clipboard allows the user to cut, copy, or paste on item or block of text to and from any windows-based software program.

The Office Clipboard allows the user to copy up to 12 items, or blocks of text from any Office 2000 product such as Word 2000, Excel 2000 or PowerPoint 2000 and paste item into any Office 2000 program. Here the advantage is that the user can paste the contents in any order as he wishes.

Fig. 6

The Clipboard toolbar shown in fig.6 has contents of 5 different applications.

To paste an item from the Office Clipboard to the document, click the icon that represents the item the user wants to paste. To paste all of the items at one location in the document click the Paste All icon in the Office Clipboard toolbar.

Saving Word Document

To save the document, click the Save button on the Standard toolbar. The Save As dialog box appears as shown in fig. 7. Name the document by typing a name in the File Name field. The default settings will save the document in a file folder called My Documents. The file can be saved in a folder of the user's choice by clicking **Up One Level** button in the Save As dialog box.

Fig. 7

7.2.4 Printing Word Document

A document can be printed by choosing the **Print** option from the **File** menu. A print dialog is displayed, from which we can choose options like name of the printer, the number of copies to be printed and the print range (either the whole document can be printed or the page numbers selected). The printer properties

can also be set by clicking on the properties button. The print dialog is shown in fig. 8.

Fig. 8

7.2.5 Exit from Word Document

To exit from Word select the Exit option from the File menu. Before exiting the Word you have to save the document else the following dialog box (fig.9) will be displayed

Fig. 9

7.2.6 Opening Existing Document

To open an existing Word document select Open icon on the Standard Toolbar or select the Open option from the File menu, this opens a dialog box as follows (fig. 10.) and the user can choose the file you want to open.

7.2.7 Formatting

What is Formatting?

Formatting makes the Word document look pleasant and makes the document more meaningful. We can format text, alignment, paragraph, Font, bullets and numbering, case, columns, borders, backgrounds, themes, frames, styles and objects.

Formatting can be done in three ways in Word 2000- Selecting tools from the Formatting Toolbar (fig. 11), using the Format menu, and choosing AutoFormat provided by Word.

Fig. 11

Changing font type

To change the font type

- 1 Select the text you want to change
- 1 On the **Formatting** toolbar, click a font name in the **Font** box (fig. 12.)

Fig. 12

Change Font Size

- 1 Select the text you want to change
- 1 On the **Formatting** toolbar, click a font name in the **Font Size** (fig. 13.)

Fig. 13

Bolding and Underlining

To make the text bold or underlined

- 1 Select the text you want to change
- 1 On the **Formatting** toolbar, click a font name in the **Bold, Underline, or Italics** (fig. 14)

Fig. 14

Alignment

<i>Alignment</i>	<i>Description</i>
Left	Aligns the selected text, numbers or inline objects to the left with a ragged right edge.
Center	Centers the selected text, numbers or inline objects.
Right	Aligns the selected text, numbers or inline objects to the right with a ragged left edge.
Justify	Aligns the selected paragraphs to both the left and right margins or indents.

Fig. 15

Bulleted and Numbered Lists.

Bulleted and numbered lists can be created to enhance the effect of presentation. To create a bulleted or numbered list, click **Bullets and Numbering...** on the **Format** menu

A dialog box appears as shown in fig. 16.

Fig. 16

Word offers different types of numbering as well as different types of Bullets, which can be chosen by clicking on *Customize...* in the **Bullets and Numbering** dialog box.

Margins and Tabs

Setting Tabs

Tab setting involves two steps – selecting the type of tab (left, centered, right, decimal or bar) and setting the actual tab stop.

Tabs can be set in one of two ways – clicking on the ruler where the tab is to be set (here the type of tab can be set by clicking on the button on the far left corner of the ruler), or, if tabs are to be set at very specific positions, selecting *Tabs* from the **Format** menu.

Setting Indents

A document's margins are generally determined by selections made in the **Page Setup** dialog box from the **File** menu. Margins can be applied either to the entire document or to specific sections of the document. But individual paragraphs or groups of paragraph can also be indented from those margins and therefore appear to have their own margin settings.

Although only two side margins (left and right) are available, a paragraph can be intended in many ways. It can be intended from the left, right or both margins. The first line of the paragraph alone can be intended, a technique that substitutes for pressing tab at the start of a new paragraph. A hanging indent can be created, which “hangs” the first line of the paragraph to the rest of the paragraph; hanging indents are often used for bulleted or numbered lists. In addition, nested indents- indentations within indentations can also be created.

Indents can be set either by choosing **Paragraph** in the **Format** menu or by using the ruler. The indent markers on the either side of the ruler can be used to set the indents.

The top triangle on the left margin represents the first -line indent, the triangle in the middle represents the hanging indent and the square at the bottom represents

the left indent the two triangles move independent of each other, whereas, the square at the bottom can be used to move them together.

7.2.8 Advance Formatting

Borders and Shading

To add a final touch to the beautifully formatted page, the user can include borders and shading. A border is a box surrounding a page on all sides, or a line that sets off a paragraph on one or more sides. A border may include shading, which fills the selected area with a pattern. Shading may be used to highlight certain parts of a page to set it apart from the rest of the page. To include these in the document, choose *Borders and Shading* from the **Format** menu.

Creating columns

Columns can be created by clicking on Columns tool in the Standard toolbar or by choosing Columns from the Format menu. On doing this, a Columns dialog box appears, from which parameters such as the number of columns, width of each column and spacing between columns etc can be chosen. The Columns dialog box appears as in fig.17.

Fig. 17

7.2.9 Advanced Tools in Word

Word provides many advanced tools that not only help in formatting a document and make it presentable, but also helps work with advanced concepts like tables, mail merge.

Proofing Tools

The proofing tools in Word improve the correctness of the contents and enhance the quality of the document.

Spelling

Word's spell check operates while the user types and indicates an error as they are made. A wavy red line below the word indicates an error. The little book icon with turning pages at the right end of the status bar indicates that the spell

checker is under work. The “x” mark that appears on the book icon indicates that there is an unresolved spelling (or grammar).

Word flags a word for spelling if the word is not present in the Word’s spelling dictionary, personal dictionary or in the custom dictionary. Word also flags an error, if the word is spelt correctly, but is not present in the dictionary.

The user can either correct the error immediately or correct the error later. Right clicking the misspelt word, displays a pop-up menu. The pop-up menu displays suggested replacements if there are any and commands for dealing with the misspelling. Choosing **Ignore All** ignores all occurrences of that spelling in the rest of the document. When the **Add** option is selected the word is added to the custom dictionary. **Click AutoCorrect** option to add the misspelt word to the AutoCorrect list, and then select the proper replacement from the submenu. Click **Language** to switch to another language dictionary or to select a different language setting. The **Spelling** option starts a regular spell check.

Check document or selected text

The entire document text can be corrected at once, instead of correcting the spelling typed. To check only a portion of the document, the required text is selected.

- 1 Choose **Spelling and Grammar** from **Tools** menu.
- 1 Press F7.
- 1 Check Spelling and Grammar button  on the Standard toolbar

If the Check Grammar check box is unchecked, the checker checks only for spelling errors. When a word that has no match in the spelling or custom dictionary is found, then the checker displays the word and its surrounding text in the Not in Dictionary box. The suspect word appears in red. The appropriate actions (Change, Change All, Ignore, Ignore All, Add or AutoCorrect) to be performed are specified.

Fig.18

Setting Spell Check Options

The user can either hide the spell check marks while working, or turn off

automatic spell checking entirely. To hide spell check mark, choose Options from the tools menu and select the **Spelling and Grammar** tab. Select the **Hide Spelling Errors in this Document** option to hide the spell check marks while working with the document. Deselect the **Check Spelling as You Type** check box to turn automatic spell checking off.

Thesaurus

Word includes Thesaurus that can be used to look for synonymous words. To look for an appropriate synonym for a word, place the cursor on the word and press **Shift + F7** or choose **Language -> Thesaurus** from the **Tools** menu.

Fig. 19

Find and Replace

The Find and Replace option is very handy if a particular word has to be replaced in the entire document. Find and Replace can find and/or replace the following entities:

- 1 **Text strings.** Strings embedded in words, or discrete words or whole phrases.
- 1 **Text strings with formatting.** Strings that are formatted, such as underlining.
- 1 **Formatting.** Font formatting options, like underlining and bold that are not necessarily associated with words or text.
- 1 **Styles.** Find all instances of a named style or replace one named style with another.
- 1 **Special characters.** Tab marks, forced line breaks, non-breaking spaces, non-breaking-hyphens, white space etc.

Find text

When the Find feature is activated, Word generally searches the entire document to find each occurrence of the text. To limit the search, select the text to search through, before starting Find. Find can be activated by selecting Find from the Edit menu or by pressing Ctrl+F. Alternately, select the Browse Object icon in the vertical scrollbar and then click on the Find icon . The Find and Replace dialog box appears as shown in fig. 20. Enter the search text in the **Find What?**

Text box and click the **Find Next** button. Click the More buttons to specify additional options. The options are:

- 1 **Match Case.** Finds an exact match for uppercase or lowercase letter.
- 1 **Find Whole Words Only.** Avoids finding text that is part of another word.
- 1 **Use Wildcards.** Uses * and? Wildcards in the search string. The * wildcard matches any sequence of zero or more characters and the? Wildcard matches a single character. E.g. “ca?” would match “car” or “cat” and “ca*” would match “cat” or “came”.
- 1 **Sounds Like.** Finds homonyms – words that sound similar to the search string. E.g. “fare” would match “fair”.
- 1 **Find All Word Forms.** Finds alternate forms of the search string. E.g. “came” or “coming” for “come”.

Replace Text

The Replace feature in Word helps to search for a string and replace all its occurrences with another string. To replace a string select **Replace** from the **Edit** menu or press **Ctrl+H**. In the dialog box that appears, enter the search string and the replace string in the **Find What?** And **Replace with** text boxes respectively.

To find and replace text with a specified format, click the Format button in the Find and Replace dialog box and specify the required format. To find and replace special characters, click the Special button from the Replace dialog box and specify the relevant style.

AutoCorrect

The AutoCorrect option in Word allows to automatically correct misspelt words as they are typed. It automatically corrects two initial capitals in a word, converts the first letter of a sentence to upper case, and so on. Choose **AutoCorrect** from the **Tools** menu to display the AutoCorrect dialog box as shown in the fig. 20. The user can add his/her own misspellings and shortcuts to the existing ones.

Fig. 20

To add a new entry to the AutoCorrect list, type a name for the AutoCorrect entry in the **Replace** text box and click **Add**.

AutoText

AutoText keeps frequently used text and graphics and inserts them in the document when they are called. To add a new AutoText entry, select **AutoText** from the **Insert** menu or select the text and press Alt-F3. Click OK in the dialog box that appears.

Self Check Exercises

- 3) State whether the following statements are True or False:
 - 1) By default, word automatically aligns paragraph with right indent
 - 2) Paragraph contains single line spacing by default.
 - 3) You can insert a page break any point on the page
 - 4) Spell-checker help in correcting the misspelled words.
 - 5) Special characters, tabs, page breaks can be changed with find and replace commands.
- 4) Fill in the blanks:
 - 1) Command searches for specified text in the active document.
 - 2) features provide synonyms and antonyms for the selected word in the document.
 - 3) The spelling mistakes are underlined by a line.
 - 4) The option in word allows to automatically correct misspell words as they are typed.

Note: i) Write your answer in the Space given below.
ii) Check your answers with the answers given at the end of this unit.

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7.2.10 Tables

The table feature in Word is very powerful and provides an excellent way of working with columns or data in a tabular format. A table consists of rows and columns of cells that can have text and graphics. Tables can even include pasted illustrations that explain steps in a list, display side-by-side text and so on. The commands available for working with tables simplify the job of arranging and formatting tables of information.

A new table can be created by clicking the **Insert Table** button  on the Standard Toolbar and dragging the number of rows and columns to be included. On releasing the mouse button, a blank table appears in the document. A table can also be inserted by selecting the **Table->Insert->Table** from the menu bar. A dialog box as shown in Fig. 21 appears. Enter the number of rows and columns to be included in the table and click **OK**.

Fig. 21

If the width of the column is adjusted, the text also adjusts itself to the new width. To change the width of a column, place the mouse pointer on the vertical line of the table. When the pointer turns into a double-headed arrow, drag the mouse to set to the appropriate width. A table can also be inserted by choosing Draw Table from the Table menu. Drag the pencil that appears diagonally to draw a table.

Fig. 22

Entering and Editing Text in a Table

Text can be entered into the table by clicking any cell. The Tab key or Right Arrow key can be used to move to the next cell in the right. **Shift +Tab** or Left Arrow key to move to the next cell in the left. The Up and Down arrow keys will move the cursor to the cell above and below the current cell.

Characters will automatically wrap to the next line to accommodate the text in the cell, i.e., the entire row of cells expand downward to accommodate the text. The same thing happens on pressing the **Enter** key. The insertion point moves down, and the row height increases.

Adding Rows and Columns

To insert a new blank row after the last row in the table, move to the last cell and press Tab. A new row can also be inserted by selecting **Table->Insert->Rows Above** or **Table->Insert->Rows Below**. To insert a column, select **Table->Insert->Columns to the Left** or **Table->Insert->Columns to the Right**.

Merging and Splitting Cells

To merge cells, select the cells to be merged and select **Merge Cells** from the **Table** menu. To split a cell, select **Split Cells** from the **Table** Menu. In the dialog box that appears, enter the number of rows and columns and click **OK**.

Formatting and Rotating Text in the Tables

Word allows each cell in a table to be formatted separately. We can apply fonts, font effects, alignments, bullets and numbering, and indents and spacing to the text in a table by using the Formatting toolbar on the **Format** menu.

The Table and Borders toolbar provides additional formatting options that are unique to tables.

Fig. 23

We can place the text exactly at a position by selecting one of the nine alignment options. The text inside a cell can be rotated using Word's Text Direction feature. The text can be rotated so that it runs vertically, facing either right or left. To achieve this, select the cell or group of cells containing the text and click the Change Text Direction button on the Tables and Borders toolbar.

Displaying or Hiding Gridlines and End Marks

Table gridlines show the outlines of the cells and make working with the tables a lot easier. The gridlines do not appear on print. To turn gridlines on or off, choose **Tables-> Show Gridlines** or **Tables -> Hide Gridlines** respectively.

Converting Text or Table

Let us assume we have typed in a list of names and telephone numbers, which we would like to convert to a table format. It would be time-consuming to create

a table and then retype the entire text. Word provides an option **Convert Text to Table** in the **Table** menu that allows us to do the same. Select the entire list of names and telephone numbers and choose this option. In the dialog box that appears, specify the parameters such as the number of columns, number of rows, column width and so on. Choose the desired parameters and click **OK**.

Nested Tables

Nested tables are nothing but tables within tables. This is a new feature added in Word 2000. Nested tables can be used when creating a Web page, or a printed brochure. Follow the given steps to nest one table inside the cell of another table:

- 1 Position the cursor in the cell where the nested table has to be added.
- 1 Select **Table-> Insert-> Table** from the menu, or click the **Insert Table** button on the Tables and Buttons toolbar.
- 1 Enter the number of columns and the number of rows that has to be included in the nested table and click **OK**.

