



SIR SYED COLLEGE, TALIPARAMBA

(Affiliated to Kannur University) Re-accredited by NAAC with A
Grade Kannur, Kerala, India-PIN 670142

NAME OF THE ADD ON COURSE : EXPLORATORY

DATA ANALYSIS USING 'R' PROGRAMMING

Offered By : Department of Statistics

Name of the Course Coordinator : Ms.Fathimathul Nithasha Beegam I

Assistant Professor.

Dept. of Statistics, Sir Syed College, Taliparamba

Chairman : Ms. Mashooda Kauser .G.D

Associate Professor & Head,

Dept. of Statistics, Sir Syed College, Taliparamba

Members

1. : Mr.Mansoor.N.K ,Assistant Professor, Dept. of Statistics, Sir Syed College, Taliparamba
2. Mr..Linto Joseph , Assistant Professor, Dept. of Statistics, Nirmala College,Muvattupuzha
3. Ms.Mashuda Kauser.G.D,Associate Professor & Head

Vision and Mission of the course:

- Using R can help analysis efficiently
- To improve the impact and accessibility of data report and presentation
- setting and thereby enhance the employability of the learners

Programme specific outcome:

- To provide an overview of the tools needed for data analysis
- to enable students by using R for effective data analysis
- To provide training in statistical software
- To demonstrate conceptual understanding of the

unified nature of statistical inference.

Methodology for Teaching, Learning and Evaluation

Lectures ,Presentations,Assignment,Model Practical Examination.

➤ **Evaluation**

Evaluation	Weightage %
External (Based on Theory and Practical exam)	60
Internal (Based on Internal test, assignment and Viva)	40

Name of the Add on Course :-**EXPLORATORY DATA ANALYSIS USING ‘R’ SOFTWARE**

Duration of the Course	Course code	Hours per week	Credit and Modules	Exam hours
30 Hours	ACSTA01	4	3	3

Detailed syllabus with modules and hours.

MODULE I

Introduction to R , CRAN, Install R and RStudio, Help in R, R script, R variables,Install and Import library/packages in R,Built-in functions in R,Data objects in R, Data types in R- vectors, matrices, arrays, factors, lists, data frames, Operators in R,.

MODULE II

Mean, Median, Mode, Range, Quartiles, Standard deviation, Variance, Skewness, Kurtosis. Bar chart, Pie chart, Box plot, Line graph, plot, Histogram, Density plot. Correlation & Regression in R. Case Studies in R.

MODULE III

Random Number Generation of Binomial distribution, Poisson distribution, Standard Uniform distribution, Exponential distribution and Normal distribution. Plotting of Probability distributions in R.