**14****ELECTRONIC SPREAD SHEET**

Now a days accounting transactions are processed through computers. Usage of computers enables a business to quickly, accurately and timely access the information that helps in decision-making. This sharpens the competitive edge and enhances profitability of the business. The computer systems work with the data which is processed by the hardware commanded by the user through software. The Computerised Accounting System (CAS) has the following components:

Procedure : A logical sequence of actions to perform a task.

Data : The raw fact (as input) for any business application.

People : Users.

Hardware : Computer, associated peripherals, and their network.

Software : System software and Application software.

These are the five pillars on which Computerised Accounting System rests. This Lesson discusses about the Electronic Spread Sheet, which is used in computers as special software for processing and generating the various types of data. Electronic Spread Sheet is also known as Worksheet. In this Lesson, we will discuss the meaning, features and other related terms and procedures related to Electronic Spread Sheet.

**OBJECTIVES**

*After studying this Lesson, you will be able to:*

- State the meaning of Electronic Spread Sheet.
- Explain the features of Electronic Spread Sheet
- Explain the procedure of Data entry, Text Management and Cell formatting in Excel.



Notes

- Explain the procedure of calculations in Excel.
- Explain the procedure of preparation of Various Reports through Excel.

### 35.1 MEANING OF ELECTRONIC SPREADSHEET

Electronic Spreadsheet is a combination of rows and columns. Visually, the spreadsheet looks like any other matrix with rows and columns. It is also known as a worksheet. This worksheet is so large that the human eye cannot view all its rows and columns at a point of time. Therefore, user focuses on few rows and columns and keeps changing the focus to the required part of the worksheet, as and when required. It is normally used for calculations and comparison of numerical or financial data for arriving at the desired information for reporting. An electronic spreadsheet is a computer program that allows the user to add and process data. The concept of electronic spreadsheet can well be understood with the help of MS Excel, which is one of the MS office software.

### 35.2 BASICS AND FEATURES OF SPREADSHEET

A spreadsheet is characterized by certain features, given as under:

1. **Grid :** By definition, a spreadsheet is seen as grid structured by number of rows and columns. Each row is sequentially assigned number such as 1,2,3.... And every column is assigned an alphabet for identification. First 26 columns are assigned alphabets beginning A to Z and thereafter, the columns begins with AA followed by AB till the last column is assigned alphabets.
2. **Element :** Each element of spreadsheet is defined by a point of intersection between a particular row and column. It is therefore, addressed by referring to the relevant row and column. For example, the element A1 means the first row of column A. The element is capable of storing data and formulae for calculations.
3. **Lens View :** Spreadsheet allows the user to view and concentrate on a limited number of rows and columns to work with.
4. **Functions :** Spreadsheet is supported by a large number of functions capable of performing difficult and lengthy calculations in fractions of seconds.
5. **Formatting :** Spreadsheet has text formatting capabilities. This enables the generated report to be saved, printed and exported to other applications for use.
6. **Save, Print and Export :** Spreadsheet is saved as a file so that it can be opened for additions and alterations as per the need arisen. It can also be printed by selecting a part of the entire sheet. It can also be sent to mail recipient as an attachment.



### INTEXT QUESTIONS 35.1

Fill in the blanks with suitable word/words:

- A spreadsheet is seen as \_\_\_\_\_ structured by number of rows and columns.
- Each element of spreadsheet is a point of \_\_\_\_\_ between a particular row and column.
- Spreadsheet allows the user to view and concentrate on a limited number of \_\_\_\_\_ and \_\_\_\_\_ to work with.
- Spreadsheet is supported by a large number of \_\_\_\_\_ for difficulty and lengthy calculations in fraction of seconds.
- A saved spreadsheet can be opened for additions and \_\_\_\_\_.

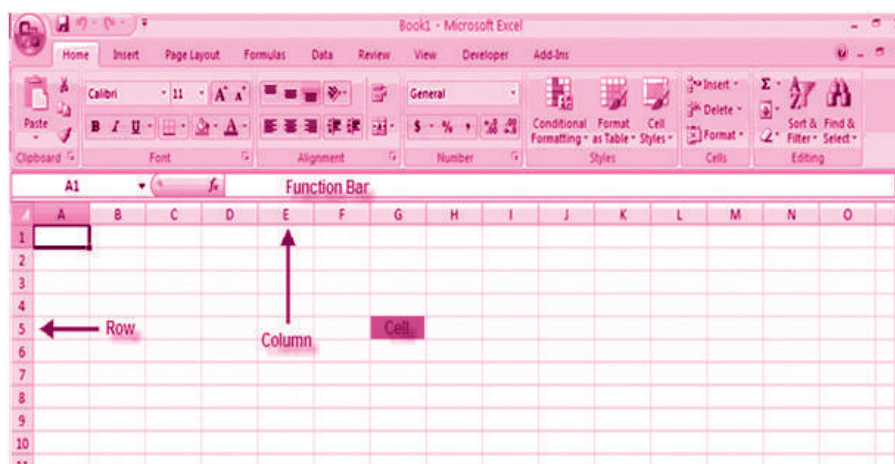


Notes

### 35.3 DATA ENTRY, TEXT MANAGEMENT AND CELL FORMATTING

Excel is one of the software that is bundled with MS office to implement the spreadsheet described above. Here under, we are exhibiting the visuals using MS Excel 2007. Basic features offered by MS Excel are:

- 1. Workbook and Worksheet in Excel :** Spreadsheet is referred to as a worksheet in Excel. This worksheet is a single page of a workbook which is a multipage document. At a time, only one worksheet is available to a user for carrying out operations. When an excel program is executed, a new excel workbook is opened along with Excel application window shown below:



As already stated a spreadsheet is an electronic document that stores various types of data. There are vertical columns and horizontal rows. A cell is where the column and row intersect. A cell can contain data and can be used in calculations of data



Notes

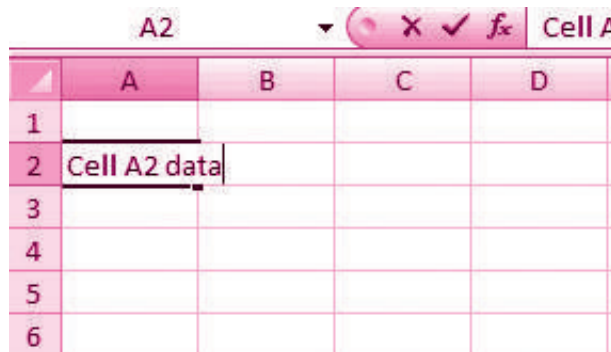
within the spreadsheet. An Excel spreadsheet can contain workbooks and worksheets. The workbook is the holder for related worksheets.

**2. Worksheet Operations :** The following worksheet operations are associated with the spread sheet:

**i. Movement of Cell Pointer :** To activate a cell pointer, click at the cell. The cell pointer is moved from its current location to another by using arrow keys: left, right, up and down. By keeping the **ctrl key** pressed, the use of arrow keys moves the cell pointer to the edge of current data region that is defined as an area of worksheet with data entered in cells and bounded by the edges of the worksheet and its empty rows and columns.

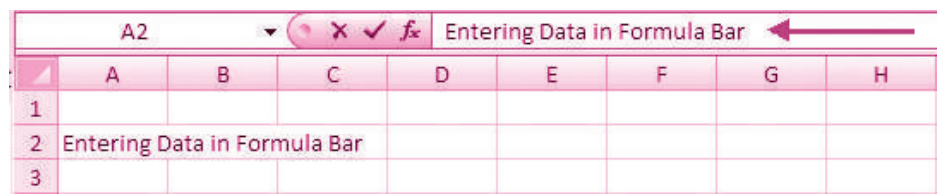
**ii. Short-Cut Menu :** It is called by a **right click** action of the mouse on selected cells so as to perform various operations. The short-cut menu is handy tool because it includes list of those operations that are commonly performed on selected cells.

**iii. Entering Data into Cells :** There are different ways to enter data in Excel: in an active cell or in the formula bar. To enter data in an active cell:

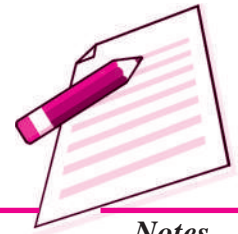


- Click in the **cell** where you want the data
- Begin typing

To enter data into the **formula bar**



- Click the cell where you would like the data
- Place the cursor in the **Formula Bar**
- Type in the data



Notes

iv. **Selecting Multiple Cells:** Excel allows you to move, copy, and paste cells and cell content through cutting & pasting and copying & pasting.

- To select a cell or data to be copied or cut: Click the **cell**

	A	B	C
1			
2	2-Jun		
3	4-Jun		
4	6-Jun		
5			
6			
7			

- Click and drag the cursor to select many cells in a range

	A	B	C	D	E	F
1		Widgets	Customers	Sales	Price	
2	2-Jun					
3	4-Jun	2	4	2	5	
4	6-Jun					
5						
6						
7						

**Select a Row or Column**

To select a row or column click on the **row** or **column header**.

