Index

Data Analytics- Knime and Tableau
Working days: 05

Day	Session	Topics
Day 1		**Inauguration of the course**
	I	**Ice Breaking Session**
		Entry Behaviour Test (EBT)
	II	**Introduction to Data Analytics: Basic Concepts: Data, types of data: String, numeric, date; types of analytics;**
		KNIME: A Broad overview; Build a basic workflow;
	III	**Data downloading sorting errors**
	IV	**Hands on session**
Day 2	**I**	**Manipulating, Data type conversion (Data preparation),**
		Application of Statistical concepts in Knime
		Statistical Analysis and deriving insights about the dataset
	II	**Text Processing and Other features in KNIME**
	III	**Treating Missing values**
		Duplicate, Top/bottom record, Box Plot, Scatter Plot, Correlation,
	IV	**Hands on session**
Day 3	**I & II**	**Database connectivity: Setting preferences- getting data from oracle 11g- Using Write Node to export data- Export Knime workflow**
	III & IV	**Case Study**
Day 4	**I & II**	**Tableau: Data downloading; Database Connectivity; Manipulation; Visualisation, Calculated fields; Filters; Hierarchy, Dashboards**
	III & IV	**Other features in Tableau: Story, Distribution of workbooks**
Day 5	**I & II**	**Tableau Exercise/ Case Study: Analysing data, Deriving Insights; Identifying risk areas, building dashboards.**

Day	Session	Topics
	III	**Principles of Visualisation- Consolidation of Concepts; Data Analytic Principles and Approaches**
	IV	**Exit Test** **Summing and valediction**

IDEA 10.4
Working days: 05

Day	Session	Topics
Day 1	I	Inauguration of the course
		Ice-breaking session
		Entry Behaviour Test (EBT)
	II	Introduction to CAATs – IDEA
	III	Creating Projects – Managed and External, Import of data from diverse formats –Excel, Access, csv, text; understanding data using the field statistics, Checking validity of data through Control totals, creating current documentation of tasks performed using the history property, Project Overview
	IV	Hands on Session
Day 2	I	Importing of PDF
	II	Exercises
	III & IV	Challenges faced by auditors in Importing Oracle Data. Importing data using ODBC to IDEA Importing data to other tools MS Excel and Knime
Day 3	I	Field Manipulation in IDEA – Append, Remove, Modify columns – Data types – Virtual, Non Virtual, Editable, Enabling/Disabling deletion of non-virtual fields
	II	Exercises
	III	Basic data analysis in IDEA – Duplicate Key Detection/Exclusion, Gap Detection, Summarisation Data Extraction – Direct extraction, Key value extraction, Top/Bottom Records extraction, Indexed extraction Working with multiple databases – Join, Visual Connector, Append, Compare
	IV	Case Study
Day 4	I	Commonly used @ Functions in IDEA
	II	Introduction to # functions
	III	Exercises
	IV	Sampling- Random- Systematic – Stratified Random
Day 5	I & II	Case Study
	III	Exporting Data from IDEA to other formats, Creating and Printing Reports in IDEA Revision & Queries
	IV	Exit test, summing up & valediction