Advanced Excel









Module 01 - Understand Excel

Introduction to Excel

- What is Excel & its complete history
- Basic terminology of Excel
- Spreadsheet environment & Object Model of Excel
- Different versions of Excel (97-2003,2007,2010, 2013 & 2016)
 and what's new in each version of it
- Different file formats .xls,.xlsx,.xlsm,.xlsb,.xlam,.csv...etc., and when to use which format of Excel
- Excel user interface and customization of Quick Access Toolbar

Module 02 - Basic Excel

Clipboard Group

- Cut
- Copy
- Copy as Picture
- Different Types of Paste Special Options
- Paste vs Paste Special
- Format Painter

Font Group

- Font Style
- Font Size
- Border Styles
- Cell Colors
- Font Colors

Alignment Group

- Cell Alignment
- Orientation
- Indent Level
- Wrap Text
- Merge/Unmerge

Data Types in Excel

Number Group

- General
- Number
- Currency
- Accounting
- Short Date
- Long Date
- Time
- Percentage
- Fraction
- Scientific
- Text
- Custom number formatting
- How to use your own formatting
- Advanced techniques in Number formatting
- How to change default number settings
- Comma Style
- Increase/Decrease Decimals

Conditional Formatting

- What is Conditional Formatting
- How to change existing formatting
- How to delete existing formatting
- Highlight cells Rules
- Top/Bottom Rules
- Data Bars
- Color Scales
- Icon Sets
- Writing Complex Conditional
- Formatting rules using formulas

Project1: 23 Interview tasks using conditional formatting

Format as Table (FT)

- What is FT
- Differences between Normal Table And Format as Table
- Advantages of FT
- How to create Dynamic Pivot
- Tables & Charts using FT
- How to create effective formulas using Format as Table
- Convert FT to Normal Range
- Create our own Table style

Cell Styles

Cells

- Insert Cells/Rows/Columns/Sheets
- Delete Cells/Rows/Columns/Sheets
- Hide Rows/Columns/Sheets
- Unhide Rows/Columns/Sheets
- Row Height/Column width
- Rename Sheet
- · Change Sheet Tab Color
- Move/Copy Sheet

Fill Options

- Copy Down
- Copy Right
- Copy Up
- Copy Left
- Copy to Selected Range
- Fill Series by Column/Row
- Justify Fill

Clear Options

Find & Select

- Find
- Replace
- Go To
- Go To Special
- Select Objects
- Selection Pane

Module 3 - Advanced Excel

Formulas Introduction

- What is Formula
- How to start with the formula
- What is an Argument?
- How to give input to formulas
- What is Optional & Mandatory argument?
- How many ways we can give input to formulas
- Mathematical Operators
- Comparison Operators

Cell Reference Styles

- Relative Style
- Absolute Style
- Row Freeze
- Column Freeze

Text Functions

LEN, UPPER, LOWER, PROPER, FIND, SEARCH, LEFT RIGHT, MID, SUBSTITUTE, REPLACE, CONCATENATE, CONCAT, TEXTJOIN, CHAR, CODE, REPT, DOLLAR, FIXEDEXACT etc.,

Project 2: 11 Interview tasks using Text Functions.

Date & Time

TODAY, NOW, DAY, MONTH, YEAR, TIME, HOUR, MINUTE, SECOND, WEEKDAY, WEEKNUM, EDATE, YEARFRAC, DAYS360,

 DAYS, EOMONTH, DATEVALUE, TIMEVALUE, NETWORKDAYS, NETWORKDAYS.INTL, WORKDAY, WORKDAY.INTL, DATEDIF, etc.

Project3: 7 Interview-Based Tasks using Date & Time

Logical Functions

• TRU, FALSE, AND, OR, NOT, IF, IFS, IFERROR **Project4**: 9 Interview tasks using Logical Functions

Mathematical Functions

ABS, ROUND, ROUNDUP, ROUNDDOWN CEILING, FLOOR, MROUNDRAND, RAND BETWEEN, MOD, QUOTIENT, FACT, LCM, GCD, PI, EXP, SQRT, PRODUCT, POWER,, INT, EVEN, ODD, SUM, SUM, SUMIFSSUBTOTAL, SUMPRODUCT etc.,

Project5: 7 Interview task using Mathematical functions

Statistical Formulas

COUNT, COUNTA, COUNTBLANK, COUNTIF, COUNTIFS AVERAGE, AVERAGE, AVERAGEIF, AVERAGEIFSMAX, MIN, MAXIFS, MINIFS, MAXA, MINA, LARGE, SMALL, RANK etc.

Project6: 7 Interview tasks using Statistical Functions,

Information Formulas

ISTEXT, ISNONTEXT, ISNUMBER, ISNA, ISREF, ISERR, ISERROR, ISEVEN, ISODD, ISBLANK, ISLOGICAL, ISFORMULA, CELL, INFO, SHEET, SHEETS, N, NA, TYPE, ERROR. TYPE etc.,

Lookup & Ref Formulas

• VLOOKUP, MATCH, HLOOKUP, INDEX, OFFSET, CHOOSE, INDIRECT, ROW, ROWS, COLUMN, COLUMNS, TRANSPOSE, HYPERLINK etc.,

Project7: 33 Interview tasks using Lookup & Ref Funcs Report Designing Techniques

Dynamic conditional formatting using formulas

Illustrations

- Insert Pictures
- Insert online pictures
- Insert Shapes
- Insert Icons
- Insert 3D pictures
- Insert Smart Art
- Screenshots

Sparklines

- What is Sparkline?
- What is the difference between charts & Sparklines
- Line Sparkline
- Column Sparklines
- Win/Loss Sparklines

Filter Options

What is Slicer?

