6 Basics of Spreadsheet

6.1 INTRODUCTION

A spreadsheet is a large sheet having data and information arranged in rows and columns. As you know, Excel is one of the most widely used spreadsheet applications. It is a part of Microsoft Office suite. Spreadsheet is quite useful in entering, editing, analysing and storing data. Arithmetic operations with numerical data such as addition, subtraction, multiplication and division can be done using Excel. You can sort numbers/characters according to some given criteria (like ascending, descending etc.) and use simple financial, mathematical and statistical formulas.

6.2 OBJECTIVES

After going through this lesson you would be able to:

- explain the basic features of MS Excel 2007
- set up pages and their printing
- modify a worksheet
- enter and edit data in a worksheet
- work on keyboard shortcuts
6.3 FEATURES OF SPREADSHEETS

There are a number of features that are available in Excel to make your task easier. Some of the main features are:

1. **AutoSum** - helps you to add the contents of a cluster of adjacent cells.
2. **List AutoFill** - automatically extends cell formatting when a new item is added to the end of a list.
3. **AutoFill** - allows you to quickly fill cells with repetitive or sequential data such as chronological dates or numbers, and repeated text. AutoFill can also be used to copy functions. You can also alter text and numbers with this feature.
4. **AutoShapes** toolbar will allow you to draw a number of geometrical shapes, arrows, flowchart elements, stars and more. With these shapes you can draw your own graphs.
5. **Wizard** - guides you to work effectively while you work by displaying various helpful tips and techniques based on what you are doing.
6. **Drag and Drop** - it will help you to reposition the data and text by simply dragging the data with the help of mouse.
7. **Charts** - it will help you in presenting a graphical representation of your data in the form of Pie, Bar, Line charts and more.
8. **PivotTable** - it flips and sums data in seconds and allows you to perform data analysis and generating reports like periodic financial statements, statistical reports, etc. You can also analyse complex data relationships graphically.
9. **Shortcut Menus** - the commands that are appropriate to the task that you are doing will appear by clicking the right mouse button.

6.4 FEATURES OF MS EXCEL 2007

(a) Results-oriented user interface

The new results-oriented user interface makes it easy for you to work in Microsoft Office Excel. Commands and features that were often buried in complex menus and toolbars are now easier to find on task-oriented tabs that contain logical groups of commands and features. Many dialog boxes are replaced with
drop-down galleries that display the available options, and descriptive tooltips or sample previews are provided to help you choose the right option.

(b) More rows and columns, and other new limits

The grid of Excel 2007 is having 1,048,576 rows and 16,384 columns. Thus it provides a user with 1,500% more rows and 6,300% more columns than the Microsoft Office Excel 2003. The last column in Excel 2007, is XFD instead of IV in Excel 2003. The number of cell references per cell is increased to limit as maximum available memory. The formatting types are also increased to unlimited number in the same workbook as compared to the earlier limit of four thousand types of formatting.

(c) Office themes and Excel styles

By the help of a specific style, in Excel 2007, the data can be quickly formatted in the worksheet by the help of a theme. You can share themes across other releases of Office 2007 e.g. Word 2007, Power point 2007.

Applying a theme: Themes are used to make great-looking documents. A theme is defined as a predefined set of colors, lines, fonts and fills effects. Theme can be applied to a specific item like tables, charts or it can also be applied to entire workbook.

Using styles: A predefined theme based format is called style. It can be applied to change the appearance of Excel charts, tables, PivotTables, diagrams or shapes. Styles can be customized to meet user specific requirements. It is important to note that in case of charts you cannot create your own styles, but you can use preexisting styles.

(d) Rich conditional formatting

It is easy to use and apply conditional formats. A few tricks are required to observe the relationships in data, which helps to great extent for analysis purposes.

Important data trends and exceptions can be easily observed by the help of implementation and management of multiple
conditional formatting rules which apply rich visual formatting in the form of data bars, gradient colors, and icon sets to data that meets those rules.

(e) Easy formula writing

Some improvements that make formula writing much easier are as given below

Resizable formula bar: To prevent the formulas to cover the other data in worksheet, the formula bar automatically resizes to accommodate complex, long formulas. More levels of nesting can be used to write longer formulas as an enhanced feature of earlier versions of Excel.