Auto Adjust of Column Width

This is a new feature in Word 2000. When the user types a word in a cell and if the word is too long, the column width automatically increases to fit the word.

Self Check Exercises

- 5) State whether the following statements are True/False:
 - 1) Borders or shading are not possible in tables.
 - 2) We can insert more rows and columns, once the table has been created.
 - 3) Selection of particular row and columns within table cells is possible.
 - 4) It is possible to change the width of rows and columns within table cells.
 - 5) Nested tables are nothing but tables within tables.
- 6) Fill in the blanks:
 - 1) Tables consist of and
 - 2) Help to organize complex columnar information.
 - 3) A new table can be created by clicking the button on standard toolbar.

Note: i) Write your answer in the Space given below.
 ii) Check your answers with the answers given at the end of this unit.

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7.2.11 Mail Merge

Mail Merge is an operation that takes information from a database and merges the data with document to create a set of form letters, envelopes or labels. Word has the ability to retrieve, store and manipulate rows of information such as names and addresses, billing information, invoice data, product catalogue information, and so on. Some of the tasks that are commonly relegated to database report applications can also be accomplished with Word. For example, we can use data stored in Word to create.

- 1 Letter using name and address information. The names and addresses stored in a separate file can be merged with a letter.
- 1 Mailing labels that include logos and graphics
- 1 Product catalogs that include graphics and a professionally published appearance.
- 1 Sales report data in a free-form layout. Word can publish data using features such as newspaper columns and integrated graphics.

Create a Mail Merge

A Word mail merge involves three parts

- 1 **Data Source.** The data source (database) contains the information that personalizes each version of the final merged document. Usually the data is a list of names and addresses.
- 1 **Main Document.** Main document is the document that holds the static text that remains unchanged in each merge. It also contains a set of field codes that inform Word where to store the information from the data source.
- 1 **Merged Document.** This document can be a set of labels, envelopes, or form letters that stores the result of the merge operation.

The user can use the Mail Merge Helper that organizes the process of merging the main document with the data source.

The steps to be followed to create a merged document are:

- 1 Select Mail Merge from the Tools menu
- 1 Choose Create in the Mail Merge Helper dialog box.
- 1 Select the type of main document from the menu that appears.
- 1 From the dialog box that appears, choose Active Window to turn the currently open document into a main document for the mail merge. Choose the New Main Document button to open a new document to create the main document.
- 1 Choose Get Data button.
- 1 Identify the data source from the menu that appears.
 - 1 Select **Create Data Source** to start a new data source
 - 1 Select **Open Data Source** to open an existing data source document.
 - 1 Select **Use Address Book** to use an electronic mail address book or contact list from Microsoft Outlook 97 or Schedule+ 95, or the Personal Address Book
- 1 Under Main Document, select **Edit** from the dialog box. Insert the necessary fields and save the file.
- 1 In the Step 3 of Mail Merge Helper, choose **Merge** to merge the data with the document. In the Merge dialog box that appears, select the appropriate **Merge To** option from the drop down list.
- 1 Under **Records to be Merged**, click **All** or **From**. If From is selected, then the record numbers are entered in the **From** and **To** boxes to specify the range. Choose Query Options to merge specific records or records of certain type.
- 1 Click **Don't Print Blank Lines when Data Fields Are Empty** under **When Merging Records**.
- 1 Choose **Merge**.

Use the tools in the Mail Merge toolbar to navigate through the records.

Create a Database

Data source files are kept in table form. Each column is a field and each row is a record. The steps to create a Data Source are:

- 1 From the Mail Merge Helper dialog box, select Create Data Source. From the field list select the required fields.
- 1 Select a name and click Remove Field Name to remove a field name.
- 1 To add a new field name, enter the field name in the Field Name box and click Add Field Name. The Button becomes grayed if the entered field name is illegal. The rules for field names are:
 - 1 Names must start with a letter.

Software

- 1 Names must not contain a space. Use underscore if words have to be separated.
- 1 Names must not be longer than 40 characters.
- 1 Names must be unique.
- 1 Choose OK and save the data source.
- 1 In the dialog box that appears, choose Edit Data Source to add records.
- 1 Enter the relevant details in the Data Form and click OK. Click Add New to add a new blank record.
- 1 After entering the records click OK to return to the main document.

Fig. 25

Prepare a Main Document

The main document in a mail merge can be form letter, mailing labels, envelopes, catalogs or lists. The same data source can be used for all types of documents. The steps to create a merge envelope are:

- 1 Select Tools -> Mail Merge from the menu bar.
- 1 Click Create button and select Envelopes
- 1 Click Active Window to convert the current document into a main document or New Main Document to create a new Main Document.
- 1 Use Get Data to Create or Open a data source.
- 1 To customize the envelope, choose Envelopes and Labels from the Tools Menu.
- 1 In the Envelope Options dialog box, set the envelope size and font.

Self Check Exercises

- 7) State whether the following statements are True or False:
 - 1) In Mail Merge document can be merged and send to a new document also

- 2) The same data source can be used for all types of documents
 - 3) Main Document holds static text that remains unchanged in each merge
- 8) Fill in the blanks:
- 1) Data source files are kept in form.
 - 2) A word mail merge involves parts.
 - 3) The main document in a mail merge can be form or

Note: i) Write your answers in the Space given below.
ii) Check your answer with the answers given at the end of this unit.

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7.3 MS EXCEL

7.3.1 What is a Spreadsheet?

A spreadsheet is a grid of rows and columns and is also called as a worksheet. Spreadsheet programs are developed to automate tasks such as technical calculations, inferential statistics, and analyzing data etc. They also have a powerful program for graphical preparation of numerical data. They are commonly used in Production, Planning, Personnel Management, Marketing, Payroll and Accounting.

7.3.2 Starting Excel

To start Excel, click the **Start** button and select **Microsoft Excel** from the **Program** option. On starting Excel, a blank workbook is opened. This workbook has several worksheets and by default, sheet 1 is selected. Excel provides options in the menu and the user can select the appropriate options to perform an operation. Excel provides a toolbar with buttons, which graphically represent the frequently used commands.

Fig. 26

- | | |
|------------------|------------------------------|
| 1. Title bar | 8. Standard toolbar |
| 2. Menu Bar | 9. Formatting toolbar |
| 3. Name Box | 10. Formula bar |
| 4. Cell Contents | 11. Worksheet |
| 5. Rows | 12. Sheet tab scroll buttons |
| 6. Formula | 13. Sheet tab |
| 7. Columns | 14. Scrollbars |

When Excel is loaded two windows appear that are nested one within the other. The larger window is called the Application Window, which covers the entire screen. The application window is used to communicate with the Excel program. The smaller window is called the Document Window and is used to create and edit Excel Worksheets and charts.

Opening Files

We can open a new default workbook, a copy of a custom template, or an existing workbook. To open a new workbook, click **File** menu and choose the **New** option. In the **New** dialog box that appears, select a template from the list and click **OK**. This opens a blank worksheet.

To open an existing workbook, click the icon in the Standard toolbar or select **Open** from the **File** menu.

Opening Non-Excel Files in Excel

We can open many different types of files (Text File, Lotus 1-2-3, Quattro Pro, Works or dBASE files) in Excel. The files are opened directly on selecting it or sometimes the help of the Text Import Wizard is required. To open a non-excel file:

- 1 Click **File -> Open** from the menu bar.
- 1 In the **Files of Type** box select the type of file that has to be opened or select All Files.

- 1 Locate the folder in which the file was saved.
- 1 Select the Filename and click **OK**.
- 1 If the **Text Import Wizard** dialog box appears, select the **Delimited** option in Step 1 and click Next.
- 1 Mark the **Tab** check box in Step 2 of the Wizard. Mark other delimiters until a parsed data, arranged in neat columns appears in the preview window. Then click Next.
- 1 In Step 3, click the heading in the **Data preview** window for the column to be formatted. If the column contains numbers, select the **General** option in the Columns data format section. If the column contains date, then select the **Date** option.
- 1 Click **Finish** and the data gets imported into the worksheet.

Excel Worksheet

Excel performs three different tasks using three components.

The Spreadsheet / Worksheet Component

The spreadsheet component analyses and displays the text and numbers in the cells.

The Database component

The database component manipulates lists of information.

The Chart component

The chart component creates charts that help to present data in a graphical manner.

Features of Excel

Excel is the most comprehensive spreadsheet application available in the market. It is not just a tool for calculating, manipulating and analyzing data, but also a versatile organizational tool for presenting information. The features of Excel are listed below:

1 Worksheet and Graphics

The worksheet and graphics feature includes extremely powerful calculating features. Apart from working with numbers and texts it is also possible to present graphical data using Excel 2000.

1 Data Lists and Databases

Database functions are another important feature of Excel. Several useful functions are available for working with data that are listed in a tabular form. Functions are also available for evaluating values, combining data and so on.

1 Data exchange with other applications

Excel takes advantage of the windows environment. The Windows environment especially applies to the DDE (Dynamic Data Exchange) and OLE (Object

Linking and Embedding) concepts within Excel and between Excel and other windows application.

1 Workbooks

Excel works with a consistent file concept. All data is gathered in workbooks. These workbooks store current status of the workspace, along with all currently opened files and the settings selected for them.

1 Data Type

The data types entered in the Excel worksheet are Numbers, Dates and Times. But Numbers, dates, and times aren't displayed as expected. **Number formats** Microsoft Excel displays numbers, dates, and times on a worksheet according to the number format applied to the cells. To change the number format, select the cells. On the **Format** menu, click **Cells**, click the **Number** tab, and then click the category and format you want. To use the default date format, click the cell and press CTRL+SHIFT+#. To use the default time format, press CTRL+SHIFT+@. **##### in place of a number** a ##### error value occurs when the cell contains a number, date, or time that is wider than the cell or when the cell contains a date or time formula that produces a negative result. Try increasing the width of the column.

Regional settings - Options you select in the Regional Settings of Control Panel determine the default format for currency, dates, times, and numbers.

7.3.3 Building a Simple Spreadsheet

To add a new worksheet click **Insert -> Worksheet** from the menu bar. To add multiple worksheets, click the number of worksheet tabs to add in the open workbook by holding the SHIFT key. Then click **Worksheet** on the **Insert** menu.

Text, numbers and dates can be entered into any cell of the worksheet. Data can be entered in the active cell by clicking the enter box in the formula bar or by pressing F2. An entry can be cancelled by clicking the Cancel button  on the formula bar or by pressing the Escape key. Each cell can hold up to 255 characters. Text is left aligned and numbers are right aligned in Excel, and this default alignment is called General Alignment. Fig. 27 gives a clear idea on how data is displayed.

Sometimes the column headings may not appear properly, if the column width is not large enough to contain them. To increase the column width, place the mouse on the right border of the column whose width has to be increased and drag the mouse button.

Entering Date and Time

Microsoft Excel stores dates in sequential numbers known as serial values. This scheme allocates one digit for every day from January 1 to December 31. Excel also provides formatting and formulae to convert the date serial number to a specific calendar date. Dates and times are values and hence they can be added, subtracted, and included in other calculations. By default the dates are displayed in two digit years.

To enter today's date, move to a cell and type = **today ()**.

In Excel the time is added to the date serial number as a decimal fraction of a 24-hour day. Therefore, midnight is 0.000000, noon is 0.500000, and 11:59:59 PM is 0.999988. Whenever the date or time is to be changed, the cell format is automatically changed from the normal format to the appropriate date or time format.

Entering Data in a Series

Whenever the user wants to fill a cell range with data forms as a series (for e.g. 1,2,3,4 or Jan, Feb, or Mon, Tue) the data input can be automated. This can be achieved by using the Fill Handle. The Fill Handle is a black square located on the lower right corner of the selected cell. This is called **Autofill** feature.

For example, to generate month names in a range of cells, enter Jan into cell A1 and point to the fill handle with the mouse; the mouse pointer changes to a black cross. Click and drag through the cells A1 and A12 and then release the mouse button. The series of the months from Jan to Dec will be filled into cells A1 through A12.

Fig. 28

Moving and Copying

Copying Data

When copying or moving data, a copy of that data is placed in the Clipboard. The clipboard provided by Office 2000 can store multiple bits or data (up to 12). To copy a range of data select the range and press Ctrl+C or click the Copy button

in the Standard toolbar. The icons are the same as in the Word 2000. Select the destination cell and click the Paste button from the toolbar menu. The Copy and Paste commands can be easily accessed from the shortcut menu.

Moving Data

Moving data is similar to copying, except that the data is removed from its original place. To move data choose the Cut button from the Standard toolbar.

Using Drag and Drop

The fastest way to copy is to drag and drop the data. To do this, select the cells to be copied hold down the **Ctrl** key, and drag the border of the selected range. On releasing the mouse button the data is copied to the new location. The data gets moved to the new location if the border is dragged without holding down the Ctrl key.

To copy data to a different sheet press **Ctrl+Alt** while dragging the selection to the sheet's tab. Excel switches to that sheet, where the selection can be dropped in the appropriate location.

(**Note:** The drag and drop feature can be used to copy or move data to the Office Clipboard).

Delete Data

To delete data in a cell or range of cells, select the cell or the range and press the **Delete** key. The **Edit -> Clear** command can be used to delete only the formatting of the cell(s). The Clear command can be used to clear the Format, Contents, Comments or All of them.

The **Edit -> Delete** command removes the cells and then shifts the surrounding cells over to take their place.

Inserting Rows and Columns

To insert a row or column in the worksheet follow the steps given below:

- 1 Select the cell below where the row has to be inserted or the cell to the right where the column has to be inserted.
- 1 To insert multiple rows or columns, select the number of rows or columns equal to the number to be inserted by clicking and dragging the mouse over the worksheet.
- 1 Select **Rows or Columns** from the **Insert** menu. Excel inserts row below the selected or columns to the left of the selection.

A row or column can also be inserted by right clicking the row number or column header and by clicking the **Insert...** from the pop up menu.

Alternately, to insert a row or column, right-click a cell and from the pop-up menu, choose Insert option. An Insert dialog box as shown in Fig. 29 is displayed. Select the Entire row or Entire column option to insert a row or column in the worksheet.

Fig. 29

Deleting Rows and Columns

When rows are deleted in the worksheet, the rows below the deleted row move up to fill the space. When columns are deleted, the columns to the right are shifted to the left.

To delete a row or column, click the row number or column letter on the row or column to be deleted and then select the Delete option from the Edit menu. To delete more than one row or column drag over row numbers or column letters for selecting them. Alternately, right-click the selection and choose Delete from the pop-up menu. The rows and columns are renumbered automatically.

Merging Cells

Excel 2000 allows merging data in one cell with adjacent cells (that are blank) to form a big cell. Merging cells is useful especially when creating a decorative title for the top of the worksheet.

To create a title with merged cells, follow the steps given below:

- 1 Enter the title in the upper-left cell of the range. To enter multiline title, press **Alt+Enter** to insert each new line.
- 1 Select the range in which the title has to be placed.
- 1 Click **Cells** from the **Format** menu. The Format Cells dialog box appears.
- 1 Click the **Alignment** tab.
- 1 Click the **Merge cells** check box and click **OK**.

We can merge and center the data in the cell quickly with the Merge and Center button on the Formatting toolbar.