	A	B	C	D	E	F
1		Widgets	Customers	Sales	Price	
2	2-Jun					
3	4-Jun	2	4	2	5	
4	6-Jun					
5						

**Copy and Paste**

To copy and paste data:



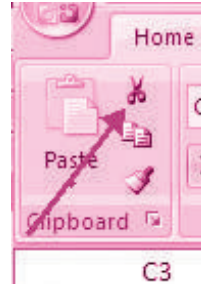


**Notes**

- Select the cell(s) that you wish to copy
- On the **Clipboard** group of the **Home** tab, click **Copy**
- Select the cell(s) where you would like to copy the data
- On the **Clipboard** group of the **Home** tab, click **Paste**

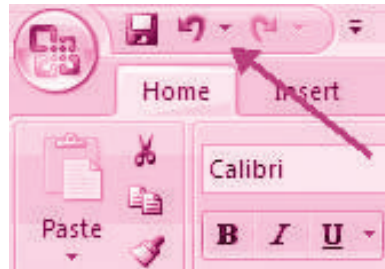
**Cut and Paste**

To cut and paste data:



- Select the cell(s) that you wish to copy
- On the **Clipboard** group of the **Home** tab, click **Cut**
- Select the cell(s) where you would like to copy the data
- On the **Clipboard** group of the **Home** tab, click **Paste**

**Undo and Redo**



To undo or redo you're most recent actions:

- On the **Quick Access Toolbar**
- Click **Undo** or **Redo**

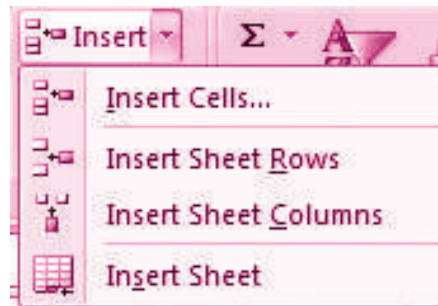
**Auto Fill :** The Auto Fill feature fills cell data or series of data in a worksheet into a selected range of cells. If you want the same data copied into the other cells, you only need to complete one cell. If you want to have a series of data (for example, days of the week) fill in the first two cells in the series and then use the auto fill feature. To use the Auto Fill feature:

	A	B	C	D
1		Widgets	Customers	Sales
2	2-Jun			
3	4-Jun	2	4	
4	6-Jun			
5				

- Click the **Fill Handle**
- **Drag** the **Fill Handle** to complete the cells

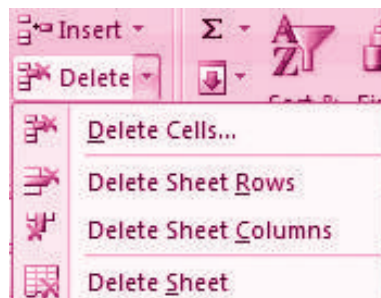
### Insert Cells, Rows, and Columns

To insert cells, rows, and columns in Excel:



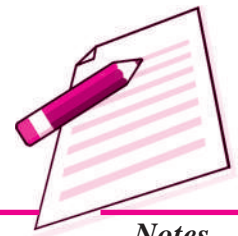
- Place the cursor in the row below where you want the new row, or in the column to the left of where you want the new column.
- Click the **Insert** button on the **Cells** group of the **Home** tab
- Click the appropriate choice: **Cell, Row, or Column**

### Delete Cells, Rows and Columns



To delete cells, rows, and columns:

- Place the cursor in the cell, row, or column that you want to delete
  - Click the **Delete** button on the **Cells** group of the **Home** tab
  - Click the appropriate choice: **Cell, Row, or Column**
- v. **Managing Text in Excel** : For any business organization using electronic spread sheet the basic requirement is to input data. The data can be input via fresh data entry as explained above or it can be transferred from other applications. **Importing Data from other sources** is easier to import data or transfer files to Excel worksheet. These data files may in other text files or non text files format.



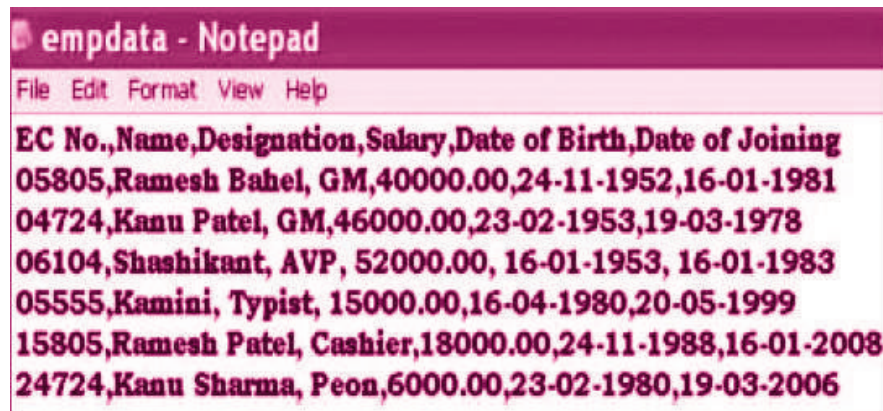
Notes



*Notes*

*Text files* can be directly read using a text editor such as Note Pad in MS Windows. These files often have extension *.txt* but can have other extensions (such as *.csv* known as **C**oma **S**eparated **V**alues text file). In order to import data from a text file, following steps are considered:

1. Create data file using Note pad program of MS Windows (to get Note pad screen on desktop on Start button->All Programs->Accessories -> Notepad)
2. A comma-separated data values in one line of this text file is a row in a spread sheet and each entry separated by a comma, is column entry for that row as shown below:

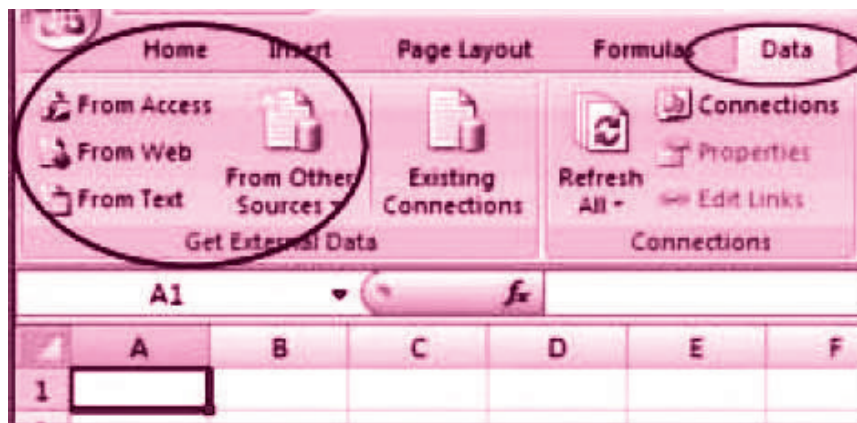


3. In the first line provide names for the columns of the spread sheet.
4. In the next line onward start entering the data separate by comma as per the names given in first line.
5. It may be possible that every data may not be of similar length but each data (even a blank data) should be separated by comma as per the names of the column.
6. Open a new Excel worksheet from the office button.
7. Select Data Tab on the Ribbon.
8. On the Data Tab; an option Get External Data having From Text option.
9. Click on 'From Text' which will allow selecting a Note pad file saved as *.cvm* into Excel format directly and data copied into respective columns and rows as shown below:





Notes



	A	B	C	D	E	F
1						
2	EC No.	Name	Designation	Salary	Date of Birth	Date of Joining
3	5805	Ramesh Bahel	GM	40000	24-11-1952	16-01-1981
4	4724	Kanu Patel	GM	46000	23-02-1953	19-03-1978
5	6104	Shashikant	AVP	52000	16-01-1953	16-01-1983
6	5555	Kamini	Typist	15000	16-04-1980	20-05-1999
7	15805	Ramesh Patel	Cashier	18000	24-11-1988	16-01-2008
8	24724	Kanu Sharma	Peon	6000	23-02-1980	19-03-2006



### INTEXT QUESTIONS 35.2

Fill in the blanks with suitable word/words:

- A cell is where the row and column \_\_\_\_\_.
- The cell pointer is moved from its current location to another by using \_\_\_\_\_ keys.
- The short-cut-menu is \_\_\_\_\_ tool for the operations that are \_\_\_\_\_ performed on selected cells.
- To enter data in an active \_\_\_\_\_, click in the \_\_\_\_\_ where you want the data and start typing.
- Click and \_\_\_\_\_ the cursor to select many cells in a range.

### 35.4 PERFORMING CALCULATIONS IN EXCEL

A formula is a set of mathematical instructions that can be used in Excel to perform calculations. Formulas start in the formula box with an = sign.

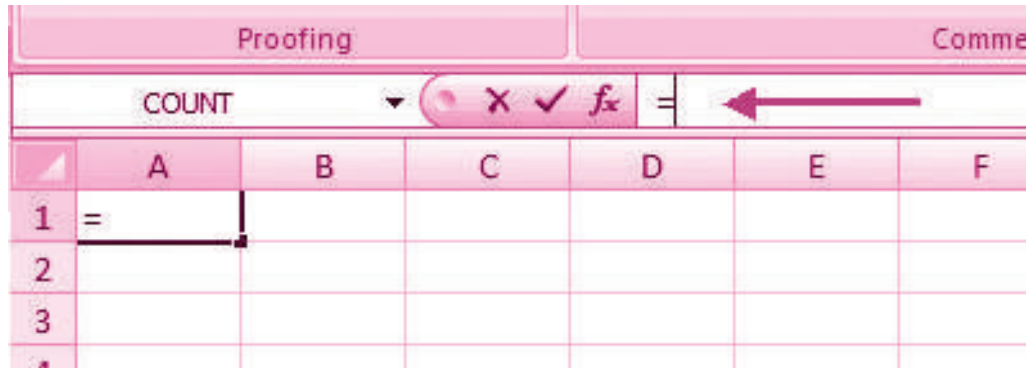
## MODULE - 7

### Application of Computers in Financial Accounting



Notes

## Electronic Spread Sheet



There are many elements to excel formula.