Function AutoComplete: Function AutoComplete feature helps to write the proper formula syntax more quickly. It helps in detecting the functions that you want to use and helps in completing the formula.

Structured references: Excel 2007 provides structured references to refer the named ranges and tables in a formula. This is in addition to the cell references, like D1 and A1C1.

Easy access to named ranges: You can organize, update and handle multiple named ranges in a central location by the help of Excel 2007. This helps you to work on your worksheet, interpret its data and formulas.

(f) Improved sorting and filtering

Enhanced filtering and sorting techniques of Excel can be used to arrange worksheet data more quickly to find the desired answers. In Excel 2007 you can sort data by color and by more than 3 levels.

You can also filter data by color or by dates, display more than 1000 items in the AutoFilter drop-down list, select multiple items to filter, and filter data in PivotTables.
6.5 STARTING EXCEL

1. Click on (with the help of mouse) the Start button on the Taskbar at the bottom left corner of the Screen.

2. Highlight the All Programs item. The program menu will open.

3. Select Microsoft Office from the list of programs. (these steps are shown Figure 6.1)

4. Click on Microsoft Excel.

Symbolically these actions are shown below.

Select Start→All Programs→Microsoft Office→Microsoft Excel 2007 commands from your menu bar.

![Microsoft Excel 2007 menu](Fig. 6.1)
Throughout the text of your lessons on MS Excel we will be showing the symbol→ to indicate the direction (steps) you have to follow.

You can also start Excel 2007 through run menu as shown below in figure 6.2.

Type excel in the open text box and click OK button. It will start MS Excel 2007.
6.6 EXCEL WORKSHEET

Excel allows you to create worksheets much like paper ledgers that can perform automatic calculations. Each Excel file is a workbook that can hold many worksheets. The worksheet is a grid of columns (designated by letters) and rows (designated by numbers). The letters and numbers of the columns and rows (called labels) are displayed in gray buttons across the top and left side of the worksheet. The intersection of a column and a row is called a cell. Each cell on the spreadsheet has a cell address that is the column letter and the row number. Cells can contain text, numbers, or mathematical formulas.

![Fig. 6.3](image-url)
6.6.1 Selecting, Adding and Renaming Worksheets

The worksheets in a workbook are accessible by clicking the worksheet tabs just above the status bar. By default, three worksheets are included in each workbook. One can add more worksheet in a workbook also. To do that

**Insert a new worksheet**

To quickly insert a new worksheet at the end of existing worksheets

Click the Insert Worksheet tab as shown below (encircled with blue circle)

![New Worksheet](image)

**Fig. 6.4**

**To insert a new worksheet before an existing worksheet,**

Select the worksheet before which you want to insert a new worksheet then follow steps as 

1. Select Home tab
2. Click cells Group
3. Click Insert
4. Click Insert Sheet

Say if you want to insert a new worksheet before a sheet name Physics
### Fig. 6.5

#### Data Entry Operations

<table>
<thead>
<tr>
<th>Name</th>
<th>Teacher</th>
<th>Rollno</th>
<th>Subjects</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr. J.L. Bakshi</td>
<td>Mr. Sohan Singh</td>
<td>1</td>
<td>Mathematics</td>
<td>R</td>
</tr>
</tbody>
</table>

**Excel Sheet:**

1. Select the cell you want to insert or delete data.
2. Click on the ‘Insert’ menu and select the appropriate option (e.g., Insert Sheet).
3. Alternatively, you can press `Ctrl + I` to insert a new sheet.

**Insert Sheet:**

- Click on the ‘Insert’ menu.
- Select ‘Insert Sheet’ from the list.
- Press `Ctrl + I` to insert a new sheet.
A new sheet by the name sheet1 is added before the work sheet named Physics.

**Alternative Method to Insert a new worksheet**

Right click on the sheet before which you want to insert a new sheet.

Select Insert Option from Pop up Menu.

![Image](image.png)
To rename a worksheet
1. To rename a worksheet follow the steps as
2. Right click on the worksheet tab which you want to rename
3. Select rename from the Pop Up menu
4. Type new name for the Worksheet (Chemistry in our example)

Fig. 6.7
6.7 SELECTING CELLS AND RANGES

To enter data into your worksheet you must first have a cell or range selected. When you open an Excel worksheet, cell A1 is already active. An active cell will appear to have a darker border around it than other cells on the worksheet. The simplest way to select a cell is with your mouse pointer. Move your mouse to the desired cell and click on it with right button. Whatever you type goes into the cell. To select a range of cells, click on one cell, hold down the left mouse button and drag the mouse pointer to the last cell of the range you want to select. You can also use keyboard shortcuts given at the end of this lesson for selecting cells.

