









# **ABOUT COURSE**

Statistical Data Analysis is one of the most important processes for researchers to carry out their research work more accurately and effectively to represent their research findings. This training program provides the participants with a practical application of the statistical components. Participants will review several statistical techniques, gain an understanding of when and why to use these various techniques as well as how to apply them with confidence, interpret their output, and graphically display the results.

### TARGET PARTICIPANTS

The training is designed for participants who intend to learn the techniques for data management and data analysis for their research work and also those working in the corporate world, public sector, research institution and NGOs.

## **OUTCOME OF THE TRAINING PROGRAM**

- · Understand and appropriately use statistical terms and concepts
- Perform data analysis tasks with advanced statistical
- Perform simple to complex data management tasks and also the Statistical tests

# **REGISRATION FEE**

Research Scholar & Student: Rs. 2000/-Teaching Faculty: Rs. 2500/-

Accommodation will be charged separately @ Rs. 200/- Per day

# REGISTRATION





https://forms.gle/PpuTCJne2ukjYo9i6

Last Date: January 16, 2024 [Tuesday]









SCAN & PAY

# TECHNICAL SESSION | 10.00 AM - 5.30 PM

## **DAY:1 | JAN 18, 2024 [THURSDAY]**

#### **Introduction to Statistical Data Analysis**

- Explain the basic steps of the research process
- Explain differences between populations and samples
- Explain differences between experimental and non-experimental research designs
- Explain differences between independent and dependent variables

### **DAY:2 | JAN 19, 2024 [FRIDAY]**

#### **Basic Statistics**

- · Descriptive statistics for numeric variables; Frequency tables
- Distribution and relationship of variables
- Cross tabulations of categorical variables
- Stub and Banner Tables

# Graphics

- Introduction to Graphs
- Graph commands
- · Different types of Graphs

# DAY:3 | JAN 20, 2024 [SATURDAY]

#### Statistical Tests

- One Sample T Test; Independent Samples T Test
- Paired Samples T Test; One-Way ANOVA
- Chi-Square test; Pearson's Correlation
- Spearman's Rank-Order Correlation
- **Bivariate Plots and Correlations for Scale Variables**

# **DAY:4 | JAN 21, 2024 [SUNDAY]**

### **Predictive Models**

- Linear Regression
- **Multiple Regression**
- **Logistic Regression**
- **Ordinal Regression**

# Nonparametric Tests

- Describe when non-parametric tests should and can be used
- Describe the options in the Nonparametric Tests procedure dialog box and tabs
- Interpret the results of several types of nonparametric tests

### DAY:5 | JAN 22, 2024 [MONDAY]

### Time Series and Forecasting

- · The basics of forecasting
- Smoothing time series data
- Regression with time series data
- **ARIMA** models
- Intervention analysis

# **Decision Trees**

- **Introduction to Decision Trees**
- **Application of Decision Trees**
- Overview of decision tree based methods (CRT Decision Trees CRT **Regression Trees Quest Analysis)**

