Course Definition.

What is Excel?

✓ Excel is an electronic spreadsheet program that can be used for storing, organizing and manipulating data.

• Why Excel?

- ✓ Excel makes calculations of complex formulas easy
- ✓ Excel works great as a basic reporting tool
- ✓ To groom your career as reporting analyst
- ✓ To broaden your opportunity's horizon in various sectors. (Like IT, BPO, KPO, Banks, others etc.)

• Who should go for Excel/VBA?

- ✓ A professional / Student looking forward to learn a basic technology and groom his/ her career in IT/KPO/Bank/BPO sector.
- ✓ A professional / Student looking forward to groom his/her career in Reporting/Analysis. (Report Automation)
- ✓ A manager trying to track his/ her team performance and fulfil all reporting task (Including manual/ automated) he/she handles.
- ✓ A teacher trying to figure out how your students are doing as compared to their peers
- ✓ A small business owner wondering which product to keep and which to retire
- ✓ A scientist trying to figure out the homogeneity of a dataset
- ✓ A housewife keeping track of household expenses and determining if it's a good idea to send her children to \$1000/mth tuition classes
- ✓ A freelancer wants to earn some money seating home by doing some easy excel work.

What is a Report?

✓ A document containing information organized in a narrative, graphic, or tabular form, prepared on ad hoc, periodic, recurring, regular, or as required basis. Reports may refer to specific periods, events, occurrences, or subjects, and may be communicated or presented in oral or written form.

(Present a Suitable Example with some suitable scopes)

• What is a dashboard?

✓ A dashboard is a visual display of the most important information needed to achieve one or more objectives; consolidated and arranged on a single screen so the information can be monitored at a glance.

Here are the key characteristics of a dashboard:

✓ All the visualizations fit on a single computer screen — scrolling to see more violates the definition of a dashboard.

- ✓ It shows the most important performance indicators / performance measures to be monitored.
- ✓ Interactivity such as filtering and drill-down can be used in a dashboard; however, those types of actions should not be required to see which performance indicators are under performing.

Example



Excel Functions and VBA

- ✓ Excel provides the user with a large collection of ready-made functions, more than enough to satisfy the average user
- ✓ VBA (Visual Basic for Applications) is the magic that allows you to get your Office programs doing whatever you want. You can automate tedious procedures, get your different applications to communicate with each other, and build the tools that you wish Microsoft had made. And you don't even have to be a Rocket Scientist!

From simple macros to complex procedures and custom functions... once you start using VBA you will wonder how you ever managed without it.

• How you are going learn with us?

- ✓ Learn While Working...
- ✓ Understanding most commonly used excel formulas and various scenarios.
- ✓ Training on how to record or write macros.
- ✓ Report Automations and various tools.
- ✓ The work environment provides a context for learning that is very different to that provided within Colleges/universities. Not only do people learn in different ways, but they also learn different things. Although the workplace appears to be primarily concerned with your capability (what you do and how you perform), it is equally important to be able to do the right thing at the right time.

- ✓ In practice this means that you have
 - (1) To understand both the general context and the specific situation you are expected to deal with
 - (2) To decide what needs to be done by yourself and possibly also with others, and
 - (3) To implement what you have decided, individually or with others, through performing a series of actions. All three of these processes contribute to your perceived capabilityy.
 - (4) Many Brains environment
 - (5) Bound to do. Bound to learn.

Questions and Answers

Program A for Excel Learners (40 hrs)

Day 1 - (4 Hrs)

Course definition

Excel Formula (What/ How to write)

Count(), Counta(), Countif(), Countifs(), Countblank(),Sum(), Sumif(), Sumifs(), Sumproduct(),Average(), min(), max

Exercise above with some suitable example or scenario

Day 2 - (4 Hrs)

