

# TECH NEST ACADEMY

## POWER BI

### 1. Getting Started with Power Bi

- Introduction
- Installation
- Building Blocks and Components of Power BI
- Overview of GUI

### 2. Get Data and Transform Data

- Introducing Power Query Editor
- Getting data from various sources
- Different Storage modes
- Cleaning data with numerous functions like Clean, Trim, Removing unwanted columns and rows
- Establishing Datatypes, replacing values, handling nulls and errors
- Pivoting, Un-pivoting, Merge and Append queries, Importing from Folders
- Creating Custom Columns, Columns by examples, Conditional Columns.
- Summarizing the data with Group By
- Duplicate queries, reference queries, Enabling and disabling load and report refresh

### 3. Data Modeling in Power BI

- Datawarehouse concepts
- Need for Data Model
- Create and Edit Relationships
- One to Many, One to One and Many to Many Relationships
- Cross filter Directions
- Activate and Deactivate Relationships

## 4. Data Visualization

- Understanding the Visuals, Format Tab
- Tables, Bar Charts, Clustered Column Charts
- Matrix Visual, Pie Charts, Donut Charts, Clustered Columns, Conditional Formatting
- Filters and their Types, Slicers, Edit Interactions
- Bookmarks, Drill down and Drill through, Tooltips, Buttons, KPI Cards
- Waterfall Charts, Custom Visuals

## 5. Data Analysis Expressions (DAX)

- Introduction to DAX, Row context and Filter Context, Calculated columns, Measures, Implicit and Explicit Measures
- Aggregation Functions, Iterator Functions, SUM, SUMX, AVERAGE AVERAGEX, RELATED etc.
- IF function, Switch Function, Different versions of Count Function
- CALCULATE Function, Filters, ALL, ALLSELECTED, ALLEXCEPT, SELECTEDVALUE
- Table Functions, Logical Functions, Concatenation
- Time Intelligence Functions, Creating Date Dimension Table, DATEADD, DATESINPERIOD, DATESBETWEEN, TOTALYTD, TOTALMTD, SAMEPERIODLASTYEAR, PARALLELPERIOD, PREVIOUSMONTH etc
- Creating summary table using SUMMARIZE Function Using Variables, Quick Measures

## 6. Power BI Service

- Introduction to PBI Service
- Power BI Free v/s Pro v/s Premium
- Creating workspaces, publishing reports, creating dashboards and Apps Gateways, Schedule refresh
- Understanding Dataflows, Creating the layout for Mobile App Static and Dynamic Row level security

## 7. Interview Questions

- Conceptual Questions and Answers
- Scenario based Questions and Answer

## 8. Power BI Project

- End to End Business intelligence implemented using Power BI

**THE END**