Inserting and Deleting Cells

Inserting cells will cause the data in the existing cells to shift down a row or over a column for creating space for the new cells. Follow the steps given below to insert a single cell or group of cells:

- 1 Select the area where the new cell(s) are to be inserted. Excel will insert the same number of cells as selected.
- 1 Choose Cells from the Insert menu. The Insert dialog box appears.

- 1 Select **Shift Cells Right** or **Shift Cells Down** and Click **OK**.

To delete the cells completely, follow the steps given below:

- 1 Select the cell or range of cells to be deleted.
- 1 Choose **Delete** from the **Edit** menu. The Delete dialog box appears.
- 1 Select **Shift Cells Left** or **Shift Cells up** and Click **OK**.

Clearing Cells

When cells are deleted, they are removed from the worksheet and surrounding cells are shifted to fill in the space. But when a cell is cleared, the cell remains in the worksheet while the contents, format or notes of the cells are cleared. To clear a cell, select the range of cells to be cleared and choose **Clear** from the **Edit** menu.

Self Check Exercises

- 9) State whether the following statements are True or False:
 - 1) Excel has 256 rows and 65,536 columns.
 - 2) Workbooks are documents that contain more than one worksheets into one file.
 - 3) A text in a cell can hold upto 255 characters.
 - 4) Sheets can be given names using upto 31 characters.
- 10) Fill in the blanks
 - 1) A Spreadsheet is a matrix of and
 - 2) Excel gives extension to all its files.
 - 3) the clear command is in menu.
 - 4) When columns are deleted, the columns to the are shifted to the

Note: i) Write your answer in the Space given below.
 ii) Check your answers with the answers given at the end of this unit.

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Calculation

Formulas

Excel Formulas can be used to perform simple calculations on the data like

addition, subtraction, multiplication and division. One of the significant features of the spreadsheet program is its ability to manipulate text and perform simple and complex calculations efficiently. Formulas usually consist of one or more cell addresses or values and a mathematical operator such as +, -, * and /.

Formulas are of three types, namely:

Text Formulae: Uses text and may contain the text operator ampersand (&), that concatenates two numbers. For e.g. typing = **123&456** in a cell, displays 123456 in that cell.

Numeric Formulae: Contains arithmetic operators like +, -, *, /, ^ and %. For e.g. (A1+A2+A3+A4) or A1:A4.

Logical Formulae: Contains comparison operators like >, <, <=, >= and <>.

A formula can be up to 255 characters long. A formula must always begin with an '=', '+', or a '-' sign. Formulas do not accept spaces, except between sets of letters, numbers or symbols enclosed in quotation marks.

Order of Evaluation of Operators

Excel evaluates a formula in a particular order determined by the precedence number of the operators being used and the parentheses placed in the formula.

Table 1.

Operator	Description	Precedence Number
:	Range of cells	1
Space	Intersection of cells	2
,	Union cells	3
-	Negation	4
%	Percentage	5
^	Exponention	6
*	Multiplication	7
/	Division	7
+	Addition	8
-	Subtraction	8
&	Concatenation	9
=	Equal To	10
<	Lesser than	10
>	Greater than	10
<=	Lesser than or Equal to	10
>=	Greater than or Equal to	10
<>	Not Equal To	10

Entering a Formula

A Formula can be entered in two-ways – by typing the formula or by selecting

cell references. To enter a formula, the following steps are performed:

- 1 Select the cell in which the formula calculation has to appear.
- 1 Type the equal sign "=", or click the Edit Formula button  in the Formula bar.
- 1 Type the formula and press Enter.

To enter a formula by selecting cell references, follow the steps given below:

- 1 Select the cell in which the formula's result has to be displayed.
- 1 Type the equal sign "=" click the Edit Formula button in the Formula bar.
- 1 Click the cell whose address has to appear first in the formula. We can also click a cell in a different worksheet or workbook. The cell address appears in the formula bar.
- 1 Type the mathematical operator after the value to indicate the next operation to be performed. The operator appears in the Formula bar.
- 1 Continue to click the cells and type the operators till the formula is complete and press Enter.

(Note: An error appears in a cell, if any one of the operations are performed – Division by zero, use of a blank cell as a divisor, referencing to a blank cell, deleting a cell used in a formula or including a reference to the cell in which the result appears).

Referencing methods:

A Formula can be moved from one worksheet location to another. When a formula is moved, the cell addresses are automatically changed relative to the location to which they are moved. This is known as **Relative** referencing. By default, Excel does not treat cells included in the formula as a set location but considers them as a relative location. This type of referencing saves time for the user, since the same formula need not be created repeatedly. For example, AutoSum formulas are written with relative referencing.

In certain situations, it might be essential to refer to the same specific cell on the worksheet in every copy of the formula. The Absolute referencing method is used in such cases. Absolute references are denoted by dollar signs before the column and rows addresses for e.g. \$A\$2.

In case some part of the address needs to be fixed, **Mixed** referencing is used. Mixed references contain both absolute and relative cell addresses like \$A2 or C\$4. To quickly cycle through the reference types, click the formula bar and press F4. This will change the reference to \$A\$1, A\$1, \$A1, and A1 with each press.

AutoSum

SUM is one of the most commonly used functions and Excel provides a fast way to enter it. The AutoSum button  on the Standard toolbar automatically sums the rows or columns. The AutoSum tool automatically builds a SUM formula in the active cell.

AutoSum can be used in three ways. They are:

- 1 To locate and total rows or columns in the range nearest to the current cell.
- 1 To total any selected range.
- 1 To add grand totals to a range containing other totals.

To sum row or columns for the nearest range click the AutoSum button and press Enter or double click the AutoSum button. To find the sum of a specific range, select the range and click the AutoSum button. To add grand total to a range of cell values select the entire range, including sub-totals and click the AutoSum button.

Naming Cells

We can use different methods to name cells – The Name box, the Create Names dialog box, and the Define name dialog box.

Using the Name Box

The Name box is the fastest way of naming a cell or range of cells if we are creating a single name. The Name box can also be used if the name is not already a label or table heading on the Worksheet.

Fig. 30

Follow the steps given below to name cells or range of cells using a Name box:

- 1 Select the cell or range of cells to be named.
- 1 Click the Name box (shown in fig. 30).
- 1 Type the name and press Enter.

Hereafter, whenever the range is selected, the name appears in the Name box.

Using the create Names Dialog box

If the names that are used to name the cells are already present in the worksheet

as row or column labels then the Create Names dialog box could be used. To create names using the Create Names dialog box follow the steps given below:

- 1 Select the range to be named (include headings).
- 1 Point to **Name** in the **Insert** menu and then click **Create**.
- 1 In the Create Names dialog box that appears, mark or clear check boxes as needed and click **OK**.

Any range can be selected by clicking the name in the Name box.

Using the Define Name Dialog box

Cells can also be named using the Define Name Dialog box. Apart from naming cells, formulas or constant values can also be named. Complex formulas can be written and named once and used many times instead of repeatedly writing.

To name a formula using the Define Name dialog box follow the steps given below:

- 1 Point to **Name** in the **Insert** menu and then click **Define**. The Define Name dialog box appears as shown in Fig. 31.
- 1 In the **Names in workbook** box, type the name for the formula, range, or constant value.
- 1 Type “=” followed by the formula or value in the **Refers to** box and click **OK**.

Fig. 31

Writing Formulas with Named Cells.

To use cell and range names in a formula follow the steps given below:

- 1 Click the cell in which the result of the formula has to be displayed.
- 1 Type the formula by pressing an “=” in the beginning.
- 1 To insert the formula in a particular cell, type the name or select **Insert -> Name-> Paste** from the menu bar and click the name in the List.
- 1 Complete the formula by pressing Enter.

Functions are special pre-written formulae that take values and perform operations and then returns a value to the cell in which they are entered. Functions simplify and shorten formulae in the worksheet. For e.g. instead of using the formula = a1+a2+a3+a4+a5 we can use the function = **sum (a1:a5)**. In certain instances, functions are the only way in which certain tasks can be carried out.

Specifying Arguments

In order to perform certain tasks, function requires specific information called **Arguments**. Arguments are values that are passed to the functions to perform operations. The number of arguments in a function varies between 0 and 14 and the length is restricted to 255 characters including quotation marks, if any. Arguments can be constants, cells or ranges, Range names or Functions.

Function Wizard

Although functions can be typed directly into a cell, the Function Wizard can be used to simplify the process. The Function Wizard leads through the process of inserting a function. The steps in the Function Wizard are:

Select the cell in which the function has to be inserted.

Type “=” or click the Edit Formula button on the Formula bar. the Formula Palette appears, as shown in Fig. 32.

Fig. 32

- 1 Select the function that has to be inserted from the Functions list by clicking the arrow on the Functions drop-down list. If a particular function is not listed in the Functions list, click the **More Functions** option at the bottom of the list.
- 1 Enter the arguments for the formula. To select a range of cells as an argument, click the **Collapse Dialog** button.

- 1 After selecting the range, click the Collapse Dialog button again to return to the Formula Palette.
- 1 Click **OK** to return to the worksheet.

Common Functions

Some of the commonly used functions and their purposes are listed in Table 2.

Table 2.

Function	Purpose
SUM	Add the values in the selected range.
MIN	Find the minimum value in the selected range
MAX	Find the maximum value in the selected range
AVERAGE	Average the values in a selected range
COUNTIF	Count all values that meet specific criteria
SUMIF	Add together all values that meet specific criteria
VLOOKUP and HLOOKUP	Find a valued in a table
IF	Display a value that depends on the set criteria
PMT	Calculate the payment for specific loan terms.
NOW	Return current date and time
TODAY	Return current date
CONCATENATE	Join cell values together in a single cell.
LEFT and RIGHT	Return a specific number of characters from the left (or right) end of a cell's value.

Self Check Exercises

11) State whether the following statements are True or False:

- 1) A formula can be upto 255 characters long.
- 2) Functions are not built in formulae for computations.
- 3) Both formulae and function begin with an equal to (=) sign.
- 4) Functions are special prewritten formulas.

12) Fill in the blanks.

- 1) Three types of formulas are and
- 2) The precedence number of % is
- 3) The button automatically sums the rows or columns.
- 4) A is a rectangular or square group of cells (range)

- 5) Function finds the maximum value in the selected range (MAX).

Note: i) Write your answer in the Space given below.
 ii) Check your answers with the answers given at the end of this unit.

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7.3.4 Formatting Spreadsheet

Formatting makes a worksheet look pleasant and makes the data more meaningful by visually segregating data into groups. We can format cells, columns, number, text, border, and alignment. Formatting can be done in three ways in Excel 2000- selecting tools from the Formatting toolbar, using the Format menu, and choosing Automatic formats provided by Excel.

Using the Formatting Toolbar

In order to display the Formatting toolbar, right-click any toolbar or menu bar and then select Formatting option from the shortcut menu. The most frequently used formats are available on formatting toolbar as shown in fig. 33. Using the formatting toolbar makes the formatting work easier and quicker.

Fig. 33

To find the hidden buttons in the toolbar, click the small arrow at the right end of the toolbar and click the **Add or Remove Buttons**. Click the buttons that has to be displayed in the toolbar.

Formatting Cells

After entering data, Excel’s many formatting features help us to make the worksheet and its contents fit together.

Aligning Entries

When data is entered, the text is automatically aligned to the left side of the cell and numbers to the right side. The Align Left, Center and Align Right button in the Formatting toolbar can be used to change the default alignment.

Rotate Cell Entries

Follow the steps given below to rotate the text entered in the cells:

- 1 Select the cells that have to be rotated.
- 1 Click **Cells** in the **Format** menu.

- 1 On the **Alignment** tab, under **Orientation**, click in the half-circle to set a rotation angle as shown in Fig. 34.
- 1 Click **OK**.

Fig. 34

Changing Column Width and Row Height

In most of the worksheets the column has to be resized, and row height adjusted. There are several ways to resize rows and columns.

Resize a Column Visually

Position the mouse pointer over the right border of the column selector for the column that has to be resized. When the mouse pointer becomes a two-headed arrow, drag the border to resize the column. Follow the same procedure to resize the rows as well, but in this case drag the bottom border of the row selector for the row that has to be resized.

Best - Fitting

When the worksheet is too large, we can save the aggravation of guessing the appropriate width by “best-fitting” the column width. To best-fit columns, follow the steps given below:

- 1 Position the mouse pointer over the right border of the column selector for the column that has to be best-fit.
- 1 When the mouse pointer becomes a two-headed arrow, double-click the border to best-fit the column.

To best-fit a row, follow the same steps as above, but in this case double-click the bottom border of the row selector for the row to be resized.

Matching Precise Width or Height

We can match the measurements of rows and columns that are far apart in a

worksheet or in a different worksheet. To achieve this, set the precise measurements for the columns and rows to be matched, and they will match exactly. To set a precise column width or row height, follow the steps given below:

- 1 Right-click a column or row selector.
- 1 Click **Column Width** or **Row Height**
- 1 Enter a new measurement and click **OK**.

Hide or Unhide Rows and Columns

We can hide important but cluttered cells by hiding those particular columns and/or rows. The worksheet will still continue to function properly. In order to hide rows or columns, right-click the selector (row number or column letter) for the row or column that has to be hidden and click **Hide**. To hide multiple rows or columns, select the rows or columns and then select **Hide**.

To Unhide rows or columns, select the rows or columns on both sides of the hidden column (s). Right-click the selection and select **Unhide** from the shortcut menu.

Shrinking Entries to Fit a Cell

In case there is a cell entry that does not fit and we also do not want to widen the column for that particular cell, we can shrink the entry so that it fits within the column width. To shrink an entry to fit the column width, follow the steps given below:

- 1 Select the cells whose entries have to be shrunk
- 1 Click **Cells** from the **Format** menu.
- 1 Click **Shrink to fit** check box on the **Alignment** tab and click **OK**.

Wrap Text to Multiple Lines

A different method to fit long entries in a narrow column is to wrap the text into multiple lines. Wrapping increases the row height. To wrap an entry to multiple lines follow the steps given below:

- 1 Select the cells whose entries have to be wrapped
- 1 Click **Cells** from the **Format** menu.
- 1 Click **Wrap text** check box on the **Alignment** tab and click **OK**.

Applying Number Formats

To format a number value, follow the steps given below:

- 1 Select the cell or range of cells to format.
- 1 Click **Cells** in the **Format** menu.
- 1 Select a format category on the **Number** tab
- 1 Select and set the options available for the format category and click **OK**.

To format dates and times, select the **Date** or **Time** from the Category list box.

To format the Currency, select the **Currency** from the category list.

Formatting Borders

Border segregates information so that it is quickly understood. Since Excel does not print the worksheet gridlines, the borders have to be specified explicitly. To apply borders quickly, we use the Borders palette. To display the Borders palette, click the Borders button .

The **Format Cells** dialog box can also be used to apply borders. Select the **Borders** tab to set the appropriate border.

AutoFormat

To apply a format automatically, select a range and choose the Auto Format command from the Format menu. The AutoFormat dialog box appears as shown in fig. 35. Select one of the different table formats, including formats for financial and accounting data.

Fig. 35

Saving the Workbook

To save a workbook after entering data, click Save from the File menu. When the file has to be saved for the first time then choose Save As option from the File menu. Type the file name and Excel will automatically give the “.xls” extension while saving the file.

Opening the Existing Worksheet

To open an existing Excel Worksheet select Open icon on the Standard Toolbar or select the Open option from the File menu, this opens a dialog box and the user can choose the file they want to open.