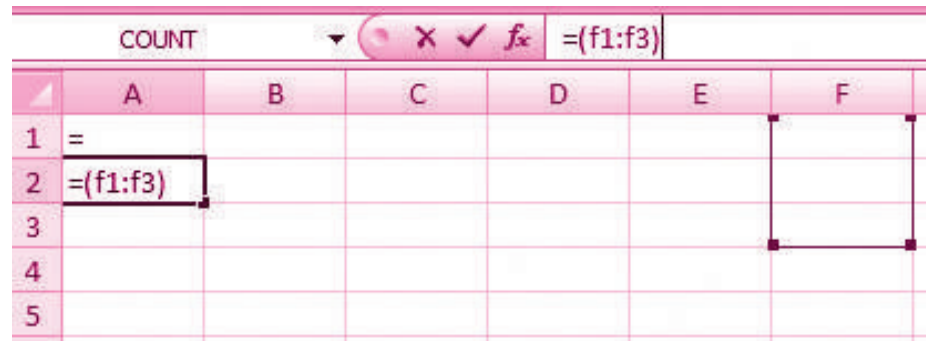
**References :** The cell or range of cells that you want to use in your calculation.

**Operators :** Symbols (+, -, \*, /, etc.) that specify the calculation to be performed

**Constants :** Numbers or text values that do not change.

**Functions :** Predefined formulas in Excel.

To create a basic formula in Excel :



- Select the **cell** for the formula
- Type = (the equal sign) and the **formula**
- Click **Enter**

### 35.4.1 Calculate with Functions

A function is a built in formula in Excel. A function has a name and arguments (the mathematical function) in parentheses. Common functions in Excel:

**Sum** : Adds all cells in the argument

**Average** : Calculates the average of the cells in the argument

**Min** : Finds the minimum value

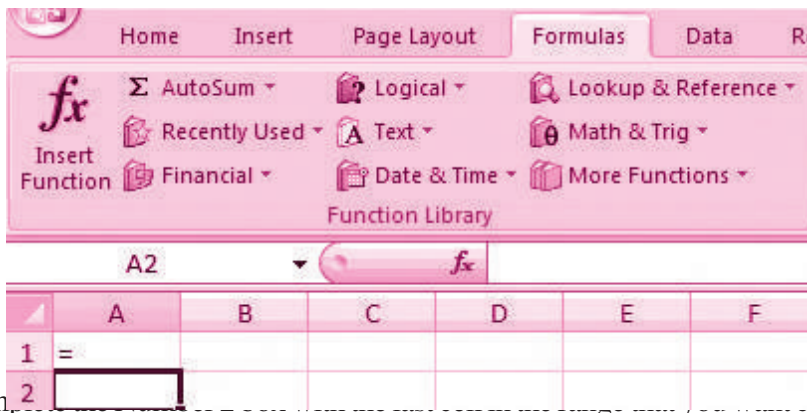


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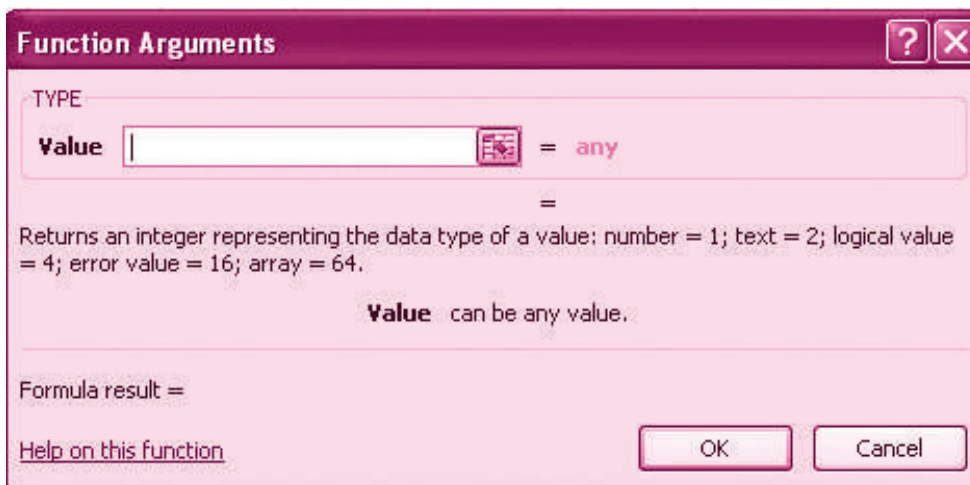
- Max** : Finds the maximum value
- Count** : Finds the number of cells that contain a numerical value within a range of the argument

To calculate a function:

- Click the **cell** where you want the function applied
- Click the **Insert Function** button
- Choose the function
- Click **OK**
- Complete the Number 1 box with the first cell in the range that you want to calculate



- Complete the Number 1 box with the first cell in the range that you want to calculate



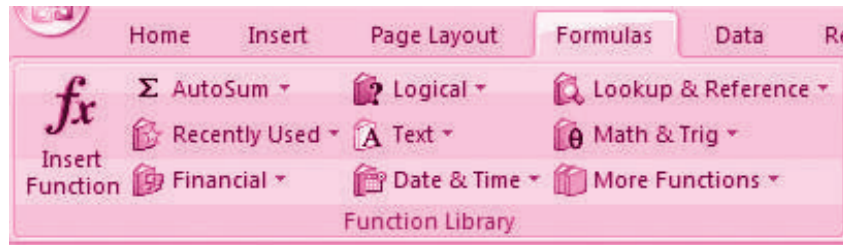
### 35.4.2 Function Library

The function library is a large group of functions on the Formula Tab of the Ribbon. These functions include:



*Notes*

- AutoSum** : Easily calculates the sum of a range
- Recently Used** : All recently used functions
- Financial** : Accrued interest, cash flow return rates and additional financial functions
- Logical** : And, If, True, False, etc.
- Text** : Text based functions
- Date & Time** : Functions calculated on date and time
- Math & Trig** : Mathematical Functions



**35.4.3 Relative, Absolute and Mixed References**

Calling cells by just their column and row labels (such as “A1”) is called **relative referencing**.

When a formula contains relative referencing and it is copied from one cell to another, Excel does not create an exact copy of the formula. It will change cell addresses relative to the row and column they are moved to. For example, if a simple addition formula in cell C1 “=(A1+B1)” is copied to cell C2, the formula would change to “=(A2+B2)” to reflect the new row.

To prevent this change, cells must be called by **absolute referencing** and this is accomplished by placing dollar signs “\$” within the cell addresses in the formula. Continuing the previous example, the formula in cell C1 would read “=(\$A\$1+\$B\$1)” if the value of cell C2 should be the sum of cells A1 and B1. Both the column and row of both cells are absolute and will not change when copied.

**Mixed referencing** can also be used where only the row OR column fixed. For example, in the formula “=(A\$1+\$B2)”, the row of cell A1 is fixed and the column of cell B2 is fixed.

**Linking Worksheets**

You may want to use the value from a cell in another worksheet within the same workbook in a formula. For example, the value of cell A1 in the current worksheet and cell A2 in the second worksheet can be added using the format “sheetname!celladdress”. The formula for this example would be “=A1+Sheet2!A2” where the value of cell A1 in the current worksheet is added to the value of cell A2 in the worksheet named “Sheet2”.

**35.4.4 Data Formatting**

Formatting of spread sheet makes easier to read and understand the important information. This is chiefly categorized as follows:

- 1. Number formatting :** Number formatting includes adding per cent (%), Comma (,), decimal (.), currency (Rs., \$), date, time, scientific values etc. Refer figure 1 given below which depicts the unformatted worksheet:

	A	B	C	D	E	F	G	H
1	Sales for Home AppliancesYear 2008_09							
2	(Figures in 000's)							
3		Q1	Q2	Q3	Q4	Actual	Target	In %
4	ALOK	40	57	52	65	214	250	0.856
5	PRANAV	50	69	69	90	278	220	1.2636
6	PRABODH	53	75	71	82	281	250	1.124
7	RAJENDRA	44	59	38	70	211	200	1.055
8	Total					984	920	1.0696
9	Reported on							
10	16.04.2009							

- 2.** From the Ribbon select, Home Tab with Number option. Click on **Format Cells** dialog box and choose **Number** tab.



Notes

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Notes

## Electronic Spread Sheet

- The **Category** list shows all the preset formulas available in Excel, grouped into categories.
- If we select **Currency**, the right hand side shows the different symbols of currencies.
- Change the number of decimal spaces to zero (0).
- Click OK to accept this format. The final output is shown below:

	A	B	C	D	E	F	G	H
1	Sales for Home Appliances Year 2008_09							
2	(Figures in 000's)							
3		Q1	Q2	Q3	Q4	Actual	Target	In %
4	ALOK	Rs.40	Rs.57	Rs.52	Rs.65	214	250	0.856
5	PRANAV	Rs.50	Rs.69	Rs.69	Rs.90	278	220	1.2636
6	FRABODH	Rs.33	Rs.75	Rs.71	Rs.82	281	250	1.124
7	RAJENDRA	Rs.44	Rs.59	Rs.38	Rs.70	211	200	1.055
8	Total					984	920	1.0696
9	Reported on							
10	16.04.2009							

	A	B	C	D	E	F	G	H
1	Sales for Home Appliances Year 2008_09							
2	(Figures in 000's)							
3		Q1	Q2	Q3	Q4	Actual	Target	In %
4	ALOK	Rs.40	Rs.57	Rs.52	Rs.65	214	250	85.60%
5	PRANAV	Rs.50	Rs.69	Rs.69	Rs.90	278	220	126.36%
6	FRABODH	Rs.53	Rs.75	Rs.71	Rs.82	281	250	112.40%
7	RAJENDRA	Rs.44	Rs.59	Rs.38	Rs.70	211	200	105.50%
8	Total					984	920	106.96%
9	Reported on							
10	16.04.2009							



### INTEXT QUESTIONS 35.3

#### I. Name the following functions available in Excel Sheet:

- Adds all cells in the argument.
- Finds the number of cells that contain a numerical value within a range of the argument.
- Calculates the average of the cells in the argument.
- Finds the maximum value.
- Finds the minimum value.

