

## XI-CHAPTER - 3

### DATA PROCESSING WITH ELECTRONIC SPREAD SHEET

1. What is an electronic spreadsheet : It is a computer application that presents the calculation, organisation, analysis and storage of data in tabular form.

#### **2. Features of electronic spreadsheet**

- Many data can be stored in table form
- Calculations, comparisons and analysis can be done using formulas and functions
- If the related data is changed, the result is also updated.
- It provides Text formatting features like alignment, borders, merge cell and font setting
- There are facilities like sorting and filtering.
- Charts can be constructed for graphical-data analysis.

#### **3. Spreadsheet basics**

- **Cell** : Intersection of each row and column makes a box which is called as Cell.
- **Active Cell** : Data can be entered only in the cell with a bold boundary.
- **Range**: Range is a group of adjacent cells that form a rectangular area.

#### **4. Components of the Worksheet window**

- Title Bar : The top part of the window where the name of the file or software appears.
- Menu Bar: Menu options like File, Edit, View, Insert can be seen.
- Toolbar : Shortcut button for important commands is found.
- Formula Bar : The section containing formulas
- Sheet Tabs : Bottom of the grid of cells are the sheet tabs. By default there are 3 sheets.
- Status Bar: Displays the current status of the worksheet.

#### **5. Data (data types) that can be entered in a cell : Number, text, date and time, formula**

**6. How to format the spreadsheet** : Formatting is the appearance and arrangement of data in a spreadsheet. It makes the worksheet attractive.

- **Formatting Cells** : Step 1 : Format Cells, Step 2 : Use Different tab in Format Cells dialog box
- **Format Column** : Format -> Column
- **Format Row** : Format -> Row
- **Format Sheet** : Format -> Sheet

#### **6.5 Merge Cells** : Combining multiple cells into one cell is called merging of cells.

Step 1 : Select the cells to merge.

Step 2 : Format -> Merge Cells

#### **7. Insert Cell, Row, Column & Worksheet**

- 7.1. **Cell Insert** : Step 1 : Select the cell in which you want to add a new cell.  
Step 2 : Sheet -> Insert -> Cells
- 7.2. **Row Insert** : Step 1 : Select the row in which you want to add a new cell.  
Step 2 : Sheet -> Insert -> Row
- 7.3. **Column Insert** : Step 1 : Select the Column in which you want to add a new cell.  
Step 2 : Sheet -> Insert -> Column
- 7.4. **Sheet Insert** : Step 1 : Sheet -> Insert -> Sheet

#### **8. Delete Cell, Row, Column & Worksheet**

- 8.1. **Cell Delete** : Step 1 : Select the cell to delete.  
Step 2 : Sheet -> Delete Cells  
Step 3 : Select the required option in the dialog box that appears  
Step 4 : Click OK
- 8.2. **Row Delete** : Step 1 : Select the row to delete.  
Step 2 : Sheet -> Delete Row
- 8.3. **Column Delete** : Step 1 : Select the column to delete.  
Step 2 : Sheet -> Delete Column
- 8.4. **Sheet Delete** : Step 1 : Select the sheet to delete. Step 2 : Sheet -> Delete Sheet  
Step 3 : Click Yes/No

## 9. Editing Features in Spreadsheet

### 9.1. Fill a cell range :

#### \*\*\*\*How to enter consecutive numbers from 1 to 100 in column?\*

Step 1 : Select the value from 1 to 100 in the first cell.

Step 2 : Sheet -> Fill Cells -> Series

Step 3 : Enter Start value: 1 & Increment: 1 in Fill Series dialog box -> OK **OR**

Type the first number 1 in the cell. Click on the corner of the cell using the mouse. Once done, drag up to the 100th cell.

#### 9.1.1. Copying cells

Step 1 : Select required data cells

Step 2 : Edit -> Copy or **Ctrl+C**

Step 3 : Select destination cells

Step 4 : Edit -> Paste or **Ctrl+V**

#### 9.1.2. Moving cells

Step 1 : Select required data cells

Step 2 : Edit -> Cut or **Ctrl+X**

Step 3 : Select the destination cell

Step 4 : Edit -> Paste or **Ctrl+V**

## 10. Freezing Rows and Columns in a worksheet

Freezing is making a selected set of columns, rows immovable while scrolling the worksheet.

**Step 1** : Click on the row header below the rows to be frozen.

**Step 2** : View -> Freeze Cells -> Freeze First Columns /OR/ Click Freeze First Row

### Advantage of Freezing

It allows you to lock your column and /or row headings so that, when you scroll down or over to view the rest of your sheet, the first column and/or top row remain on the screen.

**11. Cell referencing** : The cell reference acts as the address of the cell. Eg : B2 refers to the second cell in column B. When a cell address is referred to in a formula, it is called cell referencing.

Two different types of references :-

**11.1 Relative Cell Reference** : It is the basic cell references that adjust and change when copied ( formula etc.) or when using Autofill.

**11.2 Absolute Cell Reference**: When copying the same formula from one cell to another, no need to change its cell Address. Absolute cell reference is used here. Eg: Relative - A3 | Absolute - \$A\$3

## 12. Page Formatting & Worksheet Print

12.1 **Print Range** : Allows printing of only a specific portion, column or row of data in sheet.

Step 1 : Format -> Print Ranges -> Edit

Step 2 : Enter the required value and click OK.

12.2. **Header** : The text found at the top of the page, called header.

**Footer** : The text found at the bottom of the page, called footer.

Step 1 : Insert -> Headers and Footers

Step 2 : Enter the required value and click OK.

12.3. **Page Breaks** : If the content of the worksheet is too long of paper, automatically adding page breaks by size when it prints.

Step 1: Select the cell /row below the row break

Step 2: Insert -> Manuel Break-> Row Break

12.4. **Page Style Setting** : To set the paper size/format, orientation and margins.

Step 1 : Format -> Page Style -> Page Step 2 : Enter the required value and click OK.

### Page orientations

► **Landscape orientation** :-

Means its a horizontal layout

► **Portrait orientation** :-

Means it's a vertical layout.