Another way to select particular range of cells is

1. Go to Name Box
2. Select range by typing (A1:C5)
3. Press Enter
4. All the cells between range A1 to C5 will be selected.

Steps are explained pictorially as
6.8 NAVIGATING THE WORKSHEET

You can advance through your worksheet by rows with the vertical scrollbar or by columns with the horizontal scrollbar. When you click and drag the thumb tab on the scrollbar, a Screen Tip will appear alongside the bar identifying the row or column to which your view is advancing.
**Move or scroll through a worksheet**

We can scroll through worksheet by different ways. One can use mouse, scroll bar or arrow keys to move between cells and to different areas of the worksheet.

To move between cells on a worksheet, click any cell or use the arrow keys. When you move to a cell, it becomes the active cell.

**Scroll and zoom by using the mouse**

Some mouse devices and other pointing devices, such as the Microsoft IntelliMouse pointing device, have built-in scrolling and zooming capabilities that you can use to move around and zoom in or out on your worksheet or chart sheet (chart sheet: A sheet in a workbook that contains only a chart. A chart sheet is beneficial when you want to view a chart or a PivotChart report separately from worksheet data or a PivotTable report.). You can also use the mouse to scroll in dialog boxes that have drop-down lists with scroll bars.

**6.9 DATA ENTRY**

You can enter various kinds of data in a cell.

1. **Numbers**: Your numbers can be from the entire range of numeric values: whole numbers (example, 25), decimals (example, 25.67) and scientific notation (example, 0.2567E+2). Excel displays scientific notation automatically if you enter a number that is too long to be viewed in its entirety in a cell. You may also see number signs (# # # # #) when a cell entry is too long. Widening the column that contains the cell with the above signs will allow you to read the number.

2. **Text**: First select the cell in which data has to be entered and type the text. Press ENTER key to finish your text entry. The text will be displayed in the active cell as well as in the Formula bar. If you have numbers to be treated as text use an apostrophe (’) as the first character. You cannot do calculations with these kind of data entry.

3. **Date and Time**: When you enter dates and times, Excel converts these entries into serial numbers and kept as background information. However, the dates and times will be displayed to you on the worksheet in a format opted by you.
4. **Data in Series:** You can fill a range of cells either with the same value or with a series of values with the help of AutoFill.

### 6.10 EDITING DATA

Editing your Excel worksheet data is very easy. You can edit your data by any of the following ways:

1. Select the cell containing data to be edited. Press F2. Use Backspace key and erase the wrong entry. Retype the correct entry.

2. Select the cell and simply retype the correct entry.

3. If you want only to clear the contents of the cell, select the cell and press Delete key.

4. To bring back the previous entry, either click on **Undo** button on standard Toolbar or select **Edit→Undo** command or use keyboard shortcuts **CTRL+Z**.

### 6.11 CELL REFERENCES

Each worksheet contains a number of columns and rows. Each cell of the worksheet has a unique reference. For example, A8, refers to the cell containing column number A and row number 8.

### 6.12 FIND AND REPLACE DATA IN A WORKSHEET

You may want to locate a number or text that is already typed in the worksheet. This is done through **Home Tab→Find**. You can also locate your data and replace with new data with **Home Tab→Find→Replace**.

![Fig. 6.9](image)
6.13 MODIFYING A WORKSHEET

6.13.1 Insert Cells, Rows, Columns and Delete Cells

Insert blank cells on a worksheet

- Select the cell or the range (range: Two or more cells on a sheet. The cells in a range can be adjacent or nonadjacent.) of cells where you want to insert the new blank cells. Select the same number of cells as you want to insert. For example, to insert five blank cells, you need to select five cells.
- On the Home tab, in the Cells group, click the arrow next to Insert, and then click Insert Cells.
- You can also right-click the selected cells and then click Insert on the shortcut menu.
- In the Insert dialog box, click the direction in which you want to shift the surrounding cells.