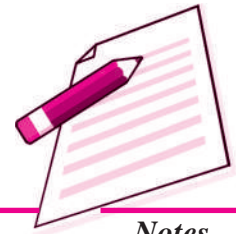
#### II. Fill in the blanks with suitable word/words :

- Calling cells by just their column and row labels is called \_\_\_\_\_.
- \_\_\_\_\_ formatting includes adding, percent, comma, decimal, currency, date, time, scientific values etc.

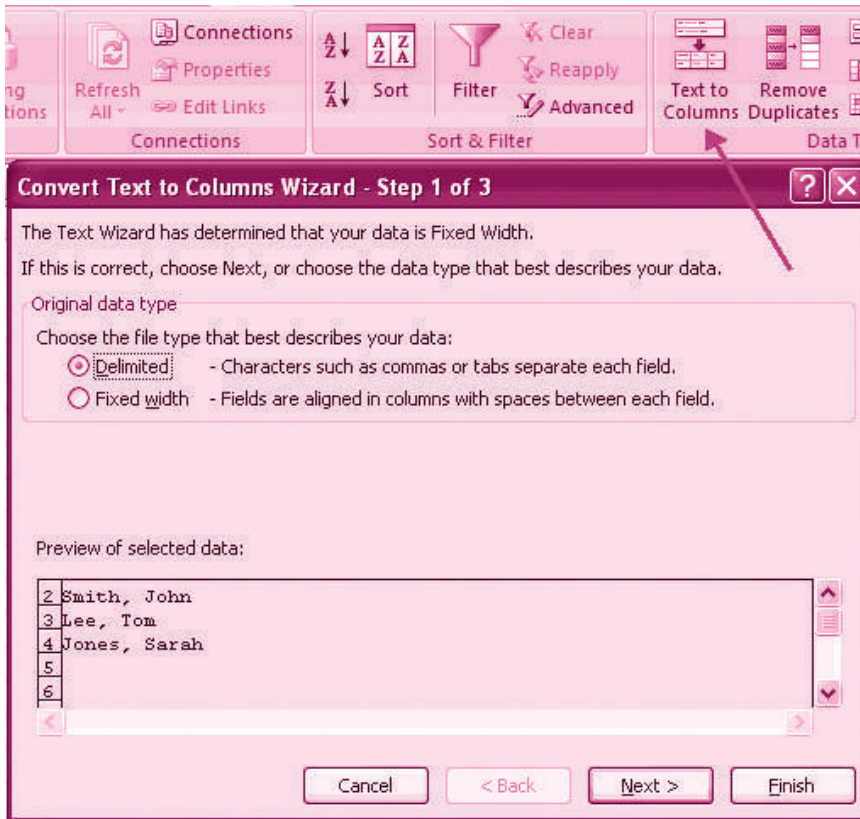
#### 35.4.5 Text and General Formatting

Sometimes you will want to split data in one cell into two or more cells. You can do this easily by utilizing the Convert Text to Columns Wizard.

- Highlight the column in which you wish to split the data
- Click the **Text to Columns** button on the **Data** tab

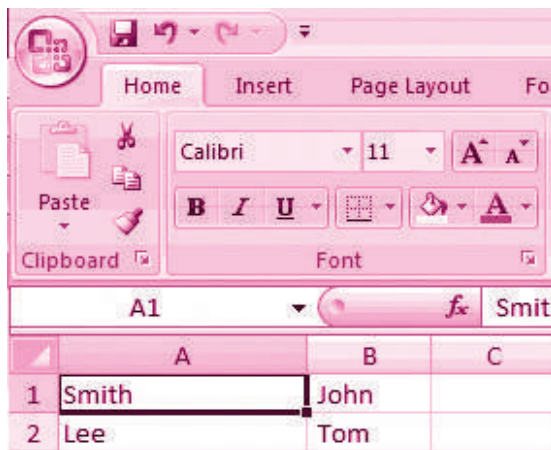


- Click **Delimited** if you have a comma or tab separating the data, or click fixed widths to set the data separation at a specific size.



### 35.4.6 Modify Fonts

Modifying fonts in Excel will allow you to emphasize titles and headings. To modify a font:



- Select the cell or cells that you would like the font applied
- On the **Font** group on the **Home** tab, choose the font type, size, bold, italics, underline, or color

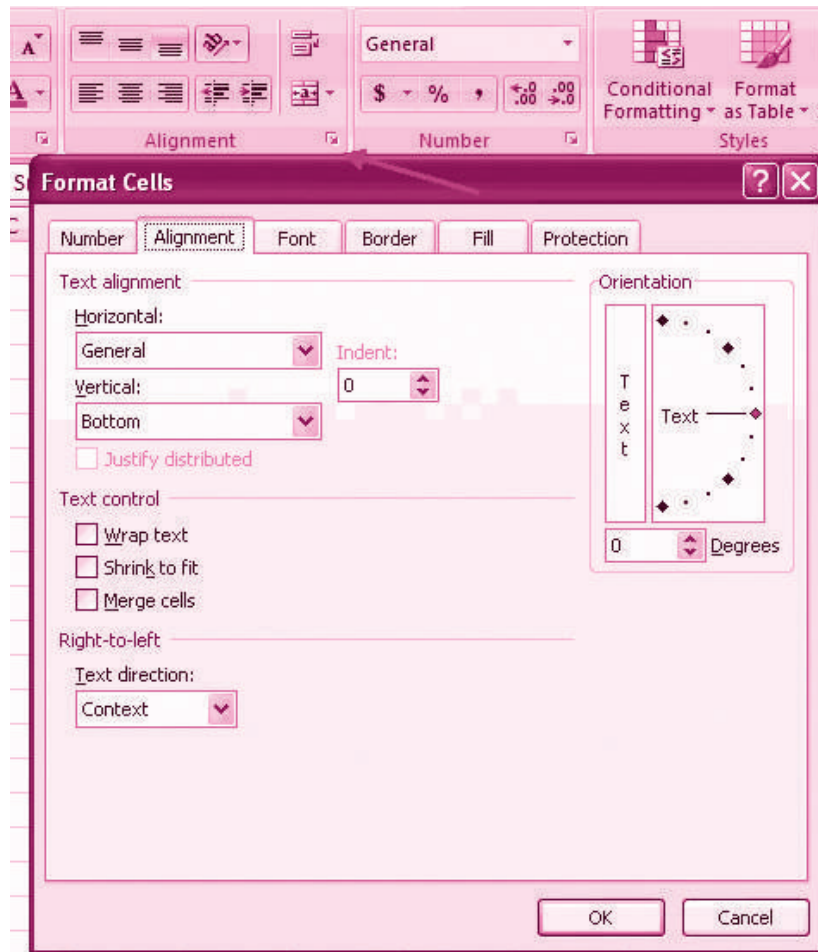


Notes

### Format Cells Dialog Box

In Excel, you can also apply specific formatting to a cell. To apply formatting to a cell or group of cells:

- Select the cell or cells that will have the formatting
- Click the **Dialog Box** arrow on the **Alignment** group of the **Home** tab



There are several tabs on this dialog box; that allow you to modify properties of the cell or cells.

**Number :** Allows for the display of different number types and decimal places

**Alignment :** Allows for the horizontal and vertical alignment of text, wrap text, shrink text, merge cells and the direction of the text.

**Font :** Allows for control of font, font style, size, color, and additional features

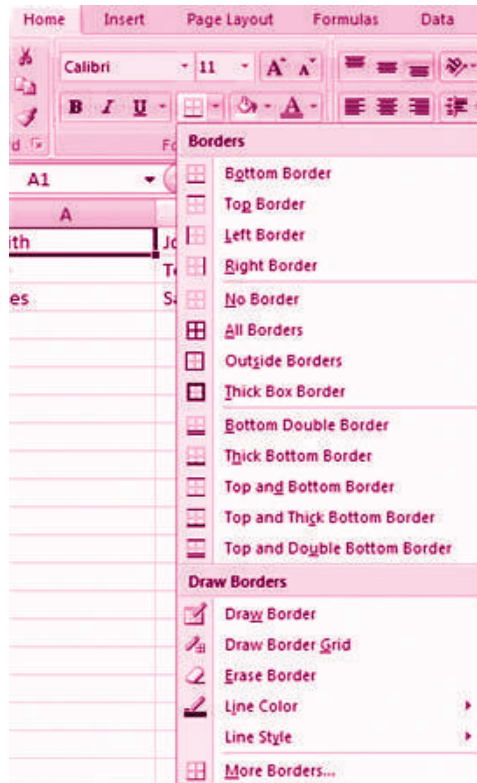
**Border :** Border styles and colors

**Fill :** Cell fill colors and styles



**Add Borders and Colors to Cells**

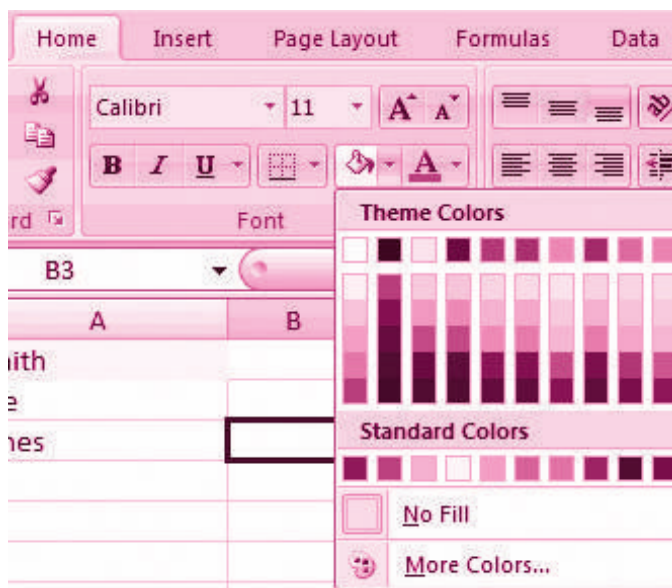
Borders and colors can be added to cells manually or through the use of styles. To add borders manually:



