## RAJIV GANDHI PROUDYOGIKI VISHWAVIDYALAYA, BHOPAL

# New Scheme Based On AICTE Flexible Curricula

# **Computer Science and Engineering, VI-Semester**

## CS605 Data Analytics Lab

Course Outcomes: After completion of the course students should be able to

1. Understand the basic of data analytics using concepts of statistics and probability.

2. Understand the needs of data processing techniques.

3. Implement the data analytics techniques using R, MATLAB and Python.

4. Apply the data analytics techniques in real life applications.

#### Unit-I

**Basics of data analytic framework, data per-processing, Statistics, probability, Probability Distribution,** Bayes' Theorem, Central Limit theorem, Data Exploration & preparation, Concepts of Correlation, Regression, Covariance, Outliers, Data visualization.

### Unit-II

Introduction to R as a data analytics tool.

Unit -III

Introduction to MATLAB as a data analytics tool.

Unit -IV

Introduction to python as a data analytics tool.

Unit – V

Case studies.