# Three Days National Workshop on Data and Statistical Analysis using R Programming

# 19<sup>th</sup> – 21<sup>st</sup> December, 2016





Information and Library Network Centre Gandhinagar, Gujarat

#### About INFLIBNET

The Information and Library Network (INFLIBNET) Centre is an autonomous Inter-University Centre (IUC) of the University Grants Commission (UGC) located in the Infocity, Gandhinagar. Major activities and services of the Centre are geared towards modernization of academic libraries and information centres, promotion of information transfer and access, support scholarship, learning and academic pursuits. The Centre acts as a nodal agency for networking of libraries and information centres in universities, institutions of higher learning and R & D institutions in India. The Centre was established as an independent autonomous Inter-University Centre of the UGC in May 1996 and set out to be a major player for promoting scholarly communication among academicians and researchers across the country.

The technology being a driving force in the contemporary education system, the Centre has taken-up a number of initiatives for the benefit of the academic community in India. These initiatives include i) IndCat, a unified online catalogue of books, theses and journals available in major university libraries in India; ii) SOUL 2.0, state-of-the-art integrated library management software; iii) e-Shodh Sindhu for extending access to selected scholarly electronic journals and databases to eligible universities, centrally-funded technical institutions and colleges in different disciplines; iv) Shodhganga for enabling online submission of doctoral theses and dissertations by research scholars in an open access digital repository; v) Shodhgangotri for facilitating research scholars to submit approved synopsis of research proposals submitted to their universities; vi) Open Journals Access System (OJAS) to facilitate faculty and researchers in Indian universities to launch their open access journals on OJAS platform; vii) InfoPort: INFLIBNET's Subject Gateway for Indian Electronic Resources; viii) e-PG Pathshala, a project assigned to the UGC by NME-ICT, wherein e-content are being developed in 77 subjects at postgraduate level; ix) VIDWAN, a premier database of profiles of scientists and faculty members working in leading academic institutions and other R & D organisations involved in teaching and research in India; x) e-Acharya - an Integrated e-content portal: a web-based portal consisting of all e-content with funding from NME-ICT, MHRD; xi) ICSSR Data Service: Social Science Data Repository for setting up of repository and hosting of NSS and ASI datasets into the data repository; and xii) National Institutional Ranking Framework (NIRF), a project assigned by MHRD for ranking institutions of higher education across the country.

#### **Objectives of the Workshop**

Statistics and statistical analysis plays a crucial role in research and analyzing data. The aim of this workshop is to provide basic training in understanding the concepts in data science and statistical analysis using R programming. The R programming language is one of the most widely used programming language among the data scientists and researchers. Being an open-source software it is freely available and allows integration with other applications.

At the end of the workshop, participants should be able to :

- Get familiar with R programming language;
- Understand statistical analysis using R programming;
- Explore how to analyze research data using R programming; and
- Explore how to represent data using basic graphs in R.

#### **Major Topics**

- Introduction to R, Tinn-R, Rstudio, Rcommander;
- Data types in R, Importing and handling data in R;
- Working with functions in R;
- Statistical Analysis using R

(Summary measures, hypothesis testing, correlation & regression, ANOVA, Chi-square test);

- Data visualization using R; and
- Introduction to Reproducible Research using R and Rstudio (knitr and rmarkdown).

#### **Resource Persons**

The lecturers are prominent researchers, scientists/professors in the field of statistics and data science. They have an extensive experience with the application of statistical analysis in a research evaluation.

#### **Target Participants**

IT and LIS professionals, academicians, faculty, current and prospective research scholars, students from all disciplines. A maximum of 25-30 candidates will be selected for the training programme on First-Come-First-Serve basis.

#### **Duration: Three Days**

Three days workshop includes theory & extensive practical sessions.

#### Venue

The Workshop will be conducted at Information and Library Network Centre, An IUC of University Grants Commission, Infocity, Gandhinagar-382007, Gujarat, India.

#### **Workshop Fee**

The registration fee is Rs. 3,450/- (Rupees Three thousand Four Hundred Fifity only) per person without accommodation and Rs. 5,750/- (Rupees Five thousand Seven Hundred Fifty only) with accommodation (\* The amount is inclusive of Service Tax at the Rate of 15%). It includes training kit, lunch and tea (on three training days only). TA/DA and accommodation charges will have to be borne by sponsoring organizations/participants.

# Accommodation

The Centre will arrange accommodation during the period of training at INFLIBNET Guest House (A/C Room) on twin sharing basis. The participants must send prior intimation and charges for accommodation along with registration fees. The accommodation will be provided first come first basis.

#### Registration

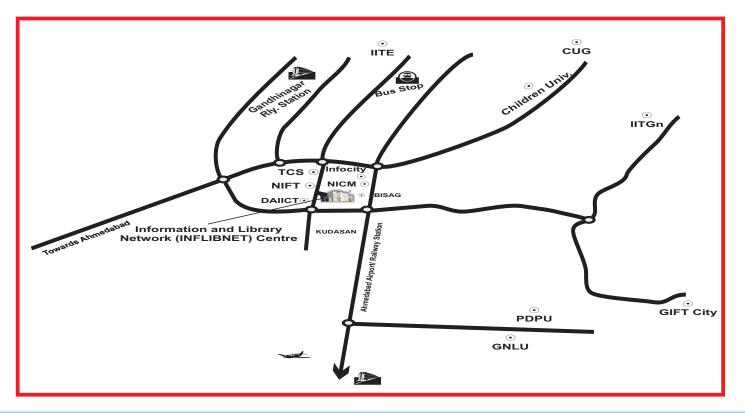
Please send your completed dully filled-in registration form along with the registration fee through Demand Draft drawn in favour of INFLIBNET Centre, send to Sh. Hitesh Solanki, Scientist-B (CS) on or before December 15, 2016. DD should be drawn on nationalized banks only with 3 months validity.

#### How to Reach INFLIBNET

**Road Routes:** Gandhinagar is connected to Surat, Mumbai, and Navi Mumbai through National Highway 8A. It is connected to Ahmedabad, Jaipur, Udaipur, New Delhi & Chandigarh through the National Highway 8C.

**Air Connectivity:** The nearest airport is Sardar Vallabhbhai Patel International Airport, Ahmedabad located at a distance of 15KM from Domestic flights are available for the Metropolitans and other major cities of India. It also provides many International flights from Ahmedabad to across the world.

**Rail Connectivity:** The nearest Railway Station is Ahmedabad Railway Station (Known as Kalupur) which is well connected to all metropolitans and other major cities of India. The Ahmedabad Railway station is located at a distance of 23 Km from the INFLIBNET Centre, Gandhinagar.



# For further information please contact

# **Course Director**

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