Notes

- Click the **Borders** drop down menu on the **Font** group of the **Home** tab
- Choose the appropriate border

To apply colors manually:



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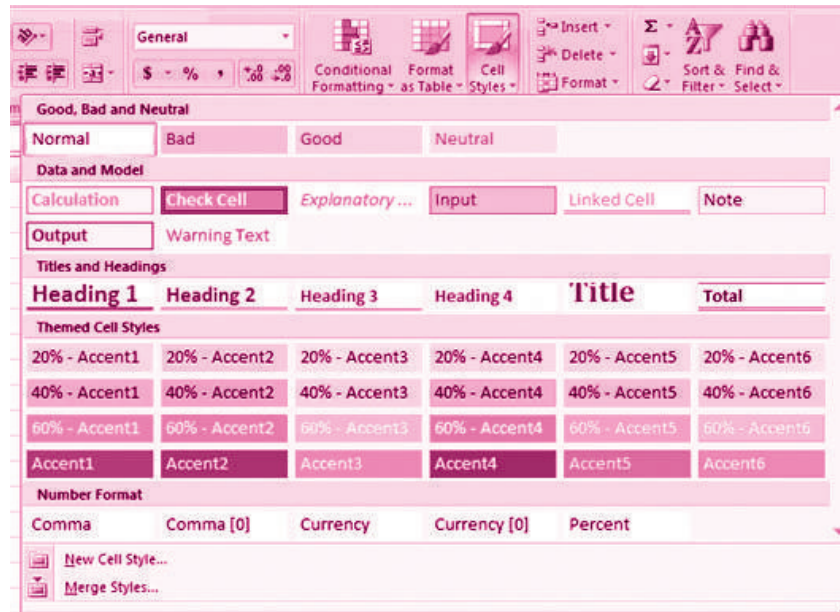
### Application of Computers in Financial Accounting



Notes

## Electronic Spread Sheet

- Click the **Fill** drop down menu on the **Font** group of the **Home** tab
- Choose the appropriate color



To apply borders and colors using styles:

- Click **Cell Styles** on the **Home** tab
- Choose a style or click **New Cell Style**

### 35.4.7 Change Column Width and Row Height

To change the width of a column or the height of a row:



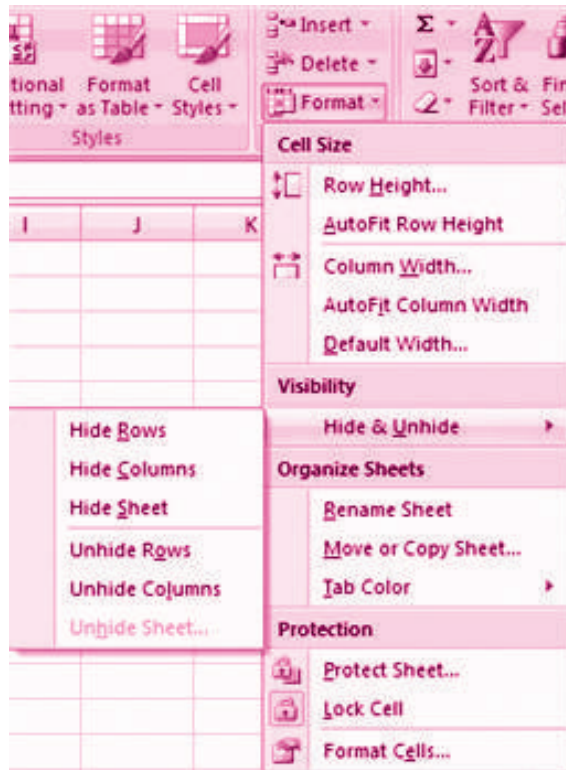


Notes

- Click the **Format** button on the **Cells** group of the **Home** tab
- Manually adjust the height and width by clicking **Row Height** or **Column Width**
- To use **AutoFit** click **AutoFit Row Height** or **AutoFit Column Width**

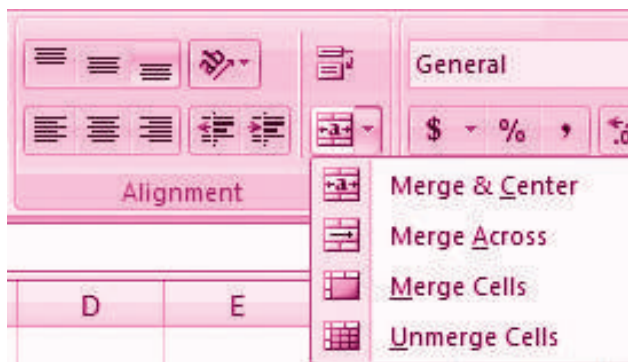
### 35.4.8 Hide or Unhide Rows or Columns

To hide or unhide rows or columns:



- Select the row or column you wish to hide or unhide
- Click the **Format** button on the **Cells** group of the **Home** tab
- Click **Hide & Unhide**

### Merge Cells





**Notes**

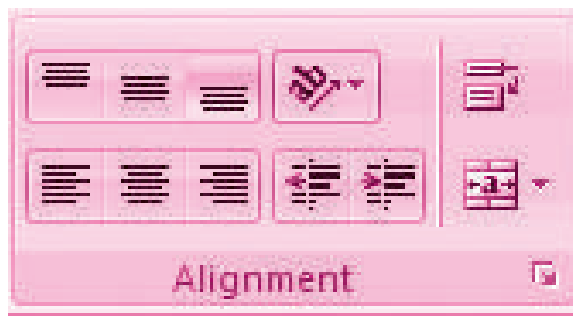
To merge cells select the cells you want to merge and click the **Merge & Center** button on the **Alignment** group of the **Home** tab. The four choices for merging cells are:

- Merge & Center** : Combines the cells and centers the contents in the new, larger cell
- Merge Across** : Combines the cells across columns without centering data
- Merge Cells** : Combines the cells in a range without centering
- Unmerge Cells** : Splits the cell that has been merged

**35.4.9 Align Cell Contents**

To align cell contents, click the cell or cells you want to align and click on the options within the **Alignment** group on the **Home** tab. There are several options for alignment of cell contents:

- Top Align** : Aligns text to the top of the cell
- Middle Align** : Aligns text between the top and bottom of the cell
- Bottom Align** : Aligns text to the bottom of the cell
- Align Text Left** : Aligns text to the left of the cell
- Center** : Centers the text from left to right in the cell
- Align Text Right** : Aligns text to the right of the cell
- Decrease Indent** : Decreases the indent between the left border and the text
- Increase Indent** : Increase the indent between the left border and the text
- Orientation** : Rotate the text diagonally or vertically





## INTEXT QUESTIONS 35.4

*Fill in the blanks with suitable word/words:*

- i. We can split data of one cell into two or more cells by utilizing the convert Text to \_\_\_\_\_.
- ii. \_\_\_\_\_ fonts in Excel will allow you to emphasize titles and headings.
- iii. To merge cells, select the cells you want to merge and click the \_\_\_\_\_ button on Alignment group of the tab.

## 35.5 CONDITIONAL FORMATTING

Conditional formatting helps the user to highlight interesting cells or range of cells, emphasize unusual values and visualize data by using data bars, colour scales and icon values. The conditional format changes the appearance of a cell range based on given criteria. This implies, if the condition is met/or stands true, the cell range is formatted on that condition; if the condition is false, the cell range is not formatted based on that condition. We will study about this in the subsequent section on 'Output Reports'.

## 35.6 OUTPUT REPORTS

The entire or partial worksheet(s) can be printed at a time or as and when needed as per the requirement. MS Excel provides an opportunity:

1. Print a partial or entire workbook
2. Print several worksheets at once
3. Print an Excel table
4. Print workbook to file
5. Print graphic charts and Pivot tables.

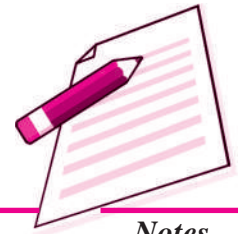
The procedure to generate a report is given below:

### Set Print Titles

The print titles function allows you to repeat the column and row headings at the beginning of each new page to make reading a multiple page sheet easier to read when printed.

