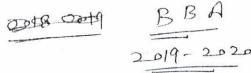# CRITERIA 1.2.1
Assessment Year 2019-20

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, sorting		
1	Data Filter, Sort, custom sort, Advanced Filter Using Pivot tables & Charts		
2	Conditional formatting, Finding duplicates, Inserting/hiding comments Data text to columns using delimiters		
2	Using Basic Excel Library Functions: SUM, DIFFERENCE, PRODUCT, SUMPRODUCT, 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	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, Percentiles, 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 VUA	