

A.K.Dasgupta Centre for Planning and  
Development, Visva-Bharati

34<sup>th</sup> Two Week National Workshop  
On

Statistical Methods in Research using 'R'

Date: 26<sup>th</sup> February-10<sup>th</sup> March, 2024  
Mode: Online [Google Meet]



Statistical analysis of data is very important in decision making. Variety of statistical methods are used in data for which different software programmes are available. It is important that researchers and also end-users of research findings need to know what method is to be used in a particular context, what programme is to be used for analyzing data etc. Researchers of different fields collect data from different primary and secondary sources. They need to know the proper way to analyze the data collected or compiled. The most popular package for researchers for analyzing data today is R. Presently R is an open source programming language used for statistical computing and graphics. The R language is widely used among researchers in science as well as in social science for data analysis and statistical modeling. The workshop has been designed to orient Faculty members and Researchers in data analysis and programming at an introductory level using R programme.

The Centre invites applications from research scholars, faculty member of colleges and universities, management executives who wish to deepen their understanding on the subject.

This 14-day Programme is designed to familiarize academicians, practitioner and researchers with the statistical research tools and techniques, with special focus on the Software “R” This will augment the skill of the participants to use “R” and enhance the horizon of their research work. The knowledge of modern techniques applied to research is imperative for quality work and this workshop aims to give a comprehensive insight on

those and enable researchers and academicians to apply those techniques rightly.

### **Objective of the Workshop**

- To understand the basics of 'R' , its uses in research
- To Impart knowledge on different statistical techniques through use of 'R'
- To interpret the out-put of the analysis of data done using 'R' and to draw valid and meaningful inference from the out-put of 'R' analysis

At the end of the workshop the participant will be able to learn the following:

- (i) Get familiar with R programming language;
- (ii) Understand statistical analysis using R programming;
- (iii) Explore how to analyze research data using R programming;
- (iv) Explore how to represent data using basic graphs in R;
- (v) Explore the cause and effect study using

### **This course would be of particular benefit to:**

- Faculties & Teachers
- Consultant and Administrators engaged in Higher Education Institute. [HEI]
- Industry training professionals
- Research Scholars
- Students
- Extension specialists in agriculture, public health and rural development practitioners
- Consultant in development sector

## Course Outline

- Introduction to 'R'
- Entering and Editing of Data
- Reading Data, Manipulating Data, Saving of Data
- Variable, Relationships, Visualizations of data. Coding of data
- Exploratory Data Analysis: Correlations, Regression
- Inferential Statistics: z-test, t-test, Chi-square test,
- Analyzing Categorical Variables
- Cluster analysis, Factor analysis, Log linear Models Discriminant Analysis, logistic regression, and other Multivariate Analysis Techniques
- Analysis of data with Repeated Measures
- ANOVA

Applicants have to mail their soft copies of application mentioning their present status on or before **20<sup>th</sup> February, 2024**. Applicants should mention their contact address, telephone number, e-mail address and institutional affiliation. The application to be addressed to Prof. Debasis Bhattacharya, Chair Professor, A.K.Dasgupta Centre for Planning & Development, Visva-Bharati. **Application must reach [vbplanning46@gmail.com](mailto:vbplanning46@gmail.com) within due date.** **Registration fee: Rs.2000/- for Faculties and Rs.1000/- for other participants.** Registration Fee to be paid online. Details of payment will be provided after selection. **The workshop has been designed to be held in "Online mode"**. The order of participation in the programme will be made on last come first out basis. The timing of the workshop will be **from 2.30p.m. to 7.30 p.m.**

## **Important Dates**

**Last Date for receiving application: 20<sup>th</sup> February, 2024**

**Letter of Acceptance: 21<sup>st</sup> February, 2024**

**Email for Correspondence: [vbplanning46@gmail.com](mailto:vbplanning46@gmail.com)**

**For Assistance: Call to Sri Daya Shankar Kushwaha, Ph-9474644413**

**Visit website for other information: [akdcentrevisvabharati.org](http://akdcentrevisvabharati.org)**

# Application Form

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Name

Address

Designation

Permission  
from Institution

Yes/No

Institution  
Affiliation

Ph. No.

Email

Basic  
knowledge on  
'R'

Yes/No

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Signature of the applicant