Printing a Worksheet

Once the data is entered, the calculations and formatting is completed, the next step is to take a printout of the worksheet. Excel provides several options for customizing the printing job. To print a worksheet, click Print from the File menu. The Print dialog box appears as shown in Fig. 36. The Print dialog box will give an overview of the available options.

Fig. 36

To select various options such as Print quality, Paper orientation, Media and Media sizes click the properties button. The Preview button gives a view of the document that is to be printed.

To make adjustments (margins, page size etc.) before printing the document, select the Page Setup option from the File menu. This is used to specify major facets of the page like page layout, margins etc.

Setting and Removing a Print Area

If only a part of the worksheet has to be printed repeatedly, the print area can be set that allows printing the range quickly without selecting it first. To set a print area in the worksheet, follow the steps given below:

- 1 Select the range of cells that has to be included in the print area.
- 1 On the **File** menu, point to **Print Area** and click **Set Print Area**. The print area will be set and a dashed line is displayed around it in the worksheet.

To remove a print area, point to **Print Area** in the **File** menu and select **Clear Print Area**.

Printing a Selected Range

To print a range of cell in a worksheet only once without setting print area follow the steps given below:

- 1 Select the range of cells to be printed.
- 1 Click **Print** from the **File** menu.
- 1 In the **Print** dialog box, click **Selection** under **Print What** and click **OK**.

Printing a Chart Object

To print a chart object without printing the underlying worksheet, click anywhere in the chart and click the print button  the Standard toolbar.

7.3.5 Creating Charts

It is always easier to grasp data and make comparisons when it is presented graphically rather than as a collection of data in numbers. A chart is a way to present a table of numbers visually. Displaying a data in a well-conceived chart can make it more understandable, and often we can make our point more quickly. Charts are based on numbers that appear in a worksheet. Before creating a chart we have to enter relevant data in the worksheet. A single chart can use data from any number of worksheets or even from different workbooks. Charts can be separately stored on Chart sheets, which can be printed, viewed or edited. They can be embedded in the current sheet so that they become a part of it. Both embedded and chart sheets are updated as the data on the sheets is changed.

Elements of a Chart

We need to know what the elements of a chart are before creating a chart in Excel. In Excel, chart can be either 2-D or 3-D. the elements of a 2-D chart are:

Y- Axis

Y- Axis is called as the “Series” or “Rank” axis. It shows the value of data points that are plotted.

X- Axis

X- Axis known as the “category” axis, shows the categories of the data points that are plotted.

Category names

Category names identify the individual data points may be dated. The category names are taken from the topmost row or left-most column, depending on the orientation of the sheet.

Legend

Legend is a set of tables that describe the data series. These labels are attached to the symbol, color or pattern that is associated with the series and placed on the chart. It is used to differentiate one data from another.

Data marker

Data marker is another tool used to differentiate one data series from another.

Tick marks

Tick marks are small lines used to divide the two axis and provide scaling.

Gridlines

Gridlines are displayed for both axis to help read the value of individual data points. Gridlines are scaled according to the values on the axis and can be changed.

Data labels

Data labels are displayed at times to show the value of data point.

Selected border

Selected border identifies that a particular chart can be sized, moved or deleted and contains nodes or handles for that purpose.

Besides the elements of a 2-D chart, 3-D charts have the following additional elements. They are:

Z-Axis

Z-Axis is called as the “value” axis and shows the value of the data points.

Wall is the background of the plotted area.

Corners

Corners can be rotated to give different views to the user.

Floor

Floor is the base upon which the series are plotted.

Types of Charts

The first step in creating a chart from the data is to choose a chart type. There are many different types of charts available in Excel 2000 and some may seem unusual because the user is not accustomed to seeing them or interpreting the data, they present. The key ideas to keep in mind when the user chooses a chart type are:

- 1 What kind of data is being used for charting?
- 1 Is he/she going to show discrete comparison between categories of data?
- 1 Correlations between two numeric values?
- 1 What kind of chart is the audience accustomed to seeing and interpreting?

The user can choose a chart type based on the data, which he/she is using in the worksheet. The different types of charts are explained below. All these types of charts can be seen in the **Insert** → **Chart** option.

Column charts

Column charts are one of the most commonly used types of chart. This type of chart is useful for displaying discrete data. We can have any number of data series, and the columns can be stacked on top of each other.

Bar charts

A Bar chart is essentially a column chart that has been rotated 90 degrees to the left. The advantage in using a bar chart is that the category labels may be easier to read. Bar charts can consist of any number of data series. In addition, the bars can be stacked from left to right.

Line charts

Line charts are also very frequently used. They are used to plot data that are continuous and discrete.

Pie chart

A Pie chart is useful when we want to show relative proportions or contributions with respect to a whole entity. Generally, a Pie chart uses not more than five or six data points otherwise it is difficult for the user to interpret. A Pie chart can use one data series. We can explode a slice of a pie chart. Activate the chart and select the slice we want to explode. Then drag it away from the center.

XY (Scatter) charts

Another common chart type is XY chart. An XY chart type differs from the other chart types in that both axis display values. This type of chart is often used to show the relationship between two variables.

Area charts

An Area chart is similar to a line chart that has been colored. Stacking the data series lets us clearly see the total plus the contribution by each series.

Doughnut chart

A Doughnut chart is similar to a pie chart, except that it has a hole in the middle. Unlike a pie chart, a doughnut chart can display more than one data series. Data series are displayed as concentric rings. As we can see, a doughnut chart with more than one series to chart can be difficult to interpret.

Radar charts

A Radar chart has a separate axis for each category, and the axis extends out from the center. The values of the data point are plotted on the appropriate axis. If all data points in a series had an identical value, it would produce a perfect circle.

Surface charts

Surface charts display two or more data series on a surface. Unlike other charts, Excel uses color to distinguish values, not distinguish the data series. The only way to change these colors is to modify the workbook's color palette by using the color panel in the Options.

Bubble charts

Bubble charts are new in Excel. Additional data series is represented by the size of the bubbles. The chart is displayed in the form of bubbles.

Stock charts

Stock charts are very useful for displaying stock market information. These charts require three to five data series, depending on the subtype. This chart uses the High-Low-Close subtype that requires three data series.

Cylinder, Cone and Pyramid charts

These three charts are essentially the same – except for the shapes used. We can use these charts in place of a bar or column chart.

Creating a Chart using the chart Wizard

- 1 To create a chart using the chart wizard, first key-in the data in the work sheet as shown in the fig. 37 or we can type our own data in the worksheet.

Fig. 37

- 1 Click on the Insert menu to select the chart option. It displays all the types of charts that are available and we can select our choice from it. The figure is as given below.

Fig. 38

- 1 Then select the chart format that we need. It displays a dialog box where we specify the data range. And then click the Next button.

Fig. 39

- 1 The third Chart Wizard dialog box has six tabs, as shown in the fig. 40. The various options for the chart are specified in this dialog box.

Fig. 40

- 1 After given all titles etc. click the next button. Another dialog box as shown in fig. 41 opens up that requires us to specify the place where the chart is to be placed.

Fig. 41

- 1 The chart location gives us two options. We can either accommodate the chart in the same sheet or we can even place the chart in a separate sheet. After completing all these steps we get the required output as shown in Fig. 42.

Fig. 42

- 1 In case the chart needs modification we double click on it to display a dialog

box shown in fig. 43. Each element in a chart can be modified by selecting that particular element and changing it to one required. Excel 2000 will popup different popup menus when clicking the mouse on various places in the chart.

Fig. 43

Changing the Chart Type

After creating the chart, the user might feel that a different chart type would display his data better. In that case, follow the steps given below.

- 1 Click the chart to select it.
- 1 Click the right mouse button and select Chart Type option where the Chart Type dialog box appears as seen in fig. 38.
- 1 Select a chart type and then click **OK**.
- 1 The chart type changes into the one user selected.

Changing the Chart Data

The data in a chart is updated automatically when the values in source range changes. But if the user adds any extra rows or columns in the worksheet those changes will not be reflected in the Chart.

There are two ways the user can change source range:

- 1 The user can add more rows or columns to the existing source range, by dragging the data border.
- 1 The user can change the source range using the Chart wizard.

To add more rows or columns

- 1 To accomplish the above tasks, first select the chart. The user can see three different borders around the data in the worksheet.
- 1 There is a small square on the lower-right corner of the cell i.e., in the last column.

- 1 By dragging this square, rows and columns of the cell can be increased.
- 1 To change the data range, select the chart and then click the Chart from the Insert menu or from the toolbar. This opens up a dialog box where the user can select the chart type. After choosing the chart type, click Next.
- 1 In the next dialog box the user can specify the new data range in the Data Range field. The remaining steps will be same as the one we saw earlier while creating a chart.

Self Check Exercises

13) State whether the following statements are True or False:

- 1) In Excel column width and row height can be changed.
- 2) A chart is a single document that displays Graphics.
- 3) X-axis is known as the category axis.
- 4) Z-axis is called the series axis.

14) Fill in the blanks

- 1) A is a visual representation of one or more data
- 2) improves the legibility of data.
- 3) To apply a format automatically we can use command
- 4) Y-axis is also called axis.

Note: i) Write your answer in the Space given below.
 ii) Check your answers with the answers given at the end of this unit.

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7.4 MS POWERPOINT

PowerPoint is the ideal tool to create electronic slide shows that will attract even the most uninterested crowd. It can also be used to create overhead transparencies and audience handouts that will rival even the expert presenters. PowerPoint makes the presentation simple by providing the user with built-in professional design elements called Autolayouts and Presentation templates. A PowerPoint presentation/ file consists of slides, handouts and speaker’s notes.

Slides

Slides are individual “pages” of a presentation. Slides can have titles, text, graphics, shapes, clipart and visuals created using other applications. It is possible to print slides as black-and-white or color overhead transparencies or have 35mm slides made using a film or service bureau.

Handouts

A handout consists of smaller, printed version of the slides. There can be two, three or six slides per page. Additional information such as, the company name,

date and page number can also be printed.

Speaker notes

The Speaker notes are pages containing explanations for one or more slides of the presentation. A smaller version of the slide can be added on to the Notes page. The Speaker notes help the presenter to remember the key points during a presentation. The Notes can also be distributed among the audience. If the presentation is saved as a Web page, the Notes can be displayed on the screen along with each slide. This provides, those who visit the web page, the necessary background and details.

7.4.1 Starting a PowerPoint Presentation

The general steps for creating a PowerPoint presentation are:

- 1 Create new slides and enter the text in them
- 1 Apply a presentation design to the master slide.
- 1 Format each of the slides, if necessary.
- 1 Add necessary objects to the presentation
- 1 Apply slide transitions, animation effects and links for electronic presentations (Slide Shows)
- 1 Create audience material and speaker notes
- 1 Rehearse and add slide timings.

Let us look into each of these steps in detail.

First let us get familiar with the screen, the menu bar and toolbars of the PowerPoint application. The screen is shown in fig. 44. The basic elements of the screen are shown in the Figure.

Table 3

Element	Description
Control Menu Box	It is used to change the size and position of the application window or to close it. It contains minimize, maximize and close buttons
Title Bar	It contains the application title, namely, Microsoft PowerPoint
Menu Bar	It displays PowerPoint's menu options
Minimize Button	It shrinks the application window to a program icon
Maximize/Restore Button	Maximizes/restores the application window to its non-maximized size and location.
Standard Toolbar	This toolbar contains buttons for the frequently used commands and the file operations.
Formatting Toolbar	This toolbar contains buttons representing frequently used formatting commands
Drawing Toolbar	The buttons in this toolbar are used to draw objects on the slide
Status Bar	It reports information about the currently selected command.

When the user clicks on the menu on the menu bar, a personalized menu that shows only the most commonly used commands is shown. The list can be expanded to see all the commands, by clicking on the arrow at the end of the menu. Once a command is used, it is included in the personalized menu.

The **Standard** and the **Drawing** toolbars can be made to share the space, thus leading to more workspace. The following are the steps to do this.

- 1 Click on the  icon in right end of any toolbar
- 1 Select **Add or Remove Buttons**
- 1 Click on **Customize...** The **Customize** dialog box will be displayed.
- 1 Select the **Options** tab
- 1 Check the **Standard and Formatting toolbars share one row** option
- 1 Click the **Close** button.

We can customize the toolbars by adding or removing the individual buttons. Click the  icon in right end of the toolbar and select **Add or Remove Buttons** to add or remove the buttons. This brings up the popup menu containing all the buttons of that particular toolbar. If a button has to be added, check the box against it. If a button has to be removed, uncheck the box against it.

When the PowerPoint application is started, the screen shown in fig. 45 will be opened. The Startup Dialog box appears as shown in the figure. This dialog box is used to open an already existing presentation or a new presentation.

Fig. 45

A new presentation can be created in one of the three ways shown in Fig. 45. Choose any method by clicking the corresponding option and then check **OK**.

- 1 **AutoContent Wizard.** The AutoContent Wizard helps us in creating a presentation in a very simple way and is best suited for beginners. It takes the user through 5 steps in which it collects the necessary information for building a presentation. It then builds the presentation automatically. Fig. 46 to fig. 50 shows these 5 steps.
- 1 **Template.** The second method is to start a presentation by selecting the template button that determines the presentation's design excluding the content. The new presentation is based on the built-in-design templates selected by the user. In PowerPoint 2000 a wide variety of new designs are available, including a number of animated templates with preset animation.
- 1 **Blank Presentation.** The third method is to click on the Blank Presentation option. This opens a presentation with no elements or design background in place. This option is useful when creating our own presentation elements from scratch. The Blank Presentation is selected by default.

If the user wants to open an existing presentation he/she should choose the Open an existing presentation option and select the File from the window displayed below it. This window is enabled only when the Open an existing presentation option is chosen.

(**Note:** Some features and add-ins in PowerPoint are not installed when PowerPoint is installed. But, the application has shortcuts, icons or commands for these features. Each of these is installed when it is used for the first time.)

7.4.2 Creating a Presentation using AutoContent Wizard

- 1 Select the AutoContent Wizard in the Startup dialog box or select File->New and select the AutoContent wizard in the dialog box that follows. The screen as in fig. 46 is displayed. The left side of the screen displays the steps to be followed while creating the presentation using the wizard. Of the 5 steps, the step that is executed currently is highlighted using a different color. In fig. 46, it is highlighted using green color.

Fig. 46

- 1 On pressing the Next button, the screen shown in fig. 47 is displayed. The screen shows different presentation types under each category (the categories are represented by the buttons). This screen is used to decide the presentation type. If the user clicks on a specific category, the presentation types under that category are displayed.

Fig. 47

- 1 In fig. 47 the presentation types under the General category are displayed. Let us select the Generic type of presentation and press the Next button. The next screen is shown in fig. 48.

Fig. 48

The screen in fig. 48 lists all types of output that can be used.

- 1 Let us select the **On-screen presentation** option and press the **Next** button. The next screen is shown in fig. 49.

Fig. 49

- 1 The screen in fig. 49 is used to specify the header and footer that should appear in the presentation. After specifying the Header and the Footer, press the Next button. The screen as in fig. 50 is displayed.

Fig. 50

- 1 Click the Finish button, shown in fig. 50, to end the wizard.