To Print Titles:

- Click the **Page Layout** tab on the Ribbon
- Click the **Print Titles** button
- In the **Print Titles** section, click the box to select the rows/columns to be repeated



*Notes*

## MODULE - 7

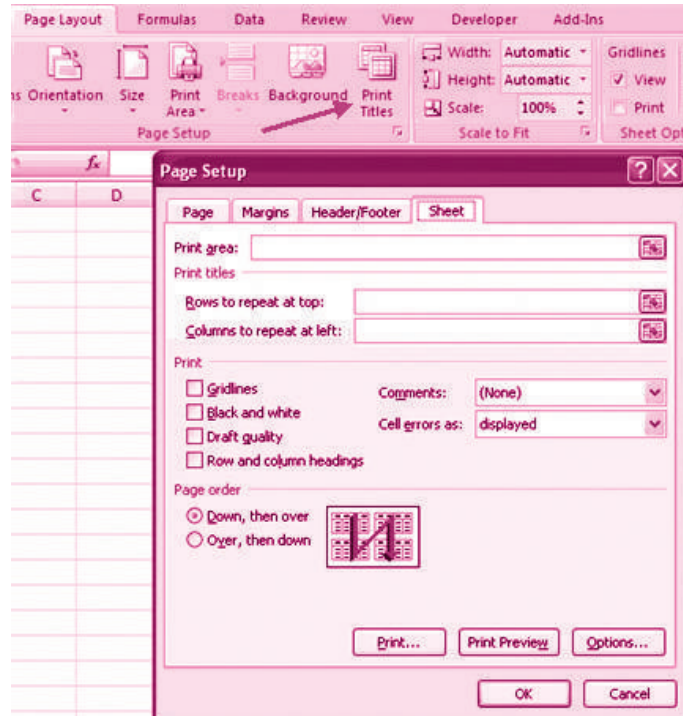
### Application of Computers in Financial Accounting



Notes

## Electronic Spread Sheet

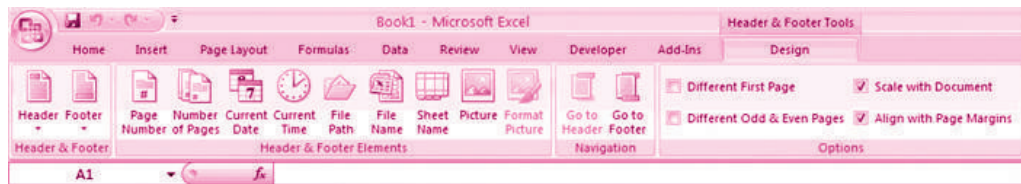
- Select the row or column
- Click the **Select Row/Column Button**
- Click OK



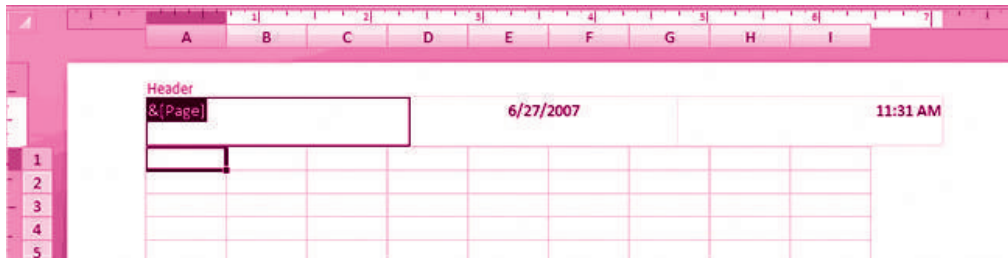
### 35.6.1 Create a Header or Footer

To create a header or footer:

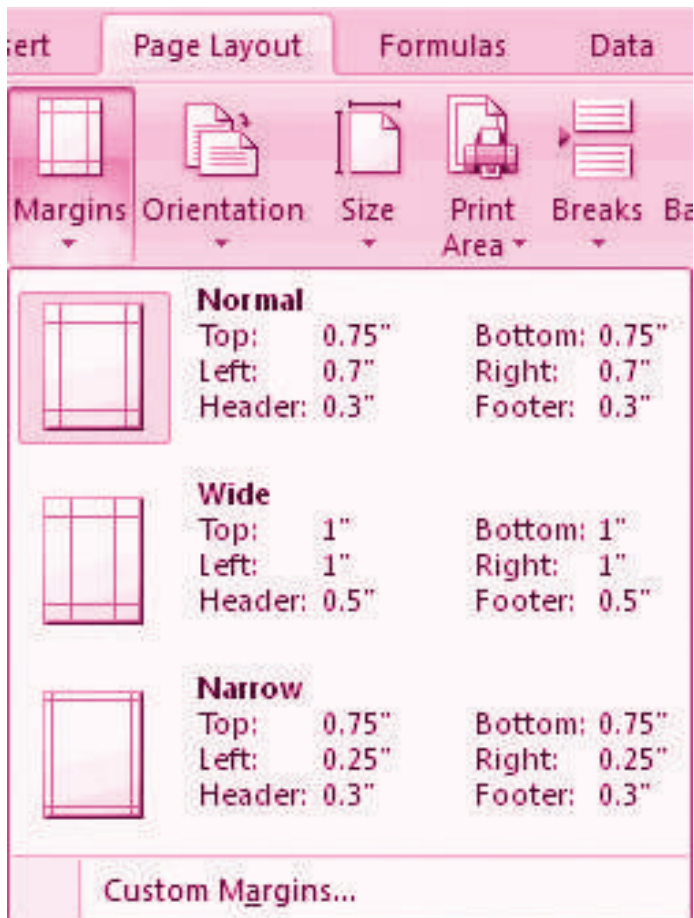
- Click the **Header & Footer** button on the **Insert** tab
- This will display the **Header & Footer Design Tools Tab**
- To switch between the Header and Footer, click the **Go to Header** or **Go to Footer** button



- To insert text, enter the text in the header or footer
- To enter preprogrammed data such as page numbers, date, time, file name or sheet name, click the appropriate button
- To change the location of data, click the desired cell



### 35.6.2 Set Page Margins



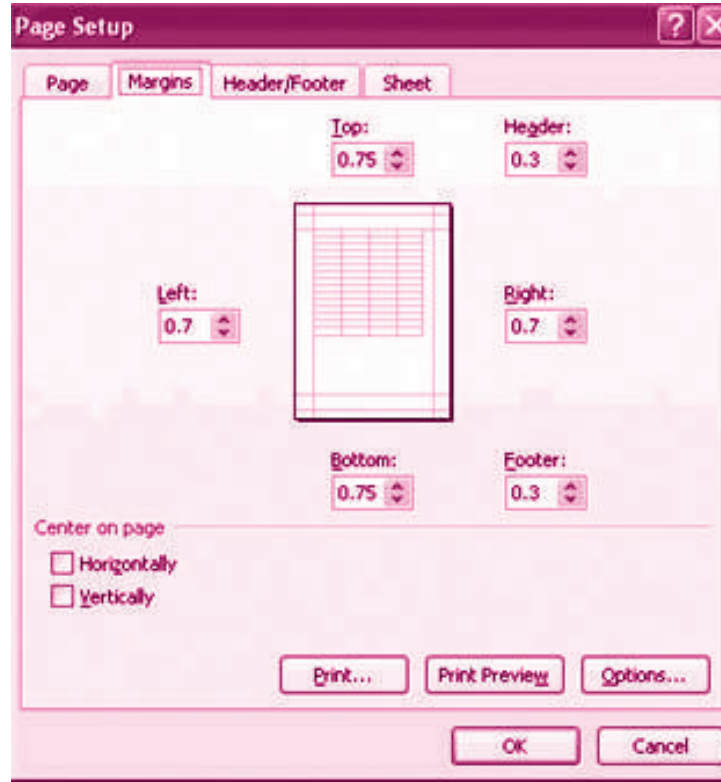
To set the page margins:

- Click the **Margins** button on the **Page Layout** tab
- Select one of the given choices, or
- Click **Custom Margins**
- Complete the boxes to set margins
- Click **Ok**



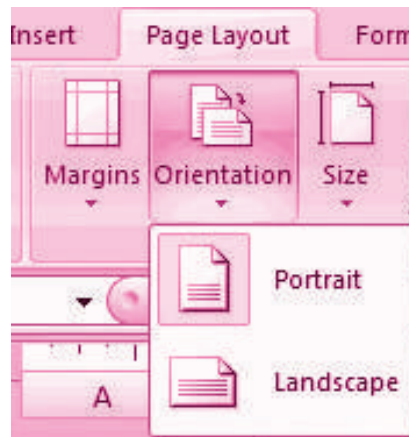


Notes



### Change Page Orientation

To change the page orientation from portrait to landscape:



- Click the **Orientation** button on the **Page Layout** tab
- Choose **Portrait** or **Landscape**

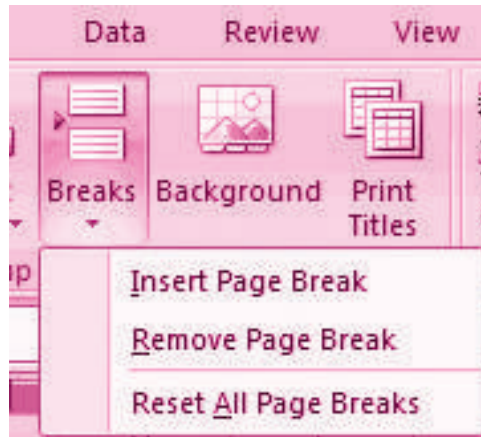
### 35.6.3 Set Page Breaks

You can manually set up page breaks in a worksheet for ease of reading when the sheet is printed. To set a page break:





Notes

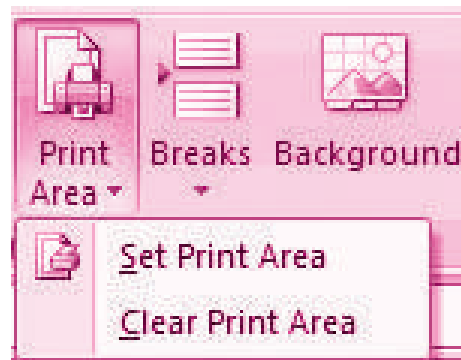


- Click the **Breaks** button on the **Page Layout** tab
- Click **Insert Page Break**

### Print a Range

There may be times when you only want to print a portion of a worksheet. This is easily done through the Print Range function.

