Faculty Development Programme (FDP)ON
Appendix I :Data Warehousing and Business Intelligence

Tentative Topics

(20th April 2016 to 30th April 2016)

Day& Date	9.00 – 11.00		11.15 – 13.15		14.15 – 16.15		16.30 – 18.30
Wednesday 20.4.2016	Registration From 8.30 am	Inaugural Address At 10.00am	Module 1: Business Intelligence Overview **Industry**	Tea Break	Module 2: Data Warehouse Fundamentals **D V L N Somayajulu, NITW**	Lunch Break	Hands on Advanced SQL Features **VRSEC, Vijayawada**
Thursday 21.04.2016	Module 2: Data Warehouse Fundamentals **D V L N Somayajulu - NITW**		Module 3: Data Preprocessing techniques **D V L N Somayajulu - NITW**		Module 3: Data Processing Techniques		Hands on Advanced SQL Features **VRSEC, Vijayawada**
Friday 22.04.2016	Module 4: Dimension Modeling **P Radha Krishna, Infosys**		Module 4: Dimension Modeling **P Radhakrishna, Infosys**		Business Performance management **Hari Prasad, TCS, Hyderabad**		Module 6: Data Generalization Methods **VRSEC, Vijayawada**
Saturday 23.04.2016	Module 5: Online Analytical Processing **D V L N Somayajulu, NITW**		Module 5: Online Analytical Processing **D V L N Somayajulu, NITW**		Implementation and Maintenance issues of Data Warehouse **S UpenderRao, SBIICM, Mumbai**		Module 8 : Data Warehouse Administration **S UpenderRao, SBIICM, Mumbai**
Monday 25.04.2016	Module 6: Data Cube Computation **NageshBhattu, IDRBT, Hyderabad**		Module 6: Data Cube Computation **NageshBhattu, IDRBT, Hyderabad**		Industry Talk 3: ETL Tool Sreekumar Infosys, Mysore		Industry Talk 3: ETL Tool Sreekumar, Infosys, Mysore
Tuesday 26.04.2016	Module 13: Introduction to Data Analytics and tools **I N Murty, Leva Consulting, Bangalore**		Module 13: Introduction to Cognos **Anil - IBM, Hyderabad**		Module 13: Features of Cognos **Anil - IBM, Hyderabad**		Cognos Lab I N MurtyLeva Consulting & **Anil, IBMHydearbad**
Wednesday 27.04.2016	Module 13: Introduction to Tableau & competitive tools in the market **I N Murty, leva Consulting Bangalore**		Module 13: Using Tableau – industry Perspective **I N Murty, Leva Consulting Bangalore**		Lab session on Tableau SaiSiri – Mu Sigma **Abhinaya – Lave consulting, Bangalore**		Lab session on Tableau SaiSiri – Mu Sigma **Abhinaya – Lave consulting, Bangalore**
Thursday 28.04.2016	Lab: Data preparation with Text and Excel files and Preparing excel files for Analysis, Getting started with Data **SiriMu Sigma& Abhinaya, Leva Consulting, Bangalore**		Connecting to Databases and advanced features, Using and Refreshing extracts, Connecting to Cubes **Siri Mu Sigma & Abhinaya, Leva Consulting , Bangalore**		Google Analytics Connecting to Cognos / Oracle / DB2 Visualisation your data - charts and GraphsII N Murty, Leva Consulting, Bangalore		Which chart or graph is right for you Efficiency tips, Formatting Histograms, Pareto charts, Funnel charts **I N Murty, Leva Consulting Bangalore**
Friday 29.04.2016	Analysis the data Using Filters, Parameters, sets, calculations **Abhi IBM and Siri - Mu Sigma**		Analytics Lab **I N Murty, Leva Consulting Abhi IBM and Siri - Mu Sigma**		Analytic Lab **I N Murty, Leva Consulting Abhi IBM and Siri - Mu Sigma**		Analytic Lab **I N Murty, Leva Consulting Abhi IBM and Siri - Mu Sigma**
Saturday 30.04.2016	Authoring Dashboards Anil, IBM &Abhimaya, leva Consulting **Hyderabad, Bangalore Siri, Mu Sigma**		Authoring Dashboards Anil, IBM &Abhimaya, leva Consulting **Hyderabad, Bangalore Siri, Mu Sigma**		Assessment Test **D V L N Somayajulu , NITW I N Murty, Leva Consulting, Bangalore**		Valedictory Function

Tentative Topics   **(20th April 2016 to 30th April 2016)**

Module No	Module Name	Module Topics
1	Business Intelligence Overview	Business Intelligence Introduction – Definition, Leveraging Data and knowledge for BI, BI Components, BI Dimensions, Information Hierarchy, Business Intelligence and Business Analytics. BI Life Cycle. Data for BI - Data Issues and Data Quality for BI.
2	Fundamentals of Data Warehousing	Need for Data Warehousing, Similarities and Differences between DW and Database, Basic building blocks of DW, DW Requirements Collection, DW Architectural components, Infrastructure and Role of Meta data
3	Data pre-processing	Need for data pre-processing, data cleaning methods, descriptive data summarization, data reduction methods, data discretization and concept hierarchy generation
4	Dimensional modeling	Principles, characteristics of dimension and fact tables, aggregated fact tables, RDBMS support for dimension table, DW schema design – case studies
5	Online Analytical Processing	OLTP Vs OLAP systems and differences, Multi-Dimensional model, OLAP operators, Data cube using SQL, Categories of OLAP tools,
6	Data Generalization methods	Data Generalization and concept description, Attribute oriented induction methods, class comparison using AOI method.
7	Data Cube Computation	Data cube concept, materialization of different data cubes, methods of data cube computation, multi feature cubes
8	Data Warehouse Administration	Data Quality, Indexing principles for DW, Monitoring and Tuning of parallel queries, query rewriting and summary advisory functions, ETL Overview
9	Implementation and Maintenance issues of Data Warehouse	Data warehouse Physical Design, Best practices of DW project Implementation and DW deployment process and issues.
10	BI Architecture and implementation	BI Implementation - Key Drivers, Key Performance Indicators and operational metrics, BI Architecture/Framework, Best Practices, Business Decision Making..
11	Advanced BI	Advanced BI – Big Data and BI, Social Networks, Mobile BI, emerging trends.
12	Business performance Management	Business/Corporate Performance Management - Dash Boards and Scorecards, Business Activity Monitoring, Six Sigma
13	Data Analytics	Data Analytics – Objective Curve, principles of Analytics and tools (Cognos, Tableuetc), Dash Boards scorecards etc

D V L N Somayajulu&SuneethaManne*, Coordinators of DW & BI*