- From which version this is available
- Slicers vs Timeline

Insert Options

- Hyperlink
- Comments
- Text Box
- Header & Footer
- WordArt
- Signature Line
- Object
- Hyperlink vs Object
- Symbols
- Equations
- Report Printing Techniques

Themes

- Change Document Styles using Themes
- Change Document Color
- Change Document fonts
- Change Document effects
- Create our own Theme

Page Setup

- Set Page Margins
- Change the orientation
- Set the paper size
- Set print area

- Clear Print area
- Insert/Remove Page breaks
- Insert picture as a background
- Print Titles

Scale to Fit

• Change scale to fit pages

Sheet Options

- Print Gridlines
- Print Headings

Arrange Objects

• Formulas Execution Techniques

Define Names

- What is Define Name/Named Range?
- Create a static Named Range
- Create a dynamic Named Range
- Edit existing Named Range
- Delete Existing Named Range
- Use Named Ranges in Formulas
- Use Named Ranges in Charts
- Use Named Ranges in Dynamic Dropdowns
- Use Named Ranges in Pivot Tables etc.

Formulas Auditing

Trace Precedents

- · Trace Dependants,
- Show Formulas,
- · Error Checking,
- Evaluate Formulas,
- Watch Window

Calculation Options

- Automatic Calculations
- Automatic Calculations except for Data tables
- Manual Calculations using Calculate Now
- Manual Calculations using Calculate Sheet

Data Management Techniques Connect with External Applications

- Create a connection with Database,
- Create a connection with a Text/CSV file
- Create a connection with the Website
- Extract data from external sources
- Delete existing connections
- Refresh connections
- Set time to refresh connections automatically

Sort & Filter

- Sort A-Z
- Sort Z-A
- Level by Sorting/Custom sorting
- Filter by Text

- Filter by Number
- Filter by Text Color
- Filter by font Color
- · Filter by Icons
- Filter using a search box
- Add selection to existing filters
- · Advanced filters using conditions
- · Paste unique filtered data in other
- · location, Auto Filter vs Advanced Filter

Data Tools

- Split Data into multiple columns using Text to columns,
- Flash Fill,
- Remove Duplicates
- Consolidate data from multiple sheets

Data Validation

- What is Data Validation?
- Static Data Validation
- Create input message
- Customize Error alert
- Change the Error Style (Stop, Warning, etc.)
- Dynamic Data Validation using formulas,
- Static List by Selecting Range/ Manual input
- List by using Named Range
- Dependent drop downs using Named Range
- Highlight Invalid Data using Circles

- Clear validation circles
- Clear Data Validation

Forecast

- What if Analysis Scenario Manager
- Goal Seek
- Data Table

Outline

- Group
- Ungroup
- Sub-Totals
- Data Protection Techniques

Spell Checking Options

- Spelling
- Thesaurus
- Translate
- AutoCorrect Options

Protection Options

- Worksheet Protection (Restrict user to enter or modify data),
- Workbook Protection (Restrict user to Insert/ Delete Sheet, Move Sheet, Copy Sheet, Change Tab Color e,tc) – Structure Protection
- How to protect specific range
- Allowing users to edit the protected range

- Lock cells / Hide formulas
- Workbook Encryption

Comments

- Insert Comment
- Show/Hide Comments
- Modify Comments
- Delete Comment

Notes

- Insert Note
- Show/Hide Notes
- Modify Notes
- Delete Notes
- Data Viewing Techniques

Workbook Views

- Normal View
- Page Break Preview
- Page Layout View
- Custom Views

Show/Hide

- Gridlines
- Formula Bar
- Headings

Zoom Options

Create a new window for the workbook

Arrange Workbooks

Split worksheet screen

View the workbook side by side for comparison

Switch from one workbook to another

• Data Analysis & Visualization

Pivot Table (PT) & Pivot Chart

- What is Pivot Table
- How to insert Pivot Table
- Pivot Table Fields Section
- Pivot Table Areas Section (Rows, Columns, Values & Filter)
- How to make your PT dynamic without changing the data source every time
- How to insert Slicers in Pivot Table
- Insert Timeline in Pivot Table
- Difference between Slicer and Report Filter
- How to Connect Multiple Pivot Tables using Slicers
- How to insert Calculated Fields/Formulas in PT
- Pivot Table Value field settings
- Grouping/Ungrouping of fields
- Creating a Pivot Chart
- Sub Total settings
- Grand Totals settings

- Report Layout Options
- Pivot Table Style Options etc.

Charts

- What is Chart?
- Charts Terminology
- Types of Charts Column, Line, Bar, Pie Area, Combo charts etc.
- Creating Static Chart
- Chart Design
- Dynamic Chart using formulas
- Dynamic chart using Named Range

Dashboards

- What is Dashboard?
- Creating Dashboard using Pivot Tables and Charts

Project8: Creating Dashboard using real time data

Project9: 25 complex tasks using advanced features of Excel