To print a range:



- Select the area to be printed
- Click the **Print Area** button on the **Page Layout** tab
- Click **Select Print Area**

### Split a Worksheet

You can split a worksheet into multiple resizable panes for easier viewing of parts of a worksheet. To split a worksheet:

- Select any cell in center of the worksheet you want to split
- Click the **Split** button on the **View** tab
- Notice the split in the screen, you can manipulate each part separately



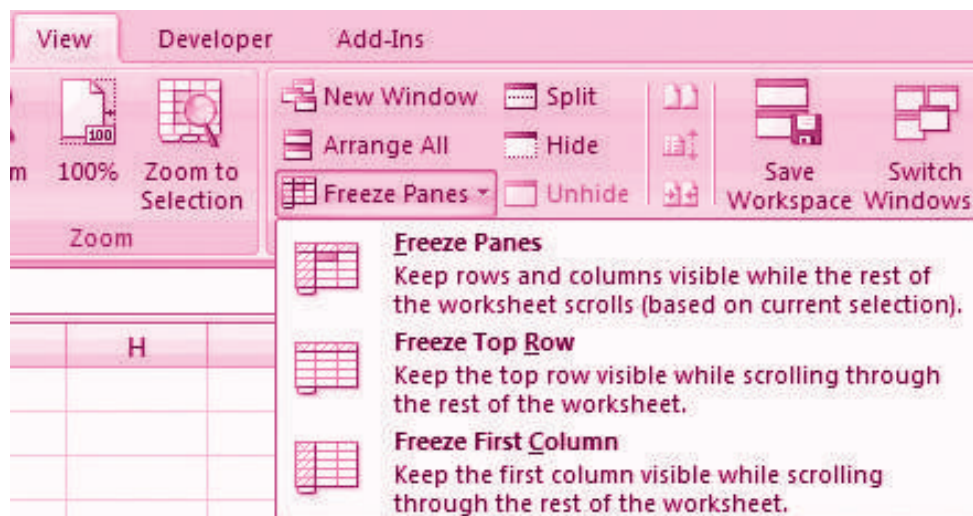
*Notes*



**35.6.4 Freeze Rows and Columns**

You can select a particular portion of a worksheet to stay static while you work on other parts of the sheet. This is accomplished through the Freeze Rows and Columns Function. To Freeze a row or column:

- Click the **Freeze Panes** button on the **View** tab
- Either select a section to be frozen or click the defaults of top row or left column
- To unfreeze, click the **Freeze Panes** button
- Click **Unfreeze**



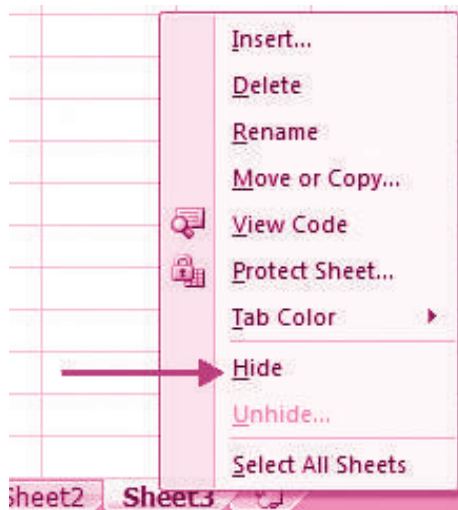
**35.6.5 Hide Worksheets**

To hide a worksheet:

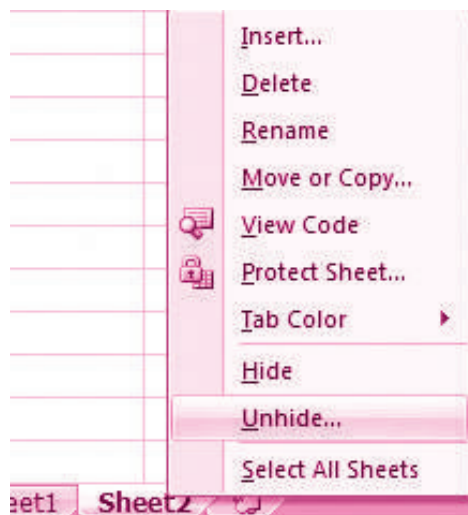
- Select the tab of the sheet you wish to hide
- **Right-click** on the tab
- Click **Hide**



Notes



To unhide a worksheet:



- **Right-click** on any worksheet tab
- Click **Unhide**
- Choose the worksheet to unhide

### 35.7 PREPARATION OF REPORTS USING PIVOT TABLE

A Pivot table is a way to present information in a report format. A Pivot Table report provides enhanced layout, attractive and formatted report with increased readability. It is an interactive way of summarizing large amounts of data. These features lead to the following advantages for the benefit of users:

- Querying large amounts of data in user friendly ways.
- Expanding and collapsing levels of data to focus on results.



**Notes**

- Moving rows to column (s) to look for different summaries of the source data.
- Filtering, sorting, grouping and conditionally formatting the required information of interest of user.
- Pivot table report helps in analyzing related totals, when there are long list of figures to sum and to compare several facts about each figure.

**Pivot Table Toolbar**

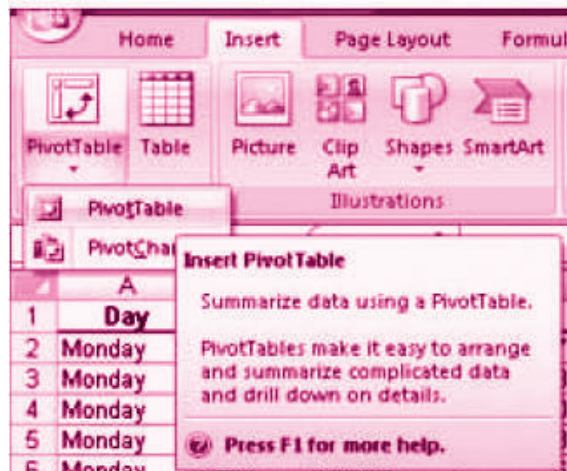
The Pivot Table uses a List Data table. A data table is a range of cells that shows the results of substituting different values in one or more formulas. There are two types of data tables: One variable and two variable table. Formula used in a one-variable data table must refer to an input cell. The input cell is a cell used by Excel in which each input value from a data is substituted. Two variable data table uses only one formula with two lists of input values. The data must refer to two different input cells.

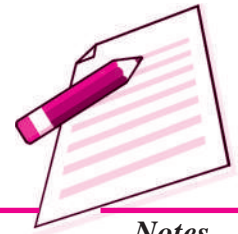
**Designing a Pivot table Report of 3 vegetable consumption of four Metro cities**

1. Enter the vegetable consumption data in the worksheet

	A	B	C	D	E	F	G	H	I
1	Day	City	Vegetable	Actual	Surplus		City	Vegetable	Quota
2	Monday	Chennai	Carrots	17	2		Mumbai	Carrots	15
3	Monday	Chennai	Onions	8	0		Mumbai	Onions	8
4	Monday	Chennai	Potatoes	20	-8		Mumbai	Potatoes	28
5	Monday	Delhi	Carrots	23	8		Chennai	Carrots	17
6	Monday	Delhi	Onions	6	-2		Chennai	Onions	7
7	Monday	Delhi	Potatoes	20	-8		Chennai	Potatoes	21
8	Monday	Kolkata	Carrots	15	-2		Delhi	Carrots	15
9	Monday	Kolkata	Onions	10	3		Delhi	Onions	8
10	Monday	Kolkata	Potatoes	21	0		Delhi	Potatoes	28
11	Monday	Mumbai	Carrots	19	4		Kolkata	Carrots	18
12	Monday	Mumbai	Onions	9	1		Kolkata	Onions	9
13	Monday	Mumbai	Potatoes	29	1		Kolkata	Potatoes	22

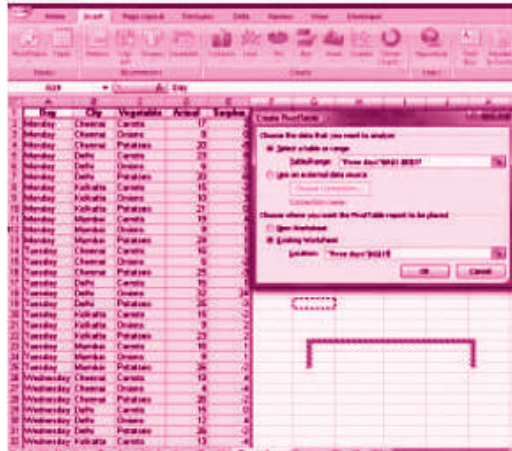
2. On the Insert tab in the Tables group, click Pivot table. Report interactive options as Create Pivot Report



