

# **CRITERIA 1.2.1**

**Assessment Year 2017-18**

**LESSON PLAN**  
**ADVANCE EXCEL**

## Eight Weeks Course

on

### ADVANCED EXCEL: Analyzing Data

#### Unit I: Introduction to Data Analysis Using Excel

Learn the basics of Excel to help managing, understanding patterns, visualize and gain insights from your data.

Day	Topics	/sub-Topics
1	Basics of Excel with historical data on Equity, Commodity etc Editing and basic formatting, Basic data Manipulation Basic excel features filtering, sortin	
1	Data Filter, Sort, custom sort, Advanced Filter Using Pivot rabies & Charts	
2	Conditional formatting, Finding duplicates, Inserting/hiding comments Data text to columns using delimiters	
2	Using Basic Excel Library Functions: SUM, DIFFERENCE, PRODUCT, M PRODUCT, COUNT, COUNTIF, SUMIF	

#### Unit II: Excel Skills for Business

Develop your skills with Excel, one of the common tools that help solving business problems

Day	Topics	/Sub-Topics
3	Mathematical, Date time functions: DATE, YEAR, DAY, MONTH, WEEKDAY, LOG, LN, SQRT, POWER, EXP etc.	
3	L1,lookup functions: HYPERLINK, INDEX, INDIRECT, MATCH, OFFSET, VLOOKUP, HLOOKUP, LEN	
4	Importing External Data: From Access, Web, Text Data & Other sources	
4	Data Validation: Data Validation, Circle Invalid data, Consolidate and Group Data	

#### Unit III: Analyzing and Visualizing Data with Excel

Develop your skills with Excel, one of the common tools that data scientists depend on to gather, transform, analyze, and visualize data.

Day	Topics	/sub-Topics
5	Financial Functions: PMT, PPMT, FV, PV, NPER, RATE, NPV	
5	Case Analysis: Loan & Lease Statement Schedule	
6	Statistical measures: Average, Median, Mode, Std deviation, Range Min Max, Variance, Coefficient of variation, Correlation and Regression Percentile, Quartiles, Theoretical Distributions: Binomial & Poisson	
6	Data Analysis Tools: Correlation, Covariance, Descriptive Statistics, Rank and Percentile	



#### IV: Essential Statistics & Optimization Using Excel

Gain a solid understanding of statistical measures using Excel, and build on your data analysis and data science foundation.

Day	Topics	Sub-Topics
7	Solver: Optimization (Linear, Transportation problems)	
8	Creating Basic Macros using VBA	

