

---

# **Diploma in MIS and Data Analysis**

Duration: 1 Year

## 1. Computer Basic

- ☞ Introduction to Computer
- ☞ Introduction to Operating System
- ☞ Notepad
- ☞ WordPad
- ☞ MS-Paint
- ☞ MS-Word
- ☞ MS-Excel
- ☞ MS-PowerPoint
- ☞ Web Browser & Internet

## 2. Advanced Excel

- ☞ Mathematical Functions  
SUM | SUMIF | SUMIFS | COUNT | COUNTA | COUNTBLANK | COUNTIF |  
COUNTIFS | AVERAGE | AVERAGEA | AVERAGEIF | AVERAGEIFS | SUBTOTAL |  
AGGREGATE | RAND | RANDBETWEEN | ROUNDUP | ROUNDDOWN | ROUND |  
SUMPRODUCT | MOD | SQRT | POWER | FACT | CONVERT | ROMAN
- ☞ Text Functions  
CHAR | CLEAN | CODE | CONCATENATE | FIND | SEARCH | SUBSTITUTE | REPLACE |  
LEN | RIGHT | LEFT | MID | LOWER | UPPER | PROPER | TEXT | TRIM | VALUE
- ☞ Date & Time Functions  
DATE | DAY | MONTH | YEAR | EDATE | EOMONTH | NETWORKDAYS | WORKDAY |  
WEEKNUM | WEEKDAY | HOUR | MINUTE | SECOND | NOW | TODAY | TIME
- ☞ Logical Functions  
AND | OR | IF | IFERROR | NOT | NESTED IF

---

### Laxmi Nagar

H.O. : B-33 Vikas Marg Oppo. Metro Pillar Number 43,  
Laxmi Nagar, Delhi – 110092  
Phones : 011-43507604, 9811631557

### Noida

Bhagwan Sahai Tower, 3<sup>rd</sup> Floor, Opp. Priya Gold  
Building, Naya Bans, Sector-15, Noida, UP-201301  
Phones : 0120-4460087, 9354132228

#### ☞ Lookup & Reference Functions

VLOOKUP | DOUBLE VLOOKUP | HLOOKUP | INDEX | MATCH | OFFSET | INDIRECT | ADDRESS | COLUMN | COLUMNS | ROW | ROWS | CHOOSE | ARRAYS | CONCEPT IN LOOKUP FORMULA'S

#### ☞ Other Functions

PMT | FV | ISNA | ISBLANK | ISERR | ISEVEN | ISODD | ISLOGICAL | ISTEXT | MAX | MIN and Other many functions.

#### ☞ Data Collection Method with Data Quality, Collaboration & Security Like Share Your Workbook on Share Drive with Quality

#### ☞ Single/Multidimensional Analysis, Like Three Dimensional (3D) Tables

#### ☞ Advanced Chart Technique, How to make Dynamic Charts, Bar Charts, Pie Charts, Scatter Chart, Line Chart, Column Chart, Speedometer Chart, Gantt Chart

#### ☞ Sensitive Analysis Like Data Table, Manual What-If Analysis, Threshold Values, Goal Seek, One-Variable Data Table, Two-Variable Data Table

#### ☞ Filters (Basic, Advanced, Conditional), Sort (Ascending, Descending, Cell/ Font Color), Conditional Formatting, Data Validation, Group & Ungroup, Data split.

#### ☞ Pivot Table and Charts, Import and Export data, Protect/Unprotect sheets/workbooks. Worksheet formatting and Print Display

#### ☞ Report Development (Live Project)

### 3. VBA (Visual Basic for Application)

#### ☞ Introduction to Excel VBA & Excel Macro

#### ☞ Referencing and Properties & Methods

#### ☞ Declaring Variables & Object

#### ☞ Looping & Statements

#### ☞ Find Method, Useful Built in Function & Useful VBA Function

#### ☞ Debugging & Error Handling

#### ☞ Working with Arrays, Files & Folder, Text File and CSV File

#### ☞ Working with Other Application, Events and Function Procedure

#### ☞ Working with Activex Control, User Form and Charts

#### Laxmi Nagar

H.O. : B-33 Vikas Marg Oppo. Metro Pillar Number 43,  
Laxmi Nagar, Delhi – 110092  
Phones : 011-43507604, 9811631557

#### Noida

Bhagwan Sahai Tower, 3<sup>rd</sup> Floor, Opp. Priya Gold  
Building, Naya Bans, Sector-15, Noida, UP-201301  
Phones : 0120-4460087, 9354132228

## 4. MYSQL

- ☞ Introduction to Basic Database Concepts
- ☞ Introduction to SQL Server
- ☞ Introduction to SQL
- ☞ DDL and DML Statements
- ☞ Working with Queries (DQL)
- ☞ Aggregate Functions
- ☞ Joins and Set Operations
- ☞ Working with Constraints
- ☞ Implementing Views
- ☞ Data Control language (DCL)
- ☞ Writing Transact-SQL (T-SQL)
- ☞ Working with Stored Procedures
- ☞ Backup and Restore