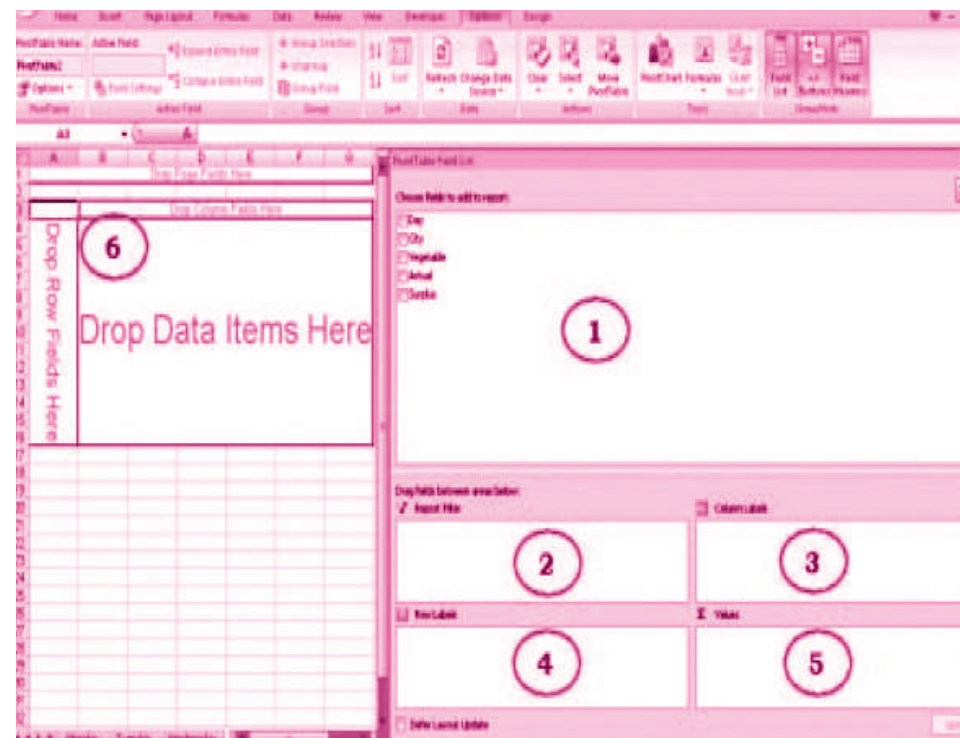


Notes

- Enter the data location and choose to place Pivot table on the existing worksheet.



- Click OK to display a blank Pivot table and field list and Excel displays a Pivot table tool bar.



- Drag the Field Names to the required positions in the Pivot Table

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### Application of Computers in Financial Accounting



Notes

## Electronic Spread Sheet

	A	B	C	D	E
1	Day	(All)			
2					
3	Sum of Actual	Vegetable			
4	City	Carrots	Onions	Potatoes	Grand Total
5	Chennai	52	18	71	141
6	Delhi	54	50	71	175
7	Kolkatta	43	25	66	134
8	Mumbai	50	30	81	161
9	Grand Total	199	123	269	611

6. Pivot Table will be generated

	A	B	C
1	Day	(All)	
2			
3	Sum of Actual		
4	City	Vegetable	Total
5	=Chennai	Carrots	52
6		Onions	18
7		Potatoes	71
8	Chennai Total		141
9	=Delhi	Carrots	54
10		Onions	50
11		Potatoes	71
12	Delhi Total		175
13	=Kolkatta	Carrots	43
14		Onions	25
15		Potatoes	66
16	Kolkatta Total		134
17	=Mumbai	Carrots	50
18		Onions	30
19		Potatoes	81
20	Mumbai Total		161
21	Grand Total		611

Common Errors in spread sheet.



### INTEXT QUESTIONS 35.5

Fill in the blanks with suitable word/words:

- The \_\_\_\_\_ format changes the appearance of a cell range based on given criteria.
- A \_\_\_\_\_ table is a way to present information in a report format.
- A \_\_\_\_\_ table is a range of cells that shows the results of substituting different values in one or more formulas.
- Two variable data table uses only one formula with two lists of \_\_\_\_\_ values.



## WHAT YOU HAVE LEARNT

- **Electronic Spreadsheet :** Electronic Spreadsheet is a combination of rows and columns. It is also known as a worksheet. This worksheet is so large that the human eye can not view all its rows and columns at a point of time.
- **Basics and Features of Spreadsheet :** (1) Grid; (2) Element; (3) Lens View; (4) Functions; (5) Formatting; (6) Save Print and Export
- **Data Entry, Text Management and Cell Formatting :** Excel is one of the software that is bundled with MS office to implement the spreadsheet described above. Here under, we will be exhibiting the visuals using MS Excel 2007.
- **Basic features offered by MS Excel are:**

**Workbook and Worksheet in Excel :** Spreadsheet referred to as a worksheet in Excel. This worksheet is a single page of a workbook, which is a multipage document.

**Worksheet Operations :** The following worksheet operations are associated with the spread sheet : (i) Movement of Cell Pointer; (ii) Short-Cut Menu; (iii) Entering Data into Cells; (iv) Selecting Multiple Cells; (v) Managing Text in Excel

- **Performing Calculations in Excel :** A formula is a set of mathematical instructions that can use in Excel to perform calculations. Formulas are started in the formula box with an = sign.

There are many elements to and excel formula.

*References      Operators      Constants      Functions*

- **Calculate with Functions :** A function is a built in formula in Excel. A function has a name and arguments (the mathematical function) in parentheses. Common functions in Excel:

*Sum      Average      Min      Max      Count*

- **Function Library :** The function library is a large group of functions on the Formula Tab of the Ribbon. These functions include:

*AutoSum      Recently Used      Financial      Logical*  
*Text      Date & Time      Math & Trig*

- **Relative, Absolute and Mixed References :** Calling cells by just their column and row labels (such as “A1”) is called **relative referencing**.
- **Mixed referencing** can also be used where only the row or column is fixed.



Notes



Notes

- **Data Formatting :** Formatting of spreadsheet makes easier to read and understand the important information. This is chiefly categorized as follows:

**Number formatting :** Number formatting includes adding per cent (%), Comma (,), decimal (.), currency (Rs., \$), date, time, scientific values etc. Refer figure 1 given below which depicts the unformatted worksheet:

From the Ribbon select, Home Tab with Number option. Click on **Format Cells** dialog box and choose **Number** tab.

The **Category** list shows all the preset formulas available in Excel, grouped into categories.

If we select **Currency**, the right hand side shows the different symbols of currencies.

Change the number of decimal spaces to zero (0).

Click OK to accept this format. The final output is shown below:

- **Text and General Formatting :** We can do this easily by utilizing the Convert Text to Columns Wizard.
- **Modify Fonts :** Modifying fonts in Excel will allow you to emphasize titles and headings.
- **Format Cells Dialog Box :** In Excel, you can also apply specific formatting to a cell.

**Number :** Allows for the display of different number types and decimal places

**Alignment :** Allows for the horizontal and vertical alignment of text, wrap text, shrink text, merge cells and the direction of the text.

**Font :** Allows for control of font, font style, size, color, and additional features

**Border :** Border styles and colors

**Fill :** Cell fill colors and styles

- **Add Borders and Colors to Cells :** Borders and colors can be added to cells manually or through the use of styles.
- **Merge Cells :** To merge cells select the cells you want to merge and click the **Merge & Center** button on the **Alignment** group of the **Home** tab. The four choices for merging cells are:

Merge & Center	Merge Across	Merge Cells
Unmerge Cells	Align Cell Contents	





*Notes*

- To align cell contents, click the cell or cells you want to align and click on the options within the **Alignment** group on the **Home** tab. There are several options for alignment of cell contents:

Top Align	Middle Align	Bottom Align
Align Text Left	Center	Align Text Right
Decrease Indent	Increase Indent	Orientation

- **Conditional Formatting** : Conditional formatting helps the user to highlight interesting cells or range of cells, emphasize unusual values and visualize data by using data bars, colour scales and icon values.
- **Output Reports** : The entire or partial worksheet(s) can be printed at a time or as and when needed as per the requirement.
- **Set Print Titles** : The print titles function allows you to repeat the column and row headings at the beginning of each new page to make reading a multiple page sheet easier to read when printed.
- **Set Page Breaks** : You can manually set up page breaks in a worksheet for ease of reading when the sheet is printed.
- **Print a Range** : There may be times when you only want to print a portion of a worksheet. This is easily done through the Print Range function.
- **Split a Worksheet** : You can split a worksheet into multiple resizable panes for easier viewing of parts of a worksheet.
- **Freeze Rows and Columns** : You can select a particular portion of a worksheet to stay static while you work on other parts of the sheet.
- **Preparation of Reports Using Pivot Table** : A Pivot table is a way to present information in a report format.
- **Pivot Table Toolbar** : The Pivot Table uses a List Data table. A data table is a range of cells that shows the results of substituting different values in one or more formulas.



### TERMINAL EXERCISE

1. What is Electronic Spread Sheet?
2. What is the basic requirement for any business enterprise for using electronic spread sheet?
3. Name the functions included in 'Function Library'.



*Notes*

4. What is conditional formatting?
5. Give the meanings of workbook & worksheet.
6. Explain the features of Spreadsheet.
7. Explain the worksheet operations in excel sheet.
8. Define workbook & worksheet. What is the difference between them?
9. What do you mean by active worksheet?
10. Explain the procedure of managing Text in excel.
11. Explain worksheet operations available in Excel Sheet.
12. Give Categories of Data formatting and explain them.
13. What benefits are available with the help of conditional formatting.
14. Explain the procedure of preparation of Reports using Pivot Table.



**ANSWERS TO INTEXT QUESTIONS**

- 35.1.** i. grid                      ii. intersection                      iii. rows, columns  
iv. functions                      v. alterations
- 35.2.** i. intersect                      ii. arrow                      iii. handy, commonly  
iv. cell, cell                      v. drag
- 35.3.** i. sum                      ii. count                      iii. average                      iv. max                      v. min
- 35.4.** i. columns wizard                      ii. modifying                      iii. merge & center
- 35.5.** i. conditional                      ii. pivot                      iii. data                      iv. input