Insert rows on a worksheet

1. Do one of the following:
   - To insert a single row, select the row or a cell in the row above which you want to insert the new row. For example, to insert a new row above row 5, click a cell in row 5.
   - To insert multiple rows, select the rows above which you want to insert rows. Select the same number of rows as you want to insert. For example, to insert three new rows, you need to select three rows.
   - To insert nonadjacent rows, hold down CTRL while you select nonadjacent rows.
2. On the Home tab, in the Cells group, click the arrow next to Insert, and then click Insert Sheet Rows.

Insert columns on a worksheet

1. Do one of the following:
   - To insert a single column, select the column or a cell in the column immediately to the right of where you
want to insert the new column. For example, to insert a new column to the left of column B, click a cell in column B.

- To insert multiple columns, select the columns immediately to the right of where you want to insert columns. Select the same number of columns as you want to insert. For example, to insert three new columns, you need to select three columns.

- To insert nonadjacent columns, hold down CTRL while you select nonadjacent columns.

2. On the Home tab, in the Cells group, click the arrow next to Insert, and then click Insert Sheet Columns.

Delete cells, rows, or columns

1. Select the cells, rows, or columns that you want to delete.

2. On the Home tab, in the Cells group, do one of the following:

   - To delete selected cells, click the arrow next to Delete, and then click Delete Cells.

   - To delete selected rows, click the arrow next to Delete, and then click Delete Sheet Rows.

   - To delete selected columns, click the arrow next to Delete, and then click Delete Sheet Columns.

3. If you are deleting a cell or a range of cells, in the Delete dialog box, click Shift cells left, Shift cells up, Entire row, or Entire column.

6.13.2 Resizing Rows and Columns

Set a column to a specific width

1. Select the column or columns that you want to change.

2. On the Home tab, in the Cells group, click Format.
3. Under **Cell Size**, click **Column Width**.

4. In the **Column width** box, type the value that you want.

**Change the column width to fit the contents**

1. Select the column or columns that you want to change.
2. On the **Home** tab, in the **Cells** group, click **Format**.
3. Under **Cell Size**, click **AutoFit Column Width**.

To quickly autofit all columns on the worksheet, click the **Select All** button and then double-click any boundary between two column headings.

**Match the column width to another column**

1. Select a cell in the column.
2. On the **Home** tab, in the **Clipboard** group, click **Copy**, and then select the target column.
3. On the **Home** tab, in the **Clipboard** group, click the arrow below **Paste**, and then click **Paste Special**.
4. Under **Paste**, select **Column widths**.

**Change the width of columns by using the mouse**

Do one of the following:

- To change the width of one column, drag the boundary on the right side of the column heading until the column width changes to the desired size that you want.

- To change the width of multiple columns, select the columns that you want to change, and then drag a boundary to the right of a selected column heading.

- To change the width of columns to fit the contents, select the column or columns that you want to change, and then double-click the boundary to the right of a selected column heading.
To change the width of all columns on the worksheet, click the Select All button, and then drag the boundary of any column heading.

**Set a row to a specific height**

1. Select the row or rows that you want to change.
2. On the Home tab, in the Cells group, click Format.
3. Under Cell Size, click Row Height.
4. In the Row height box, type the value that you want.

**Change the row height to fit the contents**

1. Select the row or rows that you want to change.
2. On the Home tab, in the Cells group, click Format.
3. Under Cell Size, click AutoFit Row Height.
   - To quickly autofit all rows on the worksheet, click the Select All button and then double-click the boundary below one of the row headings.

**Change the height of rows by using the mouse**

Do one of the following:

- To change the row height of one row, drag the boundary below the row heading until the row is the height that you want.

- To change the row height of multiple rows, select the rows that you want to change, and then drag the boundary below one of the selected row headings.

- To change the row height for all rows on the worksheet, click the Select All button, and then drag the boundary below any row heading.

- To change the row height to fit the contents, double-click

**6.13.3 Move or copy entire cells**

When you move or copy a cell, Excel moves or copies the entire cell, including formulas and their resulting values, cell formats, and comments.
1. Select the cells that you want to move or copy.

2. On the Home tab, in the Clipboard group, do one of the following:
   - To move cells, click Cut. Keyboard shortcut or CTRL+X.
   - To copy cells, click Copy. Keyboard shortcut or CTRL+C.

