

**MINISTRY OF EDUCATION** 

PANDIT MADAN MOHAN MALAVIYA NATIONAL MISSION ON TEACHERS AND TEACHING



TEACHING LEARNING CENTRE RAMANUJAN COLLEGE

> (Accredited Grade 'A' by NAAC) UNIVERSITY OF DELHI

ONE WEEK FACULTY DEVELOPMENT PROGRAMME ON

# DATA ANALYSIS USING SPSS

25 - 31 MAY 2021

CALL FOR REGISTRATION AND PARTICIPATION

## **DATA ANALYSIS USING SPSS**

The Ministry of Education (erstwhile, Ministry of Human Resource Development) launched the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT) in 2014. One of the main objectives of this mission is to facilitate teacher training by constituting Teaching Learning Centers in various institutions of higher education in our country. The Teaching Learning Centers (TLCs) are mandated to promote on a continuous basis the learning of new pedagogical practices, methodology of forming discipline-specific curricula and creating new learning materials (including e-content) for use by the teachers in colleges and postgraduate departments. It is envisioned that the TLCs will accelerate the teaching-learning process by encouraging independent critical and creative thinking and facilitating research for subject specific growth. The TLCs will assist the faculty in capacity building for curriculum designing, scientific assessment and evaluation and the development of innovative academic programs to strengthen the inclusive nature of higher education. The TLCs are also encouraged to reach out to teachers teaching in regionally disadvantaged locations. The Pandit Madan Mohan Malaviya National Mission emphasizes the need to change the role and workings of a teacher from a mere disseminator of information and knowledge to the one who helps students to develop critical, analytical skills, capabilities to generate information, the ability to reason and to