







## One Week Online Faculty Development Programme to Develop Skill Panorama on Research Methodology Based Data Analysis Using R

(August 21 – 27, 2023)

## **Organized By**

# Bhau Rao-Devras Shodh Peeth, University of Lucknow (Lucknow, UP, India, Accredited A++ by NAAC)

Science Tech Institute, Lucknow, UP (Run by: Manraj Kuwar Singh Educational Society)







Bhau Rao-Devras Shodh Peeth: BhauRao-Devras Shodh Peeth by the Government of Uttar Pradesh, Under the Department of Commerce, University of Lucknow, Lucknow, UP, India

About University of Lucknow: Situated amidst the scenic ambience on the northern bank of the mythological river Gomti, the University of Lucknow has a long and eventful history and an enviable place amongst premier institutions of academic excellence in the country. The University was set up in 1920 and has entered its centennial year marking the 100th year of its establishment. The University today imparts education in eight faculties of Arts, Science, Commerce, Ayurved, Education, Law, Fine Arts and Engineering. It has under its ambit around 170 associated colleges which impart teaching at both undergraduate and postgraduate levels to approximately 25,000 students in LU campus and approximately 1,50,000 students in associated colleges.

About Science-Tech Institute (Run by: MKSES Educational Society, Lucknow) :The Science-Tech Institute is one of the premier institutes of Lucknow dedicated to organize various academic activities like conferences, seminars, workshops and training programmes in collaboration with many national & international organizations and organisation have own Publication house and Journals' to be published Edited books, Course books and research papers. The institute is run by Manraj Kuwar Singh Educational Society, Lucknow. The society is working for the development of deprived socio-economic students by providing them quality education.

About The FDP: To address the present situation, the University Grants Commission (UGC)/NMC has intensified its efforts to have a strong virtual engagement with the students through email/Whats App and hosting lectures using Google Class Room and other video-conferencing platforms. Keeping in view the immense benefits and reach of online courses in the present academic set-up, the Bhau Rao-Devras Shodh Peeth, University of Lucknow, Lucknow, UP and Science-Tech Institute, Lucknow is offering a One Week Online Faculty Development Programme to Develop Skill Panorama on Research Methodology Based Data Analysis Using R for faculty members and research scholars of higher education in the country and this FDP also use full for skill deployment.

| Sr. No. | Days  | Topics Covered  |
|---------|---|---|
| 1       | Day -1 ( 21 August , 2023) Timing: 06:30 PM- 08.30 PM   | <ul> <li>Introduction of R</li> <li>Installation of R and R studio</li> <li>R as a calculator</li> <li>Data Structure: Vectors, Matrices, Arrays, Data Frames, Factors &amp; lists.</li> </ul>                            |
| 2       | Day-2 (22 August, 2023) Timing: 06:30 PM- 08.30 PM      | Basic Data Management  ◆ Data input: Entering data from the Keyboard  ◆ Importing data from Excel, SPSS,SAS, STATA  ◆ Creating new variable  ◆ Recoding variables  ◆ Renaming variables  ◆ Missing values  ◆ Sorting data |
| 3       | Day-3 (23 August , 2023)<br>Timing: 06:30 PM- 08.30 PM  | <ul><li>Descriptive Statistics using R</li><li>Graphical representation in R</li></ul>  |
| 4       | Day-4 (24 August , 2023)<br>Timing: 06:30 PM- 08.300 PM | Statistical Inference: Parametric Tests  ❖ T-test  ❖ Paired t-test  ❖ Analysis of Variance (ANOVA)  |
| 5       | Day-5 (25 August , 2023) Timing: 06:30 PM- 08.30 PM     | Statistical Inference: Non Parametric Tests  ❖ The Wilcoxon Signed Rank Test  ❖ Mann Whitney U-Test  ❖ Kruskal-Wallis Test  ❖ Chi-square Test   |
| 6       | Day-6 ( 26 August , 2023) Timing: 06:30 PM- 08.30 PM    | Linear Regression Analysis  ❖ Simple Linear Regression  ❖ Multiple Linear Regression  |
| 7       | Day-7 ( 27 August , 2023) Timing: 06:30 PM- 08.30 PM    | Generalized Linear Models  ❖ Logistic Regression  ❖ Poisson Regression  |

## **ELIGIBILITY**

- The FDP is open to all Faculty members (regular/ad-hoc/temporary/guest) from any Indian/Foreign University/Medical Colleges, Nursing Colleges, Agriculture College, Law College, Engineering College/ Humanities /Science/ Commerce/Social Science/Medical Ph.D. Research Scholars/MD of all the discipline.
- Registration for all the participants of the FDP is mandatory. Registered participants will be given certificates.
- Study material in the form of PPT and video recording of all sessions will be provided to all registered participants.

