## Data Analytics

| Duration : 40 Hours | Exam Marks:50 |
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| Objectives: |  |
| This Subject introduces the concept of Business Analysis and Optimization. It gives an glimpse |  |
| of the reference architecture in Business Analytics. |  |
| Introduces the concept of Decision Support Systems and provides knowledge of a Data |  |
| Warehouse, multi-dimensional analysis. The subject provides an understanding of Business |  |
| Intelligence concepts, applications, design elements. |  |
| The subject also provides an insight into Data Mining, processes and challenges of building Data |  |
| Mining Capability and various models of Data Mining. |  |
| Knowledge of Dashboards, designs of dashboards, reports and metrics is provided. Learning of |  |
| the concept of Big Data, its characteristics and structure and knowledge on the architecture, |  |
| usage, benefits and risks of Big Data analysis is provided in this subject. |  |
| Course Outcomes: After completing this subject, the student should be able to |  |
| Identify basics of analytics and business optimization, Understand the use of reference |  |
| architecture in business analytics |  |
| Define decision support science and Explain the concept of data warehouse |  |
| Understand the terms and concepts of Business Intelligence |  |
| Define Data Mining, describe steps to build the data mining. |  |
| Gain knowledge of Dashboards, Reports, Metrics |  |
| Understand the process of analysis using Dashboards and Reports. and learn how to build |  |
| Dashboards and Reports |  |
| Gain a knowledge of Big Data, its characteristics and structure. Learn Exploring Big Data, |  |
| Filtering BigData, Adoption Architecture, Benefits \& Barriers and Trends for Big Data |  |
| Analytics. |  |


| Module I: | 6Hours |
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| Business Analytics and Optimization | 6Hours |
| Module II: |  |
| Data Warehouse | 6Hours |
| Module III: |  |
| Business Intelligence | 6Hours |
| Module IV: |  |
| Data Mining | 8Hours |
| Module V: |  |
| Dashboard \& Report Designing |  |


| Module VI: | 8Hours |
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| Big Data Analytics |  |