The wizard will create the presentation with a pre-defined setting. It will also give instructions as to what should appear in each slide. The user can edit the text in each slide according to his/her requirement.

7.4.3 Saving the Presentation

- 1 Choose **File->Save** or **File->Save As**. Fig. 51 shows the Save As dialog box that comes up.
- 1 Select the drive and the directory in which the file has to be saved from the Save in list box
- 1 Specify the name of the presentation in the **File name** text box
- 1 Select **Presentation** from the **Save as type** list box.
- 1 Click the **Save** button.

Fig. 51

Creating a presentation based on Blank Presentation

The following steps are to be followed for creating a presentation based on blank presentation option:

- 1 Choose **File->New** to open the New Presentation dialog Box (shown in fig. 52) or select Blank Presentation option from the PowerPoint Startup Dialog Box shown in fig. 45.
- 1 Select the desired AutoLayout for the new presentation's first slide and click **OK**.

Fig. 52

7.4.4 Types of AutoLayouts

Each new slide comprises 24 AutoLayouts. An AutoLayout predetermines certain slide elements, such as title or bulleted list. Select the required layout. The label to the right of the list of the AutoLayouts gives a description of the type of slide selected. Fig. 53 shows that **New Slide** dialog box the **Bulleted List** layout selected.

Fig. 53

PowerPoint Views

In any PowerPoint presentation, it is possible to switch among five types of Views. Each View gives a different way of looking at the work and offers different capabilities. The user can switch between Views, by clicking the button that represents the view. The View buttons are at the left-side bottom of the PowerPoint window. Fig. 54 shows the View buttons

Fig. 54

Normal view

Normal view contains three panes. They are:

- 1 **Outline pane.** It is used to organise and develop the contents of a presentation. The points can be rearranged by dragging the bullets and the slides can be rearranged by dragging the slide icon on the pane.
- 1 **Slide pane.** The slide pane helps us to see how the text appears on each slide. It is also used to add charts, pictures, graphics, animations etc. to individual slides.
- 1 **Notes pane.** The notes pane is used to add speaker notes or information to be given to the audience.

The Normal View is shown in Fig. 55.

Fig. 55

In the Outline View, the user can display formatted or plain text, full text or only the titles. In this view the user can work with the slide titles and the main text in the classic outline form. On clicking the Outline View appears as shown in fig. 56.

Fig. 56

Slide Sorter View

The Slide Sorter View shows all the slides of the presentation in a single screen. This helps us to add, delete, rearrange the slides, add timings and select the slide transition style. It is also useful to preview animation on multiple slides at the same time. The Slide Sorter View screen is shown in fig. 57.

Fig. 57

Slide View

In the Slide View the user can type, draw, add clipart, insert pictures and change the look of the text as well as the object. In this view the user can work on one slide at a time. He can type text, change the slide layout or add artwork and graphics from other application. The Slide View appears as shown in the Fig. 58.

Fig. 58

Slide Show

In the Slide Show, the user sees the slides as an electronic presentation on the computer. Each slide fills the screen. The effect of the transitions and timings can be seen as set in the Slide Sorter View. The Slide Show View appears as shown in Fig. 59.

Fig. 59

Creating New Slides in Slide View

The following steps are used to create a new slide in the Slide View.

- 1 Click on the **New Slide** button in the Standard Toolbar or choose **Insert->New Slide** to open the New Slide Dialog Box.
- 1 Select the desired layout for the new slide and click **OK**.

The new slide will be created next to the current slide.

7.4.5 Entering Text in Slide View

The next step in creating a presentation is to enter text in the slides. Let us consider an instance where the **Title Slide** layout is chosen from the AutoLayout window. It consists of a title and a subtitle. The procedure for entering text in the **Slide View** is given below:

- 1 Click on the placeholder where the text has to be entered.
- 1 The sample text disappears and the cursor appears inside the placeholder.
- 1 The user can now enter his/her text inside the placeholder.
- 1 Once the text is entered, deselect the object by clicking a blank area of the slide.

PowerPoint 2000 supports various languages including European languages, Japanese, Chinese, Korean, Hebrew and Arabic. The user can enter, display and edit text in any of these languages. The user can also specify a particular language for displaying the help. Microsoft Office is based on the Unicode text encoding standard, which allows PowerPoint 2000 to display presentations correctly, no matter what language they are written in, provided the operating system supports the characters specific to that language. Another new feature in PowerPoint 2000 is that if the text entered in a slide does not fit a text placeholder, Microsoft PowerPoint automatically resizes the text to fit it.

7.4.6 Slide Master

The format of the text entered in a title subtitle, or bulleted-list object is determined by the format settings in a special slide called the **Slide Master**. The Slide Master guarantees that all the titles, subtitles and bulleted-list text in the presentation are identically formatted, thus lending to an overall consistency in the presentation. The Slide Master is also used to set the background design for all the slides in the presentation.

The steps for setting the background design using the Slide Master are:

- 1 Choose **View->Master-> Slide Master**
- 1 Choose **Format->Apply Design Template**. The **Apply Design Template** dialog box (shown in fig. 60) is displayed.

- 1 Choose the **Expedition** design and click the **Apply** button.

The master slide will now appear as in Fig. 61.

Fig. 61

If some text, picture of the system date or some other object has to appear on all the slides, it can be placed on the Master Slide.

- 1 Choose **View->Normal (OR)** choose **Close** button on the **Master** toolbar to close the Master Slide and return to the Normal View.

Let us see how to create slides and enter text in the Outline View.

7.4.7 Creating Slides and Entering in Outline View

The steps involved in creating a new slide in the Outline View are as given below:

- 1 Select the slide after which the new slide has to be inserted
- 1 Click on the New slide button in the standard toolbar or choose **Insert->New Slide**.

The slides are not displayed in their actual slide form, instead, only an outline of the slides text is displayed.

- 1 To enter title text, place the insertion point to the right of the slide icon in the Outline pane and type the desired text.

To enter bulleted-list text:

- 1 Type the desired text
- 1 Place the insertion point in the line and click on the Promote button or press **Shift+Tab** to Promote a line (i.e., to increase the indentation)
- 1 Place the insertion point in the line and click on the Demote button or press **Tab** to demote a line (i.e., to decrease the indentation)

The following steps help us to understand how to promote or demote a line

- 1 Insert a new slide with Text layout
- 1 Enter the following text in the slide

TriplePower Engineering Ltd.

Company was started in 1989

Deals in Producing Electrical products

- 1 **Power switches**
- 1 **Converters**
- 1 **Inverters**
- 1 **UPS**

Select the last four lines and press the Promote Button.

To insert the bullets select the bullets icon on the formatting toolbar or choose **Format->Bullets** and **Numbering...** from the menu bar. The user can also add Graphical bullets instead of ordinary bullets. The Graphical bullets are available in the ClipArt Gallery about which we will be studying in detail later. The bullets and numbering option also allows the user to create numbered lists. The numbers will change automatically if the user rearranges the list, deletes an item from the list or adds an item to the list.

The text will be displayed in the slide as shown in fig. 62.

Fig. 62

7.4.8 Creating Non-bulleted Body Text

The procedure to remove bullets from the body text is given below:

- 1 Select the body text whose bullets are to be removed. For a single bulleted item, place the insertion point anywhere within the item. In order to select two or more adjacent bulleted items, drag the bulleted item from the top to anywhere within the bottom item.

- 1 Click on the **Bullets** button in the **Formatting** toolbar.
- 1 Bullet button in the toolbar is a toggle i.e. clicking on the Bullet button once, removes the bullets and clicking on it the second restores the bullets.

Editing Slide Text

The procedure to add a bulleted item to a slide in a Slide View or in the Outline View is:

- 1 Place the insertion point at the end of the bulleted item after which the user wants to add the new bulleted item.
- 1 Press **Enter** to create the new bulleted item
- 1 If necessary, press **Tab** or **Shift + Tab** to change the indent level of the new bulleted item and type the desired text.

To copy text from the slide:

- 1 Select the text to be copied
- 1 Press **Ctrl+C** or click on the **Copy** icon in the **Standard** toolbar

To cut text from the slide:

- 1 Select the text to be cut
- 1 Press **Ctrl+X** or click on the **Cut** icon in the **Standard** toolbar.

(**Note:** In PowerPoint 2000 we can copy more than one item into the clipboard. The clipboard can hold up to 12 items. We can store in the clipboard and use them whenever we want.)

To paste a text from the clipboard to the slide:

- 1 Place the cursor at the point at which text is to be inserted
- 1 Press **Ctrl+V** to paste the recently cut or copied item.
- 1 To paste any other item, open the **Clipboard** toolbar and click on the appropriate item.

Rearranging Bulleted Items

The procedure for rearranging the order of bulleted items by dragging is as given below:

- 1 Place the insertion point anywhere within the bulleted list.
- 1 Point to the bullet of the bulleted item to be moved. The mouse pointer changes to a four-headed arrow.
- 1 Press and hold down the left mouse button to grab this bulleted item.
- 1 Drag the bulleted item up or down to the desired new position and then release the mouse button.

The procedure for rearranging the order of bulleted items in Outline View by using the **Move Up** and **Move Down** buttons in the **Outlining** toolbar (shown in Fig. 63) is given below:

- 1 Select the bulleted item to be moved.

- 1 Click as many times as necessary on the Move Up or Move Down Button to move the selected button item to the desired new position in the selected list.

Fig. 63

Applying Text Attributes

Text attributes determine the appearance of the slide text. PowerPoint text. PowerPoint text attributes include font name, size, style and color. The text attributes can be changed by selecting the text and applying the desired attributes.

The general procedure for applying text attributes:

- 1 In the Slide View, select the desired text (part or whole of the text) using the mouse. In the Outline View, to select all the slide's text, click on the slide number.
- 1 Click on the desired text-editing button or press its corresponding keyboard shortcut: Ctrl+B to make the text bold; Ctrl+I to change the style to italic; Ctrl+U to underline.

On changing the style of the contents of the slide in Fig. 62 to bold, the screen will appear as in fig. 64.

Fig. 64

Opening an existing presentation

An existing presentation can be opened in two ways:

- 1 By choosing "Open an existing presentation" in the start up dialog box (shown in fig 45) and selecting the required file from the list below it. (OR)

1 By selecting **File->Open....**

On selecting **Open...** from the **File** menu, an Open dialog box appears as shown in fig. 65.

Fig. 65

7.4.9 Enhancing the Presentation

A good presentation consists of both effective words and effective images. PowerPoint's Drawing toolbar contains twelve drawing tools. They are listed in Table 4.

Table 4

Tool	Usage
Selection	To select and edit objects
Text	To create Text objects
Line	To draw Straight Lines
Rectangle	To draw rectangle and squares
Ellipse	To draw ellipses (ovals) and circles
Arc	To draw arcs
Freeform	To draw free-form shapes
Free Rotate	To rotate Objects
AutoShapes	To draw predefined shapes
Fill On/Off	To add/remove default fill color to/from the objects
Line On/Off	To add/remove default line color to/from the objects
Shadow On/Off	To add/remove default shadow color to/from the objects

The Drawing toolbar is shown in fig. 66. If any toolbar is not visible, it can be made visible with the following steps:

- 1 Click on the menu bar or any toolbar
- 1 Right click the mouse. The popup menu containing the names of all the toolbars will be shown. A check mark against a name denotes that it is visible.
- 1 Select the toolbar of your choice.

Fig. 66

Some of the uses of the Drawing toolbar are that it allows the user to

- 1 Change an object's fill, line and shadow color.
- 1 Draw lines and arrows in different styles (standard line, dotted line, center line dashed line etc.)
- 1 Group and ungroup objects.
- 1 Flip objects.

Drawing Straight Lines

The Procedure for drawing straight lines is:

- 1 Click or double click on the Line tool (shown in Fig. 66) in the Drawing toolbar.
- 1 Clicking once on the tool allows us to draw a single line only. Double clicking allows us to draw multiple lines.
- 1 Press and hold the left mouse button
- 1 Drag it on the slide to draw the line
- 1 Release the mouse button

Drawing Rectangles and Squares

- 1 Click/ Double-click on the Rectangle tool (shown in fig. 66) to select it.
- 1 Press and hold the left mouse button
- 1 Drag it on the slide to draw the rectangle or square
- 1 Release the mouse button

Drawing Ellipses and Circles

The procedure to draw a circle or ellipse is as given below:

- 1 Click/ Double-click on the Ellipse tool (shown in fig. 66) to select it.
- 1 Drag in the slide to draw an ellipse. Shift + Drag to draw a circle.

Drawing Arcs

An arc is a curved line. The general procedure for drawing an arc on a slide is as given below:

- 1 In the Drawing Toolbar, choose **Auto Shapes-> Basic Shapes** (shown in fig. 66) and select the arc tool.
- 1 Drag in the slide to draw an elliptical arc. **Shift + Drag** to draw a circular arc.

Creating Text Objects

A number of text objects can be created in PowerPoint. Text objects are created to add text that does not belong to the title, subtitle, or bulleted-list categories. For example, we can give a caption for a piece of clipart, or footnote for a bulleted-list item. The procedure for creating a text object on a slide is given below:

- 1 Click on the Text Box tool to select it.
- 1 Position the mouse pointer where the text has to begin
- 1 Click to create a text object that does not automatically wrap the words types or drag to create a text object that wraps the words.
- 1 Type the desired text.
- 1 Once the typing is completed, click outside the text box.

Editing objects

Let us now learn to edit the objects that we have created.

Selecting and Deselecting Objects

The procedure for selecting and deselecting the objects is given below:

- 1 Click on Selection tool (shown in fig. 66) to select it.
- 1 To select a graphic object, click on it. Press Esc to select a text object with an insertion point in it.

- 1 Shift + click on an object to select the text object with no insertion point. Black colored selection handles appear around the object to indicate that it is selected.
- 1 Press Esc or click on any blank area of the slide to deselect the currently selected object.

Resizing Objects

PowerPoint enables user to resize objects quickly and easily. The procedure is as given below:

- 1 Select the object
- 1 Drag a selection handle towards the center of the object to reduce the size of the object.
- 1 Drag a selection handle away from the center of the object to increase its size.
- 1 Shift + drag a corner selection handle to maintain the original proportions of the object (A selection handle is a two headed arrow used to resize/ enlarge/ shrink objects).
- 1 It's much easier and more reliable to hold down the Shift key while resizing.

Moving Objects

The following procedure is used to move the objects:

- 1 Click on the object
- 1 To move a graphic object, point to its middle. To move a text object, point to the outline of the selection box. A four-headed arrow appears.
- 1 Drag the object to the desired location. Shift + Drag to move the object horizontally or vertically in a straight line.
- 1 Press the arrow keys (left, right, up or down) to move the objects in small, discrete steps.

Aligning Objects

If objects in a slide are not lined up vertically or horizontally, then the user will not be able to comprehend the presentation. Aligning the objects optimizes the clarity of the presentation.

There are several ways to align objects. PowerPoint enables the user to position objects so that they lined up precisely across or down the slide. For example, in an organization chart depicting the hierarchical structure of the company, the user might like horizontally align the text boxes of employees who are at the same level. Grid and guides are the two utilities provided by PowerPoint that allow the user to align objects in the slides.

The grid is an invisible matrix of vertical and horizontal lines that covers the entire slide workspace. Grid is used to automatically align objects.

