

MNG 404 E

BIG DATA ANALYTICS

Module-I : Introduction to BIG DATA Analytics, Nuances of big data, Value ,Issues ,Case for Big data, Big data options Team challenge ,Big data sources , Acquisition ,Nuts and Bolts of Big data. Features of Big Data, Security, Compliance, auditing and protection, Evolution of Big data, Best Practices for Big data Analytics, Big data characteristics, Volume, Veracity, Velocity, Variety, Data Appliance and Integration tools, Green plum – Informatics

Module-II : Evolutions of analytic scalability, Convergence, parallel processing systems, Cloud computing, grid computing ,map reduce, enterprise analytic sand box, analytic data sets, Analytic methods, analytic tools ,Cognos, Micro strategy, Analysis approaches ,Statistical significance , business approaches, Analytic innovation, Traditional approaches Iterative. Introduction to Streams Concepts, Stream data model and architecture, Stream Computing, Sampling data in a stream, Filtering streams, Counting distinct elements in a stream ,

Module-III: Estimating moments, Counting oneness in a window , Decaying window - Real- time Analytics Platform(RTAP) applications, IBM Info sphere , Big data at rest , Info sphere streams , Data stage , Statistical analysis , Intelligent scheduler , Info sphere Streams, Predictive Analytics , Supervised , Unsupervised learning , Neural networks, Kohonen models , Normal , Deviations from normal patterns , Normal behaviours , Expert options , Variable entry , Mining Frequent item sets , Market based model.

Module-IV: Apriori Algorithm , Handling large data sets in Main memory , Limited Pass algorithm , Counting frequent item sets in a stream , Clustering Techniques , Hierarchical –K-Means, Clustering high dimensional data Visualizations Visual data analysis techniques, interaction techniques, Systems and applications IBM for Big Data , Map Reduce Framework, Hadoop , Hive Sharding ,No SQL Databases , Hadoop Distributed file systems , Hbase, Impala , Analyzing big data with twitter , Big data for E-Commerce , Big data for blogs.

Reference Book:

Sub: Big Data Analytics

1. Big Data Analytics- Minelli, Chambers, Dhiraj , Wiley Publications
2. Big Data Analytics - Pyne , Rao and Rao, Springer