



Advanced Excel



LOTUS IT HUB
COMPUTER TRAINING INSTITUTES



Advanced Excel Syllabus

- **Commonly Used Functions**

- ✓ Sum, Average, Max , Min
- ✓ Values can be from –
- ✓ One sheet – Continuous Range
- ✓ One sheet – Discontinuous Range
- ✓ Different Sheets of the Same File –
- ✓ From Different Files Of the same machine
- ✓ From Files of a separate machine (LAN)

- **Conditional Functions**

- If condition –**

For decision making in cases such as --

- ✓ Showing Passed or Failed depending on the marks.
- ✓ Giving discount 10 % if total sales is above 500 or discount 5% if total sales is less than 500.
- ✓ Multiple decisions such as showing grades 'A' if loans amt is above 700, 'B' if loan amt is between 500 and 700, 'C' if it is between 300 and 500 and so on.....

Large and Small

- ✓ These functions are very useful when we have to find which value is the second largest or third lowest value from the given range.

Conditional Sum

- ✓ To add those values where sales are above 100
- ✓ Adding sales figures of India only.
- ✓ Total of Discount where respective Sales are more than 5

Count Functions

- ✓ To count number of quantities for products
- ✓ To count how many product do not have any quantity
- ✓ Conditional count – To count the quantities where qty is more than 10

Paste Link

- ✓ There can be a situation when the calculated value of a cell is to be copied in another sheet and there should be a link for the future updates in that value

- **Logical**

- AND**

- ✓ Sometimes decision has to be taken on the success of all the conditions.
- ✓ If a student is getting more than 35 in both the subjects Math **and** Physics then only he should be declared as Passed otherwise as Failed.

- OR**

- ✓ Sometimes the decision has to be taken on the success of any one condition
- ✓ To give discount there are two criteria out of which the customer will fulfill one.
- ✓ The discount of 20% has to be given if the no. of products taken are above 5 **OR** the total cost of all the products exceeds 1000

- **Mid Functions**

- ✓ Especially suitable for lengthy Product Code
- ✓ Sometimes the product codes are having the entire description in the code itself.
- ✓ Using mid function we can extract a part of the information such as country name,city name,product name etc from a set.

Replace Function

- ✓ Sometimes we have to replace some part of the text. That means for 100 products which have product code starting from Pune- has to be replaced by Mumbai-

Left – Right Functions

- ✓ Sometimes from a product code we are interested to take some number of starting characters or some number of ending characters . In these cases we can use left right functions.

Time Function

- ✓ To create an Login Time-Management Software for checking the entry time, late time and fine

Year Function

- ✓ Calculations of years is a very important factor in many salary packages.
- ✓ To find the number of years of service and to give the profit percentage depending on the service years.

❑ **Date Functions**

- ✓ A typical library needs validations for issue date, return date, fine etc.
- ✓ Date functions help us for such as example

❑ **Weekday Function**

- ✓ Can you imagine that you are entering a date and immediately it's weekday is coming ?
- ✓ Yes it is possible using Weekday function.

❑ **Frequency Function**

- ✓ From a set of values we want to see the count of values in different ranges such as count of values between 60 and 70, between 70 and 80 and so on ...
- ✓ In such a case we can use the frequency function *in one stroke* instead of using separate and repeating count if function

❑ Database Functions

Tree	Height	Age	Yield	Profit
Apple	18	7	14	105
Pear	12	12	10	96
Cherry	13	14	15	105
Apple	9	15	10	75
Pear	9	8	8	123
Cherry	16	7	4	60
Cherry	10	7	2	222
Apple	8	9	6	300

1 . We want to count the ages of Apple who have Height > 10

3.We want to see the max profit for Apple and Cherry where both have height above 15

4.We want to see the min profit for Apple and Cherry

5.We want to see the min profit for Apple and Pear where both have age less than 10.

❑ **Mode Function**

- ✓ Mode can be used to see the most repeating value from a range.
- ✓ Can be used to see the which product is repeating many a times from the pending work list.
- ✓ To see which Supplier's name is coming more often in the last 15 years records.

❑ **Absolute Referencing**

- ✓ In excel a formula can be dragged down to get the next results. In this case the formula cell address changes respectively. But some times we do not want to change on cell address , that means one cell should be absolute reference (fixed) .
- ✓ For e.g. To see the percentage contribution of each person

❑ **Validations**

- In an corporate world validity of data is a key factor.
Through excel we can do following validations –
- ✓ To check the numbers entered are as per condition.
- ✓ To check the date entered
- ✓ To provide a drop down list to select a item.
- ✓ To check the length of the text.

Filtering Data

- ✓ From a large table sometimes it is necessary to see selective data (filtering data) or to take printouts for reports of conditional records.

Text to Columns

- ✓ Sometimes one column has a text that has multiple information . For e.g. in the full names of persons. We can split that information in different columns

Sub Totals

- ✓ In a report generation many a times we want the grand totals, sub-totals and the break up to be seen together.

Conditional Formatting

Excel can understand data and do formatting of the value accordingly. That means for easy identification we want to show the all outstanding payments which are above 5000 in red, between 3000 and 5000 in blue.

- ✓ We can format the country green if it is India, blue if it is USA and so on.

❑ **Charts**

- ✓ Representation of data in a graphical format easily gives us the idea of the ups and downs and the trend of data.
- ✓ In excel we have different types of graphs for different requirements.
- ✓ Types of charts are :--
- ✓ Column, Bar, Line, Pie, Doughnut, Bubble, Surface, Stock, Scattered, Cylindrical and Conical.

❑ **Pivot Tables**

- ✓ You can rotate rows and columns to see different summaries of the source data
- ✓ Use a PivotTable report when you want to compare related totals, especially when you have a long list of figures to summarize and you want to compare several facts about each figure. Use PivotTable reports when you want Microsoft Excel to do the sorting, subtotaling, and totaling for you.
- ✓ You can also make a PivotTable report available on the Web by using a PivotTable list on Web page. When you publish an Excel PivotTable report to a PivotTable list, others can view and interact with the data from within their Web browsers.

Pivot Chart

- ✓ In a Pivot Chart the data is shown in a graphical format but the only difference in a normal chart and a pivot chart is that in the pivot chart the summarized (calculated) data's chart is shown and not of the actual values.

Macros

- ✓ In a corporate sector there is a need to use very complicated and lengthy formulae gain and again.
- ✓ In such cases macros are real boon!
- ✓ In a macro we can record many steps. The steps may be formulae , formatting , etc. A short cut key can be given say Ctrl k to activate the macro.

THANK YOU!