In the **Drawing** toolbar, click **Draw->Snap** (shown in Fig. 66). The submenu of **Snap** is given below:

- 1 **To Grid** – Choose this to automatically align objects on an invisible grid
- 1 **The Shape** – Choose this to automatically align objects with grid lines that go through the vertical and horizontal edges of other shapes.

Note

- 1 To temporarily turn off the Snap to Grid option, i.e., in order to move an object in increments less than $\frac{1}{2}$ of an inch, hold down the **Alt** key as the object is moved.

The guides are a single vertical and single horizontal line, both extending across the entire slide workspace. When the **View->Guides** option is turned on, the center or edge of any object moved near either of these guides will snap to that guide.

Deleting Objects

The general procedure for deleting objects is given below:

- 1 Select the object to be deleted.
- 1 Press the **Del** key.

Enhancing Objects

The user may at times want to change the shape of the object. For example, the user might like to change a simple rectangle to a more dramatic, three-dimensional rectangle, or to change a simple five-pointed star to glorious, multipointed starburst. This could be done by deleting the old object and drawing the new object in its place. This technique is tedious and time consuming. Instead, we can follow the steps given below:

- 1 Select the object
- 1 Choose **Draw->Change AutoShape** to open the AutoShapes palette
- 1 Select the desired new shape.

Changing and removing an object's fill color

The Format Color and Lines command is used to change the fill color and the borderline of the chosen object. The general procedure to change the fill color and the borderline is given below:

- 1 Select the desired object.
- 1 Choose **Format->Colors and Lines** or choose **Colors and Lines** from the shortcut menu (explained in the next paragraph) to open the **Colors and Lines** dialog box.
- 1 Open the **Fill** drop-down list box
- 1 Select a color from the palette in the list box. If desired color is not present in the palette, click on More Colors, select a color from the extended palette, and click on **OK** button
- 1 In the Colors and Lines dialog box, click **OK** button to apply the selected color to the object.

Adding a Shadow to an Object

PowerPoint enables the user to add a shadow effect to an object. The steps are as given below:

- 1 Select the desired object.
- 1 Click on the **Shadow On/Off** tool to apply the default color to the selected object.
- 1 Choose **Format->Shadow** to select the desired color from the list box and click OK.
- 1 Select an object and click on the **Shadow On/Off** tool to remove an object's shadow.

Changing an Object's line Style

The procedure to change the line style with which an object is drawn is given below:

- 1 Select the line for which the style has to be changed.
- 1 Select the line style button on the **Drawing** toolbar (shown in fig.66.)
- 1 Select the desired line style.

Changing an Object's Orientation: Rotate

- 1 Select the desired object
- 1 Click on the **Free Rotate** tool (shown fig. 66) to select it.
- 1 Point to any of the object's selection handles, and drag to rotate the object around its center point. **Shift + Drag** to constrain the rotation angle to 45-degree increments.
- 1 On completing the rotation, click on the **Free Rotate** tool deselect it.

7.4.10 Working with ClipArt

ClipArt image is a simple drawing that can be used to suggest a topic or to enhance a list or other text display. Microsoft has built a gallery of clipart images into Clip gallery that provides the user with a generous library of clip art. This Clip gallery contains images of animals, people, household objects, cartoon, etc. Using this artwork in selected slides of the presentation can help to make a point, add humor, or make the presentation interesting for the viewers.

Adding ClipArt to a Slide

The procedure for adding clip art to a slide is as given below:

- 1 Open a blank presentation and choose an AutoLayout.
- 1 In the Slide View, open the slide in which the clip art has to be added.
- 1 Choose **Insert->Picture->ClipArt** (or) click on the Insert ClipArt button (or) double click the selected image area on the slide to open the ClipArt Gallery.

The ClipArt Gallery is shown in fig. 67

Fig. 67

- 1 Choose the desired category such as Academic, people, music, etc.
- 1 Select the ClipArt in the preview area of the Clip Gallery.
- 1 Right click it with the mouse to open the menu options shown in fig. 68, there are four options in the menu. These options are shown in the figure.
- 1 Choose Insert Clip button to place a ClipArt file on the slide. The images appears on the slide and becomes a part of the presentation file.

Fig. 68

To insert Media Clip

Media Clip is a motion picture or any animation file. The same procedure that is used to insert ClipArt is used to insert media clip. But we have to choose the appropriate alide in AutoLayout and select the media clip from Clip Gallery or from file.

(Note: PowerPoint supports the playing of animated **GIF** pictures to add motion to your presentations.)

Resizing Clip Art

The clip-art object can be resized just as any other PowerPoint object. The procedure for resizing a clipart to a slide is given below:

- 1 Select the clipart object
- 1 Drag the selection handle towards the center of the object to reduce the object. Drag the handle away from the center of the object to enlarge the object. Drag the corner handle to maintain the proportions of the object. Ctrl + Drag a control handle to keep the object centered when resized.

The procedure that is used to resize ClipArt is similar to the one involved while resizing drawn and text objects. By holding down Ctrl key when the corner of the selection handle is dragged, the center of the object remains fixed when the object is enlarged. Similarly we can diminish the object using the same technique. This technique is not limited to clipart and can be used on any resizable PowerPoint object. Press Ctrl + Drag the object and place it in another place in the slide to make multiple copies of the clip art.

Cropping Clip Art

We can use part of a picture or graphical object by selecting it and dragging the Crop tool over one of the resize handle. The user can use this feature to remove the undesirable part of the image just as photographers and layout artists remove the undesirable part of the image in order to emphasize the part that remains.

The procedure for cropping a clip art object is given below:

- 1 Select the clipart object
- 1 In the Picture toolbar, choose the Crop Button. The mouse pointer becomes a Cropping tool.
- 1 Drag one of the clip-art object's selection handles to crop the image as desired.
- 1 If necessary, repeat the previous step until the image is cropped to the desired level.
- 1 Click again on the Crop tool to turn off the Cropping.

Uncropping ClipArt

After cropping an object, it may appear as a resized object. But, it hides the areas of the picture we drag over, leaving only areas that remain inside the frame. The entire object remains intact after the user crops it. PowerPoint allows the user to uncrop it; i.e., to restore part or whole of the object the user previously cropped. The procedure to be followed is similar to the procedure while cropping a clipart object.

The procedure is given below:

- 1 Select the cropped clip-art object.
- 1 Choose the Crop tool from the Picture toolbar. The mouse pointer becomes a Cropping tool.
- 1 Drag one of the clipart object's selection handles to uncrop the image as desired

- 1 If necessary, repeat the previous step until the image is uncropped to the user's satisfaction.
- 1 Click on a blank area of the slide or click on the Crop tool to deselect both the clipart object and Cropping tool.

Ungrouping ClipArt

Every PowerPoint clipart object consists of two or more objects that are grouped together as a single unit. In effect, every clip art object is a mini library of clipart objects. This fact can be exploited to the user's advantage.

The general procedure for ungrouping a clipart object is as given below:

- 1 Select the object
- 1 Choose **Draw->ungroup**

If the dialog box informs that "This is imported picture, not a group. Do you want to convert it to a Microsoft Office drawing object?" then click yes to ungroup. Now we can see plenty of parts that together give a single image.(

(**Note:** Once a clip-art object is ungrouped, the resulting sub object cannot be cropped or recolored.)

Edit points

The user can reshape the ungrouped elements of the clipart images or user defined shapes. The procedure to reshape elements is:

- 1 Select the element or drawing object that the user wants to reshape
- 1 Right click and select Edit Points from popup menu. The object will appear with dots on it.
- 1 Press on one of the points and drag it to reshape the object.
- 1 Repeat the previous step if necessary.

Scaling ClipArt

Proportionally resize the object around a fixed center point by specifying a scale percentage is called scaling ClipArt. Specifying a scale of 200 percent doubles the size of the selected object, specifying 50% halves the size of the object.

The general procedure for scaling a clip-art object is given below:

- 1 Select the object you want to resize.
- 1 Choose **Format-> Picture**
- 1 Under Scale tab, enter the percentages in the **Height** and **Width** boxes.

7.4.11 Working with Colour

The color is a critical factor in determining the effectiveness and magnificence of any presentation. For example, bright and flashy colors (for instance red, yellow, and fluorescent) will be good to attract an audience (in presentations like

advertisements) whereas colors like black, white and gray are good for sedate business crowd (for example presentation on job opportunities).

Changing An Entire Color Scheme

The PowerPoint presentation has a color scheme that has a set of compatible colors. Each of these colors are used for specific slide elements. The elements of the color scheme are given in Table 5.

Table 5

Colour Name	Description
Background	The colour of a slides background (the area behind the slide's object).
Text and lines	The colour of drawn lines (ellipses, squares, freeform objects and so on), bulleted-list text and text created with the Text tool.
Shadows	The colour of the object's shadows.
Title text	The colour of the title-object text.
Fills	The colour inside the filed objects
Accents	The set of three colours used for graphs (bar-chart bars, pie-chart slices, and so on) and for secondary slide items.

The procedure for creating a colour scheme is given below:

- 1 On the format menu, click **Slide Colour Scheme**, and then click the standard tab. The colour scheme window will appear as given in Fig 69.

Fig. 69: Slide Colour Scheme

- 1 In **Standard** tab select colour schemes nearest to the type the user prefers, and then click **Apply** or **Apply To All**.

- 1 **Click on Custom** tab to define custom colour scheme
- 1 Under **Scheme Colors**, click a colour to be changed, and then click **Change Colour**.
- 1 In the **Standard Colour** palette, click the colour user prefers, and then click **OK**
- 1 In the **Custom colour** palette, drag the cross hair to select a colour, drag the scroll bar to adjust the brightness, and then click **Ok**.
- 1 Repeat the process for each colour to be changed.
- 1 Click **Add as Standard Scheme** to save the colour scheme with the presentation.
- 1 Click **Apply** to apply the new colour to the current slide.
- 1 Click **Apply top all** to apply it to all the slides in the presentation
- 1 Click **Ok**

(**Note:** Use the **Standard** tab to select the scheme from the existing colour palette, or, use the **Custom** tab to apply the users own colour scheme.)

Recolouring Clip Art

Clip Art images comprise of some colours by default. PowerPoint allows the user to change the colours of a clipart object in the same way as it allows the user to change the presentation colour scheme. The general procedure for recolouring the clip-art object is given below:

- 1 In the **Slide View**, select the desired clip-art object.
- 1 Choose **Recolour** button from the Picture toolbar. The screen will be as given in Fig 70.

- 1 Select the **Colours** option in the **Change** box to the change any colour in the object (line, background, or fill). Select the **Fills** option change only the background or fill colours.
- 1 Locate the old colour in the **Original** column, and then select the new colour from the dropdown list box in the corresponding **New** column, to change the colour.
- 1 Click on the **Preview** button to view the recoloured object (if desired).
- 1 Repeat the previous three steps for each colour to be changed.
- 1 Check or uncheck the box in front of the old colour to restore an element to its original colour.
- 1 Click **Ok** to apply the new colours.

New Clip Gallery has many numerous enhanced features than older version of PowerPoint. With the new Clip Gallery user can organize pictures into custom categories, assign keywords to pictures, drag images into our presentation, and leave the Clip Gallery open in a smaller window while users working on the presentations. The new Clip Gallery can also store sounds and movies. If we use a picture, sound, or movie often, we can add it to the Clip Gallery for easy access.

Graphical Bullets

The graphical bullets are available in the Clip Gallery to add extra flair to the slides. They can be used to replace the standard font-based bullets. A large selection of these bullets is included, and we can import our own custom-made as well.

7.4.12 Creating WordArt Objects

WordArt is one of the easiest to use features of PowerPoint, as it allows addition of exciting special effects (3D text) to the presentation. WordArt styles work well on headings or on words in the presentation that require strong emphasis, such as the word **Discount** in a product offer.

Choosing a WordArt Style

- 1 Select **Insert ->picture->WordArt** (or) on the **Drawing toolbar** click the **WordArt** button. 
- 1 The **WordArt Gallery** dialog box appears offering the choice of the WordArt styles appears as shown in the Fig. 71
- 1 Select the desired special effect and click **Ok**.
- 1 In the **Edit WordArt Text** dialog box, type the text to be formatted and select the various options (Font type, size and style) and then click **OK**.
- 1 Use the tools on the WordArt and Drawing toolbars to add or change effects to the text.

Fig. 71: Word Art Gallery

7.4.13 Working with Charts and Tables

In Office 2000, we can create charts in two ways:

- 1 Using Excel
- 1 Using Microsoft Graph

If the system has Excel, we can use it to create charts. Otherwise, Microsoft Graph will help us to create charts quickly and easily.

In PowerPoint, we can open a Microsoft Graph in three ways:

- 1 Choose **Insert->Chart**.
- 1 Click the Insert Chart button on the Standard toolbar
- 1 Double-click a chart placeholder in the AutoLayout.

Inserting A Microsoft Chart

- 1 Click the **Insert Chart** button in the Standard toolbar (or) choose **Insert->Chart** (or) double-click the chart placeholder on an AutoLayout.

The graph contains two windows as given in fig. 72.

When a chart is created Microsoft Graph always open with a simple data and chart based on that data. We can edit the sample data to create our own chart. In certain, we would like to clear all the data from the datasheet and enter our own data.

- 1 Include our labels for X and Y – axis in the first row and first column and enter the data in respective cells.
- 1 Click the **Chart->Chart type** to change the chart type. The Chart Type window will be displayed as given in fig 73. Choose a chart type from the list

Fig. 73

- 1 Close the datasheet to embed the chart in the slide. Select the chart, the resize or move as necessary.

Importing data for a chart

If the data required for the chart is already present in a file, we can import the data from that file. The following procedure is used to import data from an Excel file:

- 1 In Microsoft Graph, choose **Edit->Import File** or click the Import File button on the toolbar. This opens the Import File dialog box.
- 1 Select a file type, and then select the file that contains the data. Click Open. The **Import Data options** dialog box will appear as shown in fig. 74.

Fig. 74

- 1 If the file is a spreadsheet, select the worksheet or the named range that contains the data to be imported from the **Import Data Options** dialog box. Turn the **Overwrite Existing cells** options on or off, and click **OK**.

Creating an Organization chart

When the user starts a new organization chart, PowerPoint launches an OLE-compatible application called Microsoft Organization Chart that simplifies the process. An Organizational Chart has its own Help information that explains in detail how to create and edit organizational charts.

The steps involved in creating an organization chart in a new slide are given below:

- 1 Choose **Insert->New Slide**
- 1 Select the AutoLayout title **Organization Chart** and click **OK**.
- 1 A new blank slide opens with the icon for an organisation Chart. Double-click this icon to open the Organization chart.

The steps involved in creating an Organization Chart in an existing slide are given below:

Select the slide to which the Organization Chart has to be attached.

Choose **Insert-> Picture -> Organization Chart** or click the **Insert Org Chart** button on the Standard toolbar

Pick a slide layout that has a placeholder for an organization chart, using the layout button. When the slide is on the screen, double-click the organization chart placeholder.

The Organization Chart window appears as shown in Fig. 75. It displays a sample chart, and gives access to all its functions.

Fig. 75

- 1 Use the Organization chart tools and menus to design the user's chart.

- 1 For help on creating a chart, choose **Help -> Index** or **F1** on the Organization Chart Help menu.
- 1 Click **Exit and Return to Presentation** in the **File** menu of the Organization Chart to return to PowerPoint.