3. Select the upper-left cell of the paste area.

4. On the Home tab, in the Clipboard group, click Paste. Or CTRL+V.

**Move or copy entire cells by using the mouse**

By default, drag-and-drop editing is turned on so that you can use the mouse to move and copy cells.

1. Select the cells or range of cells that you want to move or copy.

2. Do one of the following:
   - To move a cell or range of cells, point to the border of the selection. When the pointer becomes a move pointer, drag the cell or range of cells to another location.
   - To copy a cell or range of cells, hold down CTRL while you point to the border of the selection. When the pointer becomes a copy pointer, drag the cell or range of cells to another location.

**Insert moved or copied cells between existing cells**

1. Select the cell or range of cells that contains the data that you want to move or copy.

2. On the Home tab, in the Clipboard group, do one of the following:
   - To move the selection, click Cut. or press CTRL+X.
   - To copy the selection, click Copy. or press CTRL+C.
3. Right-click the upper-left cell of the paste area, and then click **Insert Cut Cells** or **Insert Copied Cells** on the shortcut menu.

4. In the **Insert Paste** dialog box, click the direction in which you want to shift the surrounding cells.

**Prevent copied blank cells from replacing data**

1. Select the range of cells that contains blank cells.

2. On the **Home** tab, in the **Clipboard** group, click **Copy**.  
   **Keyboard shortcut** You can also press CTRL+C.

3. Select the upper-left cell of the paste area.

4. On the **Home** tab, in the **Clipboard** group, click the arrow below **Paste** , and then click **Paste Special**.

5. Select the **Skip blanks** check box.

**Move or copy the contents of a cell**

1. Double-click the cell that contains the data that you want to move or copy.

2. In the cell, select the characters that you want to move or copy.

<table>
<thead>
<tr>
<th>To select the contents of a cell</th>
<th>Do this</th>
</tr>
</thead>
<tbody>
<tr>
<td>In the cell</td>
<td>Double-click the cell, and then drag across the contents of the cell that you want to select.</td>
</tr>
<tr>
<td>In the formula bar</td>
<td>Click the cell, and then drag across the contents of the cell that you want to select in the formula bar.</td>
</tr>
<tr>
<td>By using the keyboard</td>
<td>Press F2 to edit the cell, use the arrow keys to position the insertion point, and then press SHIFT+ARROW key to select the contents.</td>
</tr>
</tbody>
</table>

3. On the **Home** tab, in the **Clipboard** group, do one of the following:
   - To move the selection, click **Cut**.
   - To copy the selection, click **Copy**.

4. In the cell, click where you want to paste the
characters, or double-click another cell to move or copy the data.

5. On the **Home** tab, in the **Clipboard** group, click **Paste**  

6. Press **ENTER**.

**Copy cell values, cell formats, or formulas only**

When you paste copied data, you can do any of the following:

- Convert any formulas in the cell to the calculated values without overwriting the existing formatting.
- Paste only the cell formatting, such as font color or fill color (and not the contents of the cells).
- Paste only the formulas (and not the calculated values).

1. Select the cell or range of cells that contains the values, cell formats, or formulas that you want to copy.

2. On the **Home** tab, in the **Clipboard** group, click **Copy**  

3. Select the upper-left cell of the paste area or the cell where you want to paste the value, cell format, or formula.

4. On the **Home** tab, in the **Clipboard** group, click the arrow below **Paste**, and then do one of the following:
   - To paste values only, click **Paste Values**.
   - To paste cell formats only, click **Paste Special**, and then click **Formats** under Paste.
   - To paste formulas only, click **Formulas**.

**Drag and Drop**

If you are moving the cell contents only a short distance, the drag-and-drop method may be easier. Simply drag the highlighted border of the selected cell to the destination cell with the mouse.

**Freeze Panes**

If you have a large worksheet with column and row headings, those headings will disappear as the worksheet is scrolled. By using the Freeze Panes feature, the headings can be visible at all times.
1. Click the label of the row below the row that should remain frozen at the top of the worksheet.