For further queries, please mail us:

## sciencetech487@gmail.com

## **REGISTRATION & PAYMENT DETAILS**

- 1. For Indian Participants: INR 600/- (Non-Refundable)
- 2. For Foreigner: \$10/- (Non-Refundable)

## Registration link given below

https://sciencetechinstitute.com/lu\_one-week-online-faculty-development-programme-on-research-methodology-data-analysis-using-r-august-2023/

Registration for all the participants of the FDP is mandatory.

Note: After successful registration, the participants will receive a confirmation via email. Please keep checking the spam folder of the email as the bulk email sent may end up in the spam folder. An official group has been made for communication with the participants on "Whats App." The link to join the official group will be provided in the confirmation mail.

## **About Resource Persons**

Dr. M. Ramakrishnan Assistant Professor, P.G and Research Department

of Mathematics, Ramakrishna Mission Vivekananda College, Mylapore, Chennai. Dr. M.Ramakrishnan has done his Ph.D in Mathematics- Statistics from the University of Madras. He has twenty six years of teaching Experience in Mathematics. His specializations are Mathematical Statistics, Ordinary Differential Equations. His Research area is Survival Analysis. He has expertise in handling Softwares SPSS, STATA, R Programming, WINBUGS, EXCEL and SCILAB. He has published Research Papers in National and International Journals and Presented Papers in many National and International Conferences in the field of Survival Analysis throughout India. He has conducted several R courses in all over India.



**Dr. Manoj Kumar**, is working as an faculty in Centre for Economic Studies and Planning (CESP), Jawaharlal Nehru University, New Delhi. He is teaching statistics, Health Economics, Biostatistics, Econometrics, Research Methodology papers as well as software's like SPSS, SAS, R, AMOS in university. He has various project related to Clinical Research, Dental, Physiotherapy and Social Sciences at university as well as for other organization, to his credits. He has good publication. He was former Biostatistician for prestigious Clinical Research organization like CliniRx Research Pvt. Ltd., Fortis Clinical Research, Invetiv (GSK) etc... At present, Dr. Manoj is visiting faculty in Clinical Research Education and Management Academy (CREMA), Delhi Tool Engineering Institute as well as in other organizations for the Biostatistics, SAS, SPSS. He is also a member of Data Safety Monitoring Board (DSMB) of various studies of Clinical trial.



He delivered more than 100 lectures in FDP/workshop/training programme/ PMMMNMTT – MHRD Induction programme and delivered lectured in various intuitions, central universities.

Mr. Saurabh Agarwal Mr. Agarwal is a graduate and post graduate engineer from IIT Kanpur and IIT Delhi. At present he is associated with HBTU, Kanpur. He is consultant to IBM and UNESCO for Business Analytics. He has expertise in Data Mining, Data Analysis, Business Analytics, Structural Equation Modelling, Multivariate Analysis and works on platforms like R, SPSS,AMOS, Modeler, IBM Watson Analytics.



#### **Chief Patron**



**Prof. Alok Kumar Rai** Vice-Chancellor University of Lucknow

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**FDP Convener** 

Prof. Somesh Kumar Shukla Director Bhao Rao Devras Shodhpeeth University of Lucknow Lucknow, UP, India

#### **FDP Co Convener**



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Prof. N.B. Singh **Emeritus Professor** Department Chemistry, SBSR &RTDC Sharda University, Greater Noida, UP, India



Prof. D.S. Hooda Former (Pro-Vice Chancellor) Kurukshetra University, Haryana, India



**FDP Advisors** 

Prof. Rajesh Shukla **Professor** Department of Physics Lucknow University Lucknow, UP, India



Prof. C.K. Dixit Dean& Head DSMR University Lucknow, India

## **FDP Organizers**



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Dr Priyanka Singh **Professor** Dept. of Oral Pathology & Microbiology K G M University, Lucknow, UP, India



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