**Class** : VIII

**Subject** : Computer Science

**Chapter** : Working in Microsoft Excel (Ch 2)

A *spreadsheet* is a program to organise information in the form of a table. In Microsoft Excel a spreadsheet is called a *worksheet*. Some popular spreadsheet softwares are MS Excel, Lotus-1-2-3, VB Planner Plus, SuperCalc etc.

**INTRODUCTION TO MS EXCEL**

1.) Excel is a computer program used to create electronic worksheets.

2.) Within Excel users can organise data, create charts and perform calculations.

3.) Excel allows users to create large spreadsheets, reference information and it also allows better storage of data.

4.) Excel operates like other MS programs and has many of the same functions and shortcuts of other MS programs.

5.) The data entered in Microsoft Excel stored as a *workbook* has worksheets in it.

6.) A *worksheet* is a collection of cells organised in the form of rows and columns. It begins with row number 1 and column number A.

7.) The *first cell* has the address A1.

8.) The horizontal arrangement of cells are called *Rows*. Rows are named using numbers such as 1,2,3..... from top to bottom.

9.) The vertical arrangement of cells are called *Columns*. Columns are named using alphabet such as A, B, C.... from left to right.

10.) You can enter text, numbers, date and time in a spreadsheet.

## WORKING WITG SHEET TAB

1.) You can **insert** a new worksheet by clicking on the *Insert Worksheet* tab present on the *Sheet* tab.

2.) You can **rename** a worksheet by double clicking on it in the *Sheet* tab.

3.) You can **delete** a worksheet by right clicking on the worksheet on the *Sheet* tab.

## RANGE

A selected rectangular block of two or more cells is called a **cell range** or **range**. It is represented by cell addresses of the first cell and its diagonally opposite cell. For example, a range that extends from cell A1 to E9 is written as A1:E9. You can define a name for a cell range from the *Name Box* that displays the cell address.

## FORMULAS

A formula starts with an equals sign (=). It can contain numbers, cell addresses, cell ranges and operations. You can use a mouse or keyboard to enter a formula. For example, to show the sum of the data in cells A1, B1 and C1 in the cell D1....

Type =A1+B1+C1 in the cell D1 and press Enter.

You can **copy** a formula from one cell to another. This can be done by:

a) using the fill handle.

b) using copy and paste.

## CELL REFERENCING

A cell address used in a formula is called a *cell reference*. There are three types of cell references in formulas:

a) a **relative** cell reference is a reference to a cell relative to the position of the formula. For example, A1.

b) an **absolute** cell reference is a cell reference that always refers to a particular cell. For example, $D$3.

c) a **mixed** cell reference is a combination of relative and absolute column and row references. For example, $B2 or B$2.

When you enter a cell reference in a formula, by default, Excel assumes it is a relative reference.

## ERRORS IN EXCEL

An error indicates that something is wrong with the way the formula was entered. Excel displays several error values, all of which begin with a number or *hash* sign (#). For example,

a) #DIV/0! (division by zero is not possible).

b) #### (column is not wide enough for the value).

c) #VALUE! (Excel doesn't recognise the value).

d) #REF! (invalid cell reference in the formula).

**ASSIGNMENT :**

*Answer the following questions:*

1.) Differentiate between workbook and worksheet.

2.) Write the steps to delete a worksheet.

3.) What is a fill handle?

4.) What is a formula? What is the maximum length of a formula in Excel?

5.) What is cell referencing? Mention the types of cell referencing.

6.) Differentiate between relative and absolute cell referencing.

7.) How will you create an absolute cell reference?

8.) What is an error? List some errors in Excel.