2. Select **View Tab**→**Window Group on ribbon**→**Freeze Panes**→**Freeze Panes**

3. To remove the frozen panes, **View Tab**→**Window Group on ribbon**→**Freeze Panes**→**Unfreeze Panes**

Fig. 6.10

Freeze panes has been added to row 2 in the image above. Notice that the row numbers skip from 1 to 11. As the worksheet is scrolled, rows 1 will remain stationary while the remaining rows will move. Following similar steps you can Freeze or Unfreeze selected columns.
6.14 PAGE BREAKS

To set page breaks within the worksheet, select the row you want to appear just below the page break by clicking the row’s label. Then choose **Page Layout → Setup Group → Breaks → Input Page Break**. Excel will start a new page from the row selected.
6.15 PAGE SETUP

Select **File**→**Page Setup** from the menu bar to format the page, set margins, and add headers and footers.

1. **Page:** The page option allows you to set the paper size, orientation of the data, scaling of the area, print quality, etc. Select the **Orientation** under the **Page** tab in the Page Setup window to make the page Landscape or Portrait. The size of the worksheet on the page can also be formatted using **Scaling**. To force a worksheet to print only one page wide so that all the columns appear on the same page, select **Fit to 1 page(s) wide**.

![Page Setup Window](image)
2. **Margins**: Change the top, bottom, left, and right margins by selecting **Margins** from the page setup group of age Layout Tab. Enter values in the header and footer fields to indicate how far from the edge of the page this text should appear. Check the boxes for centering horizontally or vertically on the page.

![Fig. 6.14](image)

There are three predefined margin settings. You can choose from them or you can also customize the margins as shown by the following diagram.

![Fig. 6.15](image)
3. **Add or change the header or footer text:** For worksheets, you can work with headers and footers in Page Layout view. For other sheet types, such as chart sheets or for embedded charts, you can work with headers and footers in the Page Setup dialog box.

**Add or change the header or footer text for a worksheet in Page Layout view**

1. Click the worksheet to which you want to add headers or footers, or that contains headers or footers that you want to change.

2. On the **Insert** tab, in the **Text** group, click **Header & Footer**.

3. Do one of the following:
   - To add a header or footer, click the left, center, or right header or footer text box at the top or at the bottom of the worksheet page.
   - To change a header or footer, click the header or footer text box at the top or at the bottom of the worksheet page that contains header or footer text, and then select the text that you want to change.

4. Type the text that you want.

   To close the headers or footers, click anywhere in the worksheet, or press ESC.

5. **Sheet** tab has the option to select the area to be printed (that is, range of cells). Check **Gridlines** if you want the gridlines dividing the cells to be printed on the page. If the worksheet is several pages long and only the first page includes titles for the columns, select **Rows to repeat at top** to choose a title row that will be printed at the top of each page.
6.16 PRINT PREVIEW

Print preview helps to view the worksheet before the final printout is taken. It helps to edit the worksheet if required as per the need.

The steps to see the print view of document

1. Select Print from Office Button.
2. Select print
3. Click Print Preview.
Click the buttons like Next and Previous with respect to Print Preview Tab. Select the Zoom button to view the pages closer. Make page layout modifications needed by clicking the Page Setup button. Click Close to return to the worksheet or Print to continue printing.

**Fig. 6.17**

<table>
<thead>
<tr>
<th>Name</th>
<th>Teacher</th>
<th>Rollno</th>
<th>Subjects</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr. J.L. Bakshi</td>
<td>Mr. Sohan Singh</td>
<td>1</td>
<td>Mathematics</td>
<td>Pass</td>
</tr>
<tr>
<td>Mrs. Champa Bakshi</td>
<td>Ms.Kaushalya</td>
<td>2</td>
<td>English</td>
<td>Pass</td>
</tr>
<tr>
<td>Tarun Bakshi</td>
<td>Mr. K K Puri</td>
<td>3</td>
<td>Mathematics</td>
<td>Pass</td>
</tr>
<tr>
<td>Arun Bakshi</td>
<td>Dr. Bansi Lal Arora</td>
<td>455</td>
<td>Computer Science</td>
<td>Pass</td>
</tr>
<tr>
<td>Pawan Sharma</td>
<td>Dr. K P Chinda</td>
<td>6</td>
<td>Sanskrit</td>
<td>Pass</td>
</tr>
<tr>
<td>Deepak Kumar</td>
<td>Mr. Tulsi Ram</td>
<td>7</td>
<td>Management</td>
<td>Pass</td>
</tr>
<tr>
<td>Jaya Bakshi</td>
<td>Ms. Raj Gupta</td>
<td>8</td>
<td>Home Science</td>
<td>Pass</td>
</tr>
<tr>
<td>Neeraj Sharma</td>
<td>Mr.K.K Puri</td>
<td>9</td>
<td>Sanskrit</td>
<td>Pass</td>
</tr>
</tbody>
</table>

**6.17 PRINT**

To print the worksheet, select Print from Office Button.
1. **Print Range** - Select either all pages or a range of pages to print.