Box tools on the Microsoft Organization Chart Window

The Box Tools are used for creating boxes in the user's chart. The Box tools include the following:

- 1 **Subordinate Box Tool** – This is used to create a subordinate box.
- 1 **Co-worker Before Box Tool** – this is used to create a co-worker box above or left of an existing box.
- 1 **Co-worker After Box Tool**- this is used to create a co-worker below or to the right of an existing box.
- 1 **Manager Box Tool** - this is used to create a manager box (a Box which has subordinate boxes reporting to it) for an existing box.
- 1 **Assistant Box Tool**- this is used to create an assistant box for an existing box.
- 1 **Zoom Tool** – this is used to enlarge the box. Choose this button and click on the box we want to enlarge. The symbol of zoom button appears as graph, to recover original graph click on this button.

The user can create a new box by clicking on an existing box with a box tool. The box tools appear across the top of the chart window as shown in fig 76.

Fig. 76

Adding a Box to the Organization Chart

The procedure to add a box to the Organization Chart is given below:

- 1 Click on the appropriate box tool to add a subordinate, manager or co-worker.
- 1 Select the box to which the user wants to add the new box.

The procedure to add multiple boxes is given below:

- 1 Click on the box tool once for each box the user wants to create (2 clicks=2boxes, 3 clicks = 3 boxes and so on).
- 1 Click on the box to which the user wants to attach the new boxes.

Adding Text to the Organization Chart

Each organization chart box has seven field labels that can be used as prompts for entering organization chart information. The procedure to enter text in an organization chart box is given below:

- 1 Select the box in which the user wants to enter the text.
- 1 Type the text in the first field.
- 1 Press Enter key to move to the next field in the organization chart box.
- 1 Type the text in the second field.
- 1 Repeat the above steps as many times as necessary, to enter text in each of the fields of the box.
- 1 Once the typing is completed, click anywhere outside the box.

Placing a Chart on the Slide

Once the user has created the chart, the user has to exit from the Microsoft Organization Chart window and place that chart on the current slide in the presentation. The general procedure for exiting Microsoft Organization Chart and placing the chart on the slide is given below:

- 1 Choose **File->Exit** and Return to Presentation (presentation file)

This will display the message box “This object has been changed. Do you want to update object in presentation file (file name), before proceeding?”

- 1 Click “yes” to update the presentation and return to slide. (Or choose **file->Update** to update any changes on the slide while keeping the Microsoft Organization Chart open).

Using this procedure the employee’s organization chart has been prepared for a company. This is given in fig. 77.

Fig. 77: Organisation Chart

In circumstances when a person quits from the organization or when a person is promoted or demoted, it is necessary to edit the basic organization chart (i.e. by deleting or changing the position of the boxes). Suppose the contents of a box in the organization chart need to be changed. To achieve this edit the text in the chart box and then click outside the box to retain the changes.

Moving Boxes in an Organization Chart

This technique is mainly used to promote or demote personnel in an organization chart. The procedure to move a box in the organization chart is given below:

- 1 Select the box to be moved
- 1 Choose **Edit->Cut**
- 1 Select the box to which the box that is being moved is to be attached.
- 1 Choose **Edit -> Paste**

Deleting a Box from the organization chart

This technique is mainly used when a person quits the organization. The procedure to delete a box from the organization chart is given below:

- 1 Select the box to be deleted
- 1 Press **Del**

Formatting the organisation Chart

There are numerous ways to change the appearance of the Organization chart. For example, the user can change the fill color of the boxes or add a drop shadow to the boxes to set them off from the background of the chart.

Changing the Chart Styles

The procedure to change the style of an organization chart is given below:

Select the entire organization chart

Choose the Menu to open the toolbar that is given in Fig. 78.

Fig. 78: Toolbar

- 1 Select the new chart style

Working with text

The following procedure is used to change the text attributes such as font style, color, size etc.

- 1 Select the text to be edited.
- 1 Click Text menu from the menu bar.

The option will appear as given in fig. 79.

Fig. 79

- 1 Choose the required option (Font or Color) and select the new settings.

On selecting **Font**, it will open the window to change the font type, style, and size. A preview is available in this window. Choose **Color** and it will show the color palette from which we can select the required color.

Choose the required alignment (Left, right, Center) to justify the text.

Creating a Table

In PowerPoint 2000 we can create a table in two ways.

- 1 Drawing the table in PowerPoint using the native table tools
- 1 Inserting tables from the MS Word.

Drawing the Table

The following procedure is used to draw the tables:

Choose **Insert->Table** from the Standard toolbar.

The **Insert->table** dialog box will appear as given in Fig. 80.

Fig. 80

- 1 Enter the required number of rows and columns.

- 1 Click **OK**
- 1 If the number of rows or columns has to be increased, draw lines by using the tool displayed as pencil.

Using this pencil we can draw diagonal lines as well.

- 1 Enter the data into the table.

Editing tables such as inserting rows and columns, deleting rows and columns follow same procedure as editing tables in MS WORD

Inserting tables from MS WORD

In case we require using a table that is already created in Word into our presentation, we can copy a table in Word and Paste it into a slide.

The following procedure is used to insert a Word Table in the current presentation:

Select an AutoLayout that includes a table

Double click the table placeholder (or) choose **Insert-> Picture ->Microsoft Word Table**.

Indicate the number of columns and rows that we want.

Click **OK**

Enter the text for the table using Words table features to format or enhance the table.

The salary details for the trainees of the TriplePower Engineering Limited are entered in the table that is given in fig. 81.

Fig. 81

- 1 Click outside the table to close the table object.

Now the slide with the table will appear as given in fig. 82.

Fig. 82

7.4.14 Working with Multiple Slide

Reordering the slides in the Outline View

The order in which the slides are shown is very important to a presentation. The slides can be reordered in either the Outline View or the Slide Sorter View. If the slide title is moved the subheading also move along with it. However, if a subheading moved the title does not move with it. Therefore, if a user wants to reorder the slides in the Outline View, it is generally a good idea to first collapse the outline by clicking the **Collapse** button. This will display only the titles of the slide, making it easier to view all the slides. This ensures that all the text on each slide moves with that slide. The steps for rearranging the slides in the Outline View are given below:

- 1 Click on the **Collapse** button (shown in fig. 83)
- 1 Select the slide to be moved
- 1 To move the slide up or down in the outline, click on the **Move Up** (shown in fig 83) or **Move Down** button (shown in fig. 83) or place the mouse pointer on the slide icon and drag it up or down in the outline.
- 1 Click on the **Expand** button (shown in fig. 83) to return body text to the outline.

Fig. 83

Reordering the slides in the Slide Sorter View

The only disadvantage of moving slides in the Outline View is that the user cannot see how the presentation looks like when the slides are rearranged. If the user wants to see how the presentation actually looks when the slides are rearranged, then it is better if the user rearranges the Slide Sorter View.

The steps for rearranging the slide are given below:

- 1 Move to Slide Sorter View
- 1 Select the slide to be moved
- 1 Start dragging the slide. The mouse pointer becomes a slide icon
- 1 Drag the slide icon to a new position

Deleting a Slide

PowerPoint allows deleting any unnecessary slide quickly and easily. The steps for deleting the slides in the Slide Sorter View are given below:

- 1 Select the slide(s) to be deleted
- 1 Press the **Del** key

The steps for deleting the slides in the Slide View are given below:

- 1 Move to the slide the user intends to delete.
- 1 Choose **Edit->Delete Slide**

Hiding a Slide

If the user is unsure of deleting a slide, but does not want to use it currently, then he can hide the slide. The hidden slide is still a part of the presentation but is not displayed during the slide show. The steps for hiding a slide are:

- 1 Select the slide
- 1 Choose **Slide Show->Hide Slide**

Adding the Transition and Builds

A presentation can be made to look more spectacular by adding transitions and builds. Transition determines the method by which one slide moves off the screen and the next slide moves on, during a Slide Show. By setting the transition effect we can specify whether the slides advance automatically, and set the time interval for which each slide is displayed. In addition, we can build body text (add a major bullet and its sub points one by one) on each slide.

Transition Effects

What is Transition? Transition is a special effect used to introduce a slide during a Slide show. For example, the user can Fade Through black or Dissolve from one slide to another. The user can choose the transition effect for each slide. Transition effects can be set either in the Slide View or in the Slide Sorter View. The procedure for setting the transition effects is given below:

- 1 Display the slide in the Slide View or select the slides(s) in the Slide Sorter View for which the transition has to be applied.
- 1 Choose **Slide Show-> Slide Transition...** or, click the **Slide Transition** button in the **Slide Sorter** Toolbar (in the Slide Show View).
- 1 Select the desired transition effect from the drop down-list box in the Effect section of the Slide Transition dialog box (for e.g., in fig. 84, Box Out is the transition effect selected).
- 1 Select the desired speed (Slow/Medium/Fast) for the transition.
- 1 In the **Advance** area, if the **On mouse click** option is chosen then slides advance only when the user clicks the mouse.
- 1 If **Automatically after** is chosen, then the slides advance automatically after the specified time (in Seconds). The time is specified in the text box below the option.
- 1 Click the **Apply** button to add the transition and speed only to the selected slide(s). Click **Apply to All** button to add the transition to every slide in the presentation.

Fig. 84

In the Slide View, the user has the option of setting the selected transition effects either to the current slide alone or to all the slides in the presentation. On the other hand the Slide Sorter View helps in setting the transition to the selected slides (not all the slides in the presentation) at the same time.

Creating Self- Running Presentations

A self-running presentation helps in transmitting a message to a mass of people. A self- running presentation runs in an unattended setting such as a museum display, a point-of-sale display, a trade-show booth, or an information desk. The two types of self-running presentations are:

- 1 Interactive Presentation
- 1 Automatic Presentation

In the case of an interactive presentation, the presentation advances based on the timing set for each slide. The slide show can be paused if a particular topic is to be discussed in detail. Automatic presentations work best when each slide contains very concise subject matter.

The following steps help us in assigning the time for which each slide is displayed:

- 1 Go to Slide Sorter View or click **View-> Slide Sorter** and select the desired slides
- 1 In the Slide Transition Dialog Box (shown in fig. 84), two options are available. The Mouse Click option is the default setting. This option can be selected if user intends to use mouse to advance the slides.
- 1 If the user wants the slide transition to be automatic, then select the Automatically after n seconds option and enter the number of seconds for which the slide is to be displayed on the screen.
- 1 Click the **Apply** or **Apply to All** button based on whether the user wants the settings to be applied to all the slides in the presentation or only to the selected slides.
- 1 If the user is in Slide Sorter View then the time appears underneath the left corner of the slides.

Adding Transition Sounds

Transition sounds are sounds that can be played when the user makes the transition from one slide to another, or, when certain parts of the text appear on the slide. Such sounds make the presentation interesting for the audience. The transition sounds can be applied in any view.

The advantage of using Slide Sorter View is its use of the interactive transition symbols (shown in Fig. 85). The Slide Transition symbols appear in the lower left corner of each slide. On clicking this symbol, user can preview the slide transition as well as the transition sounds applied. The following steps are to be followed to add transition sound effects:

- 1 In the Slide Sorter View, select the slides for which the user wants to apply the same sound.
- 1 Choose **Insert->movies and Sounds**. Then choose **Sounds from Gallery...** if the sound is to be inserted from the Gallery (The gallery contains a collection of sounds under different categories). If the sound is to be inserted from a file, choose **Sounds from File....**
- 1 Sound effects can be added in the **Sound** area of the **Slide Transition** dialog box (shown in fig. 84).
- 1 The default setting is **No Sound**
- 1 Open the **Sound drop-down** list and choose the desired sound
- 1 If the sound has to be played repeatedly, check **Loop Unit Next Sound**

Fig. 85

Adding Builds

Although text slides are essential for imparting information for any presentation, they are not very interesting. A **Build** is a special effect that determines how the objects appear on the slide. This Powerful feature gives a greater control during a slide show by drawing the attention of the audience towards the item discussed. One of the most important enhancements made from the PowerPoint97 is ability to build charts. The build feature is also referred to as **animation** to encompass the different types of effects available.

Working with Text Preset Animation

There are two ways to build text animation in the slide show. PowerPoint has built-in or preset animation effects designed to help the user enhance the presentation. The animation effects can also be customized. We can preset the animation in either the Slide Sorter View or the Slide View. Slide Sorter View provides a variety of custom animation options and allows adding enhancements to multiple slides at a time.

The two methods of applying a transition effect are given below:

- 1 Use the Text Preset Animation drop-down list box on the **Slide Sorter** toolbar. Select from the 46 transition effects listed (OR)
- 1 Choose **Slide Show -> Preset Animation** to find the 12 text animation effects.

Applying a Build Transition Effect

We can apply a transition effect to a build. Each bullet or chart item can fly from the left or peek from the bottom. To select a transition, the following steps must be followed:

In the Slide View, select the **Custom Animation** tool from the Animation effects toolbar or choose **Slide Show -> Custom Animation**. The **Custom Animation** dialog box appears as shown in fig. 86.

- 1 In the **Timing** tab, select the item to be enhanced.
- 1 Click the **Effects** tab. From the **Entry Animation and sound** area, use the Effects drop-down boxes to choose the transition style.
- 1 Choose **Preview**. The Miniature of the slide shows how the transition will work
- 1 Click **OK** to apply the transition effect.

Fig. 86

Adding Notes to a Presentation

For every slide in the presentation, the user can create **Notes Page**, containing a slide image and additional space for the speaker notes. This can be a helpful reference tool. The Notes Page is formatted based on the Notes Master. The steps for adding notes to a presentation are:

- 1 Move to the slide for which the notes are to be created.
- 1 Choose **View-> Notes Pages**. The Notes Page for the current slide appears.
- 1 Type the text in the Notes Area (the box in which “click to add Text” is given).
- 1 Drag the vertical scroll bar to move to another slide.
- 1 Repeat the above steps until the user has completed writing notes.
- 1 Close the notes pages by choosing **View-> Normal**.

Editing items on the notes master

- 1 On the View menu, choose Master -> Notes Master.
- 1 Resize or change the location of the slide image or notes box to suit the requirement.

- 1 Add any items like art, text, headers and footers, date, time, etc. on the notes master.
- 1 Click **Close** on the **Master** toolbar.

The Notes Master controls the format and the placement of the following items:

- 1 **Background Items** - Items like page number, Date, etc..., added to Notes Master is displayed on each Notes page.
- 1 **Text Style Attributes** – Similar to the Slide Master, the Notes Master has a Master Body object with five indent levels that can be formatted. If the format of any master text is changed, that format change affects every Notes Page.
- 1 **Slide Image**- The size and position of a slide image can be changed.

7.4.15 Slide Setup

When a new presentation is opened, PowerPoint creates slides that have a width of 10 inches and a height of 7.5 inches with the landscape orientation. However, we can change these slide settings. The procedure to change these settings is given below:

- 1 Choose **File-> Page Setup**. The dialog box shown in Fig 87 is opened.
- 1 Choose an option from the list box under Slides sized for label
- 1 Change the **Width** and **Height** of the slides, if necessary.
- 1 The **Number Slides from** determines the starting number of the slides. Change it if necessary.
- 1 Change the orientation of the Slides, Notes, and Handouts, and outline if needed.
- 1 Click **Ok** button

Fig. 87

(**Note:** The default orientation for notes, handouts, and outlines is Portrait orientation. The default orientation for slides is Landscape orientation.)

