



DATA ANALYSIS USING R

INSTRUCTOR LED LIVE ONLINE CERTIFICATE COURSE

17 August - 4 September

Duration: ~~13 August - 29 August~~

Timings: 4:00 PM - 6:00 PM

Days: ~~Monday - Saturday~~
Monday - Friday

Platform: Google Meet

Course Fee: Rs. 500/-

No. of sessions: 15 (2 hrs each)



Registration Link

https://docs.google.com/forms/d/e/1FAIpQLScJ_gtR8CE18YIN7bSGoejTPLcdy14oEjZwAGHIGrj-aLNuGQ/viewform



Payment Link

<https://www.sggsc.ac.in/payments>

First 10
participants
will get
Rs. 100
Cashback

Limited seats:
First come
first served
basis

90%
attendance
is
compulsory

Certificates
will be
provided after
successful
completion

Patron
Dr. JB Singh (Principal)

Co-ordinators:
Dr. Rekha Sharma
Ms. Vandana Kalra



COURSE CONTENT

DAY 1

Fundamentals of R
Installing R studio
Variables: Naming, Assigning values,
Finding and removing variables
Expressions, Objects, Symbols, Special
Values Operators: Arithmetic, Relational,
Logical, Assignment First R program

DAY 2

Selection statements: if statement, switch
statement Control statements: for loop,
while loop, repeat loop

DAY 3

Functions: In Built Functions
(Mathematical, Trigonometric, Logarithmic,
Date and Time, String), User defined
functions

DAY 4

Data Types in R
Vectors: Class of a Vector, Elements of a
Vector, Accessing Vector elements,
Functions for Vectors. Arrays: Creating an
Array, Accessing Array elements, Functions
for Arrays.

DAY 5

Matrices: Creating a Matrix, Accessing
Matrix
elements, Functions for Matrices
List: Creating a List, Accessing List
Elements, Functions for Lists

DAY 6 & 7

Factors: Creating a Factor, Accessing
Factors,
Functions for Factors
DataFrames: Creating a Data Frame,
Accessing Data from DataFrame, Functions
for DataFrame

DAY 8

Packages: What is a Package?, Installation
of a Package, Update, Remove and Check
installed packages, Loading and Unloading a
Package.

DAY 9 & 10

Data Analysis: Handling Missing Data,
Import and Export of Data, Data Reshaping
through Melting and Casting, Data
management using apply functions.

DAY 11 & 12

Statistics in R: Descriptive Statistics
(Measures of Central Tendency, Variability,
Quantile, Skewness and Kurtosis), Creating
Frequency and Contingency Tables,
Correlations.sting, Data management using
apply functions.

DAY 13 & 14

Data Visualization: Pie Chart, Bar Chart,
Histogram, Line Chart, Boxplot, Scatter Plot.

DAY 15

QUIZ and PROJECT