## 5. Python

- ☞ Python- An Introduction
- ☞ Python Variables & Data Types
- ☞ Operators
- ☞ Python Conditional Statements
- ☞ Python Looping Concept
- ☞ Python Control Statements
- ☞ Python Data Type Casting
- ☞ Python Number 9. Python String
- ☞ Python List
- ☞ Python Tuple
- ☞ Python Dictionary
- ☞ Python Sets
- ☞ Python Data & Time
- ☞ Python Function
- ☞ Module
- ☞ File Handling (Input/Output)

### Laxmi Nagar

H.O. : B-33 Vikas Marg Oppo. Metro Pillar Number 43,  
Laxmi Nagar, Delhi – 110092  
Phones : 011-43507604, 9811631557

### Noida

Bhagwan Sahai Tower, 3<sup>rd</sup> Floor, Opp. Priya Gold  
Building, Naya Bans, Sector-15, Noida, UP-201301  
Phones : 0120-4460087, 9354132228

- ☞ Exception Handling
- ☞ OOPs Concepts
- ☞ Multithreading
- ☞ Python Mail Sending Program
- ☞ Regular Expression
- ☞ Database Connection
- ☞ Interacting with Networks
- ☞ GUI (Graphical User Interface)
- ☞ Python Web Scraping

## 6. MS Power-BI (Optional)

- ☞ Learn to use the easiest Business Intelligence tool to create stunning reports and dashboards
- ☞ Learn how to connect multiple sources of data in Power BI
- ☞ Learn M-language user in Power BI
- ☞ Learn how to create advanced DAX measures and calculated columns for complex calculations.
- ☞ Learn how to use charts using visuals like column, line, pie, combo, Funnel, Gauges and KPIs to name a few.
- ☞ Learn to create powerful tables and matrix of reporting data.
- ☞ Learn how you can visualize that data in a meaningful way to revile insights into your business like never before.
- ☞ Learn how to turn data into insight and data into interactive visualizations to tell a story.
- ☞ Learn how to collaborate and share contents on Microsoft's Powerful platform.
- ☞ This hands-on course will prepare you to start your Data Analytics career

## 7. Tableau (Optional)

- ☞ Getting started with Tableau
  - Overview of Tableau
  - Tableau Architecture

### Laxmi Nagar

H.O. : B-33 Vikas Marg Oppo. Metro Pillar Number 43,  
Laxmi Nagar, Delhi – 110092  
Phones : 011-43507604, 9811631557

### Noida

Bhagwan Sahai Tower, 3<sup>rd</sup> Floor, Opp. Priya Gold  
Building, Naya Bans, Sector-15, Noida, UP-201301  
Phones : 0120-4460087, 9354132228

---

➤ Installation and Configuration of Tableau 10

☞ Connecting to the data

- Managing Metadata
- Managing Extracts
- Data Sources
- Cross-Database Joins
- Data Aggregation and Data Ports
- Tableau Charts
- Bar Charts and Stacked Bars Data Blending
- Tree Maps and Scatter Plots
- Individual Axes, Blended Axes, Dual Axes and Combinational Chart

☞ Visual Analytics

- Drill Down and Hierarchies
- Sorting, Filtering and Grouping
- Parameters and Formatting
- Trend and Reference Lines
- Forecasting and Clustering
- Analysis with Cubes and MDX

☞ Developing first bar chart

- Connecting Tableau to Data File
- Navigating Tableau
- Calculated Fields
- Adding Colors, Labels and Formatting

☞ Time Series, Maps and Aggregation

- Data Extracts and Time Series
- Understanding Granularity, Aggregation and Level of Details
- Default Location in Maps
- Custom Geo Coding
- Symbol Map and Filled Map

☞ First Dashboard

- Into Section
- Joining Data in Tableau
- Working with Maps and Hierarchies

---

**Laxmi Nagar**

H.O. : B-33 Vikas Marg Oppo. Metro Pillar Number 43,  
Laxmi Nagar, Delhi – 110092  
Phones : 011-43507604, 9811631557

**Noida**

Bhagwan Sahai Tower, 3<sup>rd</sup> Floor, Opp. Priya Gold  
Building, Naya Bans, Sector-15, Noida, UP-201301  
Phones : 0120-4460087, 9354132228

- 
- Scatter Plot and Applying Filters in Different Sheets
  - Creating First Dashboard

☞ Blending data and dual axis charts

- Duplicate Values
- Multiple Fields
- Data Blending
- Dual Axis Chart
- Building Calculated Fields

☞ Table calculation and storytelling

- Downloading Data set and Connection
- Mapping
- Building Table Calculation for Gender
- Bins and Distributions for Age
- Tree Map Chart
- Advanced Dashboard
- Storyline and Storytelling

☞ Data Preparation

- Data Format
- Data Interpreter
- Multiple Columns and Pivot
- Metadata Grid
- Advanced Data Preparation

**Note: 6th and 7th point are optional you can choose only one.**

---

**Laxmi Nagar**

H.O. : B-33 Vikas Marg Oppo. Metro Pillar Number 43,  
Laxmi Nagar, Delhi – 110092  
Phones : 011-43507604, 9811631557

**Noida**

Bhagwan Sahai Tower, 3<sup>rd</sup> Floor, Opp. Priya Gold  
Building, Naya Bans, Sector-15, Noida, UP-201301  
Phones : 0120-4460087, 9354132228