7.4.16 Running the Presentation

To start running a presentation the user should click the slideshow view select **slide show-> view show**. The laptop support disables any screen saver power-saving mode while running the presentation, preventing unwanted interruptions.

In some circumstances, the user may not like to display the slide show or play the slides in the same order as the slides were built. Power point anticipates needs and provides tools for changing the order of the slides during a presentation. The following paragraphs explain these tools.

Navigating Through A Presentation

PowerPoint offers several ways of navigating through the presentation. To navigate through the presentation in linear way, click the left mouse button after all the objects on the slide are loaded. During the slide show, an arrow appears in the lower left corner of the screen. On clicking the arrow, a menu has the following options:

- 1 **Next:** Takes us to the next slide
- 1 **Previous:** Takes us to the previous slide
- 1 **Go-> Slide Navigator:** Opens the Slide Navigator dialog box, using this we can go to any slide by selecting it in the dialog box.
- 1 **Go-> By Title:** shows a list of all the slides of the show in the order and with their titles. The user can choose the slide to view by clicking on the corresponding title.
- 1 **Go->Custom Show:** Shows a list of the custom shows available for the presentation. The user can select any one of them to view it.
- 1 **Go->Previously Viewed:** shows the last viewed slide.
- 1 **Meeting Minder...**Opens the Meeting Minder dialog box used to schedule new meetings or to view scheduled meetings
- 1 **Pointer options-> Automatic:** Shows the default mouse pointer.
- 1 **Pointer options-> Hidden:** Hides the mouse pointer and the arrow.
- 1 **Pointer options-> Pen:** Changes the mouse pointer to a pen that could be used to draw on the slide.
- 1 **Pointer options-> Pen colour:** Gives a list of colours for the pen.
- 1 **Screen->Pause:** Used to pause the show
- 1 **Screen->Black Screen:** Changes the whole screen to black colour. On choosing this option, the whole screen becomes black and this option is replaced by **Unblack Screen** option to revert to the original screen.
- 1 **Screen-> Erase Pen:** Undoes the changes made with the pen
- 1 **Help:** Lists the shortcut keys that can be used during the slide show. The dialog box that appears on choosing this option is shown in Fig 88. This dialog box can also be viewed by pressing the F1 key.
- 1 **End Show:** Stops the slide show.

Fig. 88

While the left mouse button provides a linear path through the slide show, there are times when the user intends to navigate differently. The user can navigate in a non-linear fashion via a custom show. A custom show can be created in the following manner:

- 1 **Choose Slide Show -> Custom Shows...** the custom dialog box opens (shown in Fig. 89)

Fig. 89

- 1 Click the **New...** button.
- 1 The Define Custom Show dialog box will appear as shown in Fig 90. This is where the user arranges the slides in a unique order for later playback.

- 1 Rename the show in the Slide Show name text box.
- 1 Select the first slide for the new show.
- 1 Click Add button or double click in the title of the slide to copy it to the window on the right. This adds the slide to the custom Show.

Fig. 90

- 1 If a slide has to be removed from the custom show, select the appropriate slide and click the Remove button.
- 1 Rearrange the slides in the new show by clicking the desired slide and by using the up and down arrows at the right edge of the window.
- 1 Click OK after building a custom show.
- 1 Click the Close button to close the Custom Shows dialog box.

(**Note:** The order in which the slides appear in the right side window of the Define Custom Show dialog box determines the order in which they will be displayed during the show.)

To view a custom show:

- 1 Choose **Slide Show -> Custom Shows....** The Custom Shows dialog box is opened.
- 1 Select the Custom show to be viewed
- 1 Click **Show**.

To change a Custom Show:

- 1 Choose **Slide Show -> Custom Shows....** The Custom Shows dialog box is opened.
- 1 Select the custom show to be changed.
- 1 Click **Edit....** the Define Custom Show dialog box is opened.
- 1 Make the necessary changes.

- 1 Click **Ok**.
- 1 Click **Close** to close the **Custom Shows** dialog box.

To remove a Custom Show:

- 1 Choose **Slide Show -> Custom Shows...** The Custom Shows dialog box is opened.
- 1 Select the Custom show to be removed
- 1 Click **Remove**.
- 1 Click **Close**.

Self Check Exercises

15) State whether the following statements are True/False:

- 1) A presentation cannot be created using templates
- 2) New time for which each slide is displayed can be set in the slide Show View.
- 3) The slide can only be deleted in the slide Sorter View or Outline View.
- 4) The MS-PowerPoint dialog box that appears at the start of MS-PowerPoint does not give the option to open an existing presentation.
- 5) The existing color scheme of all the slides can be changed at the same time.
- 6) The Slide Sorter View can be used to record the slides in a presentation.

16) 1) What are the different ways for creating a new presentation?

- 2) What is a presentation consisting of?
- 3) How many views the MS-PowerPoint support?
- 4) In how many ways you can create a table in MS-PowerPoint?

Note: i) Write your answer in the Space given below.
ii) Check your answers with the answers given at the end of this unit.

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7.5 MS ACCESS

7.5.1 Introduction

MS Access is a relational database management system used on desktop computers to manage information on different levels for different purposes. It is a powerful package used for creating and managing databases. It has certain built in features which assist in construction and viewing of information.

Using Microsoft Access, one can manage information from a single database file. Within the file, one can use:

- 1 **Tables** to store data.
- 1 **Queries** to find and retrieve the data that is required.
- 1 **Forms** to view, add, and update data in tables.
- 1 **Reports** to analyze or print data in a specific layout.
- 1 **Data access pages** to view, update, or analyze the database's data from the Internet or an intranet.

For a thorough knowledge of how MS Access works it is important to understand the hierarchy of a database in Access.

Database File is the main file that covers the entire database that can be saved in the hard drive or any other storage device. The extension for this file is .mdb.

Table is a collection of data on a specific aspect. A database may contain multiple tables viz. data on books, users, vendors etc. in a library.

Fields are different categories within a table. For instance in a table for books in a library, fields like author name, title, publisher etc. are required.

Datatypes are the properties of each field which could be a text (numbers, letters and punctuation), number (even decimal points) or date (data on date and time).

Value is the element entered for each field for instance a particular author's surname.

7.5.2 Starting MS Access

The Microsoft Access can be opened by using any of the following methods:

- 1) The top most section of the interface is the title bar comprising the system icon, title bar area and the windows system buttons.
- 2) The menu bar is just below the title bar comprising the following tabs:

File- containing menu items with the options to open, close, create new, save, print, send, recently opened databases and exit .

Edit- this provides functions like cut, copy, paste, delete

Software

View- to view different database objects (tables, queries, forms, reports), making the icons small or large, toolbars etc.

Insert- to insert a new Table, Query, Form, Report etc. this menu may be used.

Tools- This menu button provides a variety of tools to check spelling, provide relationship between tables, perform analysis etc.

Window- to switch between different open databases.

Help- this provides help on access. One can search through the help topics with the index.

Tabs for the main database Window provides the following options:

- 1 Tables (tables available in the database)
- 1 Queries (any queries saved in the database)
- 1 Forms (forms saved in the database)
- 1 Reports (reports saved in the database)
- 1 Macros (any short programme saved in the database)
- 1 Modules (Visual basic for application procedures stored in the database.

7.5.4 Tables

A table is a collection of data on a specific aspect viz. student records, user information etc. In tables data are organized in rows and columns. Each row represents a particular record and a column represents a particular field.

In Access, tables can be created either through the help of wizard or through the design view option. Let us see how a table is created from scratch.

- 1) Click the New button, then highlight the Design View button in the dialogue box that appears and click the OK button.

2) In the Table design view fill in the Field Name, Data Type, and Description for each field as shown in the figure.

3) After filling in all the field it is important to define the primary key. Primary Key uniquely identifies the records in the table. In this example User ID has been allotted Primary Key. For this click the right mouse button on the User ID field and choose Primary Key from the pop-up menu that appears. A small key will appear next to the field name on the left side indicating that it is the primary key.

4) Save the table after this. In the File menu choose Save, a dialogue box will appear in which type the name of the new table. By default Access gives names like Table 1, Table 2 etc. Simply overwrite this with a new name.

5) After defining the table next step is to add data in the table. Data can be added, deleted or modified in tables using the spread sheet like interface. Fill in the records with all fields as shown in the figure. Save the new data by pulling down the File menu and then choosing Save button.

To navigate to other records in the table, use the navigation bar at the bottom of the screen.

For modifying existing data, navigate to the record to be modified and tab to the appropriate field. Use the arrow keys and the delete or backspace keys to change the existing data. To delete a record, first navigate to the particular record then pull down the Edit menu and choose the Delete menu item.

7.5.5 Queries

Queries facilitate fast retrieval and display of data from tables. This is very useful when tables are very large. Queries can be used to retrieve information from a single table or multiple tables. Queries help in limiting the data in a table for a specific goal. For instance in a user database we may require information about the user's name and user id. Like tables, queries are managed from the Database Window under the menu tab.

7.5.6 Forms

Forms are window objects used to view and/or enter data in the database. They offer a more user-friendly interface by adding labels for each field and other helpful information. A form can combine data from one or more tables or queries. Forms can be created by hand using a Design View or through wizards.

Forms can have different layouts or arrangement of the labels and fields on the screen:

- 1 Columnar - labels are placed to the left of each field. Most suitable for viewing data one record at a time.
- 1 Tabular - field labels are placed at the top of the screen and the records are displayed below like a spreadsheet. Most suitable for displaying multiple records of data at a time.
- 1 Datasheet - data appears in the similar fashion as when viewing or adding data to a table.
- 1 Justified - labels are placed above each field with the fields spread out on the form. This is suitable for viewing a single record.

7.5.7 Reports

A report is an organized document that can be used to print from data. Reports add formatting to the output including fonts, colors, backgrounds and other features. Reports are usually printed out on paper rather than just viewed on the screen. A report can include data from various tables, queries, forms or data imported from other packages. There are many ways to create reports to show summarization, sorting and layout of the data in an organized form.

7.5.8 Macros and Modules

Macros are a set of actions that one can create to help in automating common tasks. For example, one can run a macro that prints a report when a user clicks

a command button. By using groups of macros, one can perform several tasks at once. It is a set of one or more actions that each performs a particular operation, such as opening a form or printing a report.

A module is basically a collection of declarations, statements, and procedures stored together as one named unit to organize Microsoft Visual Basic code. Microsoft Access has two types of modules: class modules and standard modules.

Form and report modules are class modules that are associated with a particular form or report. Form and report modules often contain event procedures that run in response to an event on the form or report. Event procedures can be used to control the behavior of the forms and reports, and their response to user actions, such as clicking a command button.

When first event procedure is created for a form or report, Microsoft Access automatically creates an associated form or report module. Standard modules contain general procedures that aren't associated with any other object, and frequently used procedures that can be run from anywhere within the database.

7.6 SUMMARY

In this Unit you learnt how to use MS Word for word processing, MS Excel for creating spreadsheet, MS PowerPoint and MS Access for Creating Databases.

Word Processing means preparing and formatting documents. MS Word is a very popular word processing software all over the world. It includes features like creating tables, charts, drawing and databases within the document. It also has capabilities like mail merging and linking components created in other programme.

Excel provides a tool for calculating, manipulating, analyzing and presenting information. In Excel, Workbooks are files that combine more than one spread sheets in one file. A worksheet can be restructure by adding and deleting cells, rows and columns. In Excel, formula build up powerful arithmetic operations by using arithmetic operations. Functions are build in formulae for specific computation. MS Excel besides compiling and calculating numbers also represents the numbers and their solution graphically using charts.

PowerPoint is a sophisticated presentation graphics software package. Which includes all of the necessary tools for creating a higher quality, visually-pleasing presentation of information. A presentation is a collection of slides, speaker notes, handouts, or media clips providing everything one needs to communicate clearly to others.

MS Access is a Relational Database Management System (RDBMS). It is a powerful program to create and manage databases. It can be used for personal information management in a small business to organize and manage all available data or in an enterprise to communicate with servers. Using Access one can manage information from a single database file. Within the file one can use table, quarries, forms and reports. It also has facility for customization using macros and modules.

7.7 ANSWERS TO SELF CHECK EXERCISES

1) True/False

- 1) False
- 2) True

Software

- 3) False
 - 4) True
 - 5) True
- 2) Fill in the blanks
- 1) Bellow
 - 2) Blueprints, patterns
 - 3) Drawing
 - 4) UNDO
- 3) There are three ways of creation a word document:
- 1) Using Wizards
 - 2) Using Templates
 - 3) By Clicking Microsoft words from Start Programs
- 4) True/False
- 1) False
 - 2) True
 - 3) True
 - 4) True
 - 5) True
- 5) Fill in the blanks
- 1) Find
 - 2) Thesaurus
 - 3) Red wavy
 - 4) Auto correct
- 6) True/False
- 1) False
 - 2) True
 - 3) True
 - 4) True
 - 5) True
- 7) Fill in the blanks
- 1) Rows, Columns
 - 2) Table
 - 3) Insert Table
- 8) True/False
- 1) True
 - 2) True
 - 3) True
- 9) Fill in the blanks

- 1) Table
 - 2) Three
 - 3) Letter or envelopes
- 10) True/False
- 1) True
 - 2) True
 - 3) True
 - 4) True
- 11) Fill in the blanks
- 1) Rows, columns
 - 2) .xls
 - 3) Edit
 - 4) Right, Left
- 12) True/False
- 1) True
 - 2) False
 - 3) True
 - 4) True
- 13) Fill in the blanks
- 1) Text, numeric and logical
 - 2) Five
 - 3) AutoSum
 - 4) Range
 - 5) MAX
- 14) True/False
- 1) True
 - 2) True
 - 3) True
 - 4) False
- 15) Fill in the blanks
- 1) Chart
 - 2) Fonts
 - 3) AutoFormat
 - 4) Series
- 16) The components of the chart are:
- Axes, Gridlines, Legends, Headings and Plot area.
- 17) True or False:
- 1) False
 - 2) True

- 3) True
 - 4) False
 - 5) True
 - 6) True
- 18) There are three ways to create a new presentation:
- 1 AutoContent Wizard
 - 1 Template
 - 1 Blank Presentation
- 19) A presentation is a collection of Slides, Handouts, speaker notes and media clips.
- 20) MS-PowerPoint supports following views:
- 1 Slide View
 - 1 Slide Sorter View
 - 1 Outline View
 - 1 Notes pages View
 - 1 Slide Show View
- 21) In MS-PowerPoint we can create a table in two ways:
- 1 Drawing the table in PowerPoint using the native table tools.
 - 1 Inserting tables from the MS Word.

7.8 KEYWORDS

- Cropping** : Trimming off unwanted parts of a picture, drawing or other graphic image.
- Drag and Drop** : A program feature that allows the moving of an element such as a paragraph of copy or a clip art image between two document or programs as both are visible on the computer screen.
- Spreadsheet** : A document with data arranged in rows and columns that can be adjusted for the entry of additional data and manipulated for reporting.

7.9 REFERENCE

Ericson, Gary (2001) Microsoft Office 2000 Resources Kit New Delhi : Prentice Hall of India.