2. **Print What** - Select selection of cells highlighted on the worksheet, the active worksheet, or all the worksheets in the entire workbook.

3. **Copies** - Choose the number of copies that should be printed. Check the **Collate** box if the pages should remain in order.

4. Click **OK** to print.

### 6.18 FILE OPEN, SAVE AND CLOSE

(A) You can open an existing File by several methods:

1. Go to windows explorer and find out the file you want to open. Double-click on the file.

2. Start MS Excel. Click on office button on the drop-down menu click 'open'. select the file you want to open from the pop-up menu.

(B) When you have finished your work on the file you can save it by either clicking on the 'file save' icon at the top left
corner or Click on office button → click on save at the drop-down menu.

(C) When you are saving the worksheet for the first time follow the steps given below:
1. Click office button
2. Select 'file save as'on the drop-down menu.
3. On the pop-up menu select the location where you want to save the file.
4. Type the file name
5. Click on 'save' in the pop-up menu.

(D) When your work is finished and it has been saved properly:
Select Print from Office Button
1. Select (Click) Close Command to close your file
2. Select (Click) Exit Excel Command to exit from MS Excel

Fig. 6.19
6.19 WORKBOOK PROTECTION

Set a password for a workbook

1. Click the Microsoft Office Button, and then click Save As.
2. Click Tools, and then click General Options.
3. Do one or both of the following:
   - If you want reviewers to enter a password before they can view the workbook, type a password in the Password to open box.
   - If you want reviewers to enter a password before they can save changes to the workbook, type a password in the Password to modify box.
4. If you don't want content reviewers to accidentally modify the file, select the Read-only recommended check box. When opening the file, reviewers will be asked whether or not they want to open the file as read-only.
5. Click OK.
6. When prompted, retype your passwords to confirm them, and then click OK.
7. Click Save.
8. If prompted, click Yes to replace the existing workbook.

INTEXT QUESTIONS

1. Write True or False for the following statements
   (a) To modify a preset header or footer click the custom header and custom footer buttons.
   (b) Autofill helps you to add the contents of a cluster of adjacent cells.
   (c) Charts features help you in presenting a graphical representation of data.
   (d) Click the edit button to print the worksheet.
   (e) Pivot table allows you to perform data analysis.
2. Fill in the blanks
   (a) When the active document is protected the command name changes to ______________ workbook.
   (b) Select ______________ from the menu bar to view how the worksheet will look when printed.
   (c) _________ toolbar allows to draw a number of geometrical shapes, arrows, flow chart elements etc.
   (d) Check ______________ if you want the gridlines dividing the cells to be printed on the page.

6.20 WHAT YOU HAVE LEARNT

In this lesson you learnt about starting Excel and working on a worksheet. You can select a cell or a range of cells. Also you can enter data in a worksheet. You can define the size of a page by going to page set up and insert a page break. You have learnt about page-preview which gives an idea on how the print out will look like.

6.21 TERMINAL QUESTIONS

1. What are the main features of MS Excel?
2. Differentiate between a worksheet and a workbook?
3. What are the different types of data that can be entered into worksheet cells?
4. Explain three different ways you protect your workbook.
5. How do you find a single number or name you want in a large worksheet containing thousands of numbers and names? Is it possible to replace a name or number with some other name or number? How?
6. How do you select a single cell, a single column, a single row, a cluster of cells, and a entire worksheet?
7. Difference between Move cells and Copy cells
8. What are the different features available in Page setting command?
8. Explain the different features available in Print command?

10. Define the following:

   (a) Navigating worksheet

   (b) Editing data

   (c) Insert cells and rows

   (d) Drag and drop

   (e) Workbook protection

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**6.22 FEEDBACK TO INTEXT QUESTIONS**

1. (a) True   (b) False   (c) True   (d) False   (e) True

2. (a) Unprotect   (b) Print preview   (c) Autoshapes

   (d) gridlines