LEFT(Text, # Characters)	Gives leftmost portion of text for #		
	characters		
=RIGHT(Text, # Characters)	Gives rightmost portion of text for #		
	characters		
=MID(Text, Start #, # Characters)	Gives text from Start # for # characters		
=TRIM(Text)	Removes extra spaces		
=PROPER(Text)	Makes first letter in each word of text		
	uppercase		
=CLEAN(Text)	Removes all non-printable characters		
	from text		
=UPPER(Text)	Makes text ALL UPPERCASE		
=LOWER(Text)	Makes text all lowercase		
=FIND(Text to Find, Within Text)	Finds starting position of text within		
	text; case sensitive		
=SEARCH(Text to Find, Within Text)	Same as above, but not case sensitive		
=LEN(Text)	Gives # of characters in text		

=SUBSTITUTE(Within Text, Text to Replace text within text based on search

Replace, Text to Swap In) for "Text to Replace"

=REPLACE(Within Text, Start #, # Replace text within text based on Characters, Text to Swap In) character position at "Start #"

=VALUE(Text) Converts text to number

=TEXT(Value, Format Text) Shows number or text in different

format

Exercise a report to work on, which may use all above functions.

Day 3 - (4 Hrs)

Function What It Does

=DATE (Year, Month, Day)

Creates date in Excel

Converts text to real date

EYEAR (Date)

Returns year of date

Returns month of date

EDAY (Date)

Returns day of date

=NETWORKDAYS (Start Date, End Calculates # of business days between

Date) two dates

=EOMONTH (Start Date, # Months) Last day of month after # months

Exercise a report which utilizes all the above functions

Day 4 - (4 Hrs)

=VLOOKUP (Value, Table, Column #) Looks up Value in Left Column and Returns

cell in specified Column # and Row # that

contains Value

=HLOOKUP (Value, Table, Row #) Looks up Value in Top Row and Returns

cell in specified Row # and Column # that

contains Value

=MATCH (Value, Row or Column Range) Finds Item's Position in Row/Column

=INDEX (Table, Row #, Col #) Retrieves cell value at Row # and Column #

=INDIRECT (Reference) Returns cell at reference given by Reference

text

=ADDRESS (Row #, Col #) Creates cell reference text

=CHOOSE (Number, Item1, Item2...) Selects Item from List based on Number =OFFSET(Cell, # Rows, # Cols) Move # of Rows and Columns from Cell

Cell freeze concepts and applicable scenarios

Exercise a report which utilizes all the above functions

Day 5 - (4 hrs)

Conditional Formatting, Data sorting and Filtering. Pivot Tables, Calculated Fields, Named Ranges.

```
IF (condition, [value_if_true], [value_if_false])
IF (OR (A1<150000, A1>250000), 0, A1)
IF (AND (A1>100, B1<200), 25, 0)</pre>
```

Exercise:

Example: Create a data table with some Student ID, name and Subjects, Enter dummy marks. 45 is pass mark.

Any students passed in all the subjects should declared as pass. And if passed then Average marks >=80 A, >=60 B else C. Fail for Fail.

Day 6 to 10 (4*5= 20 hrs.)

Project. (With Expert Support)

Gathering Requirements (Learn how to get the customer's requirement) Understanding Data Source Drafts and signoffs (via email- learning business communication) Online / Live presentation.

CV preparation

Interview Tips

Certifications

For Excel + VBA Program A + Program B

Program B (40 hrs.)

Day 11 - (4 hrs.)

Introduction to VBA Macros

Understanding various way to referencing a cell.

Understanding excel Object hierarchy

Recording Macros and understanding code behind

Editing, writing a macro code and saving.

Debugging

Day 12 - (4 hrs.)

VBA Programing concept

VBA Syntax and Semantics

Variable Type and declaration, Comment line

Decision making with operators

Repeating actions with loops

Day 13 - (4 hrs.)

Procedures and Events

Functions

User Forms and GUI

Day 14 - (4 hrs.)

Sort, Filter, Find, Conditional formatting, Pivot, Charts with macros Error Handling

Day 15 - (4 hrs.)

ODBC Connectivity, Query handling.

Day 16 to 20 (5*4=20 hrs)

Project. (With Expert Support)

Gathering Requirements (Learn how to get the customer's requirement)

Understanding Data Source

Drafts and signoffs (via email- learning business communication)

Online / Live presentation.

CV preparation

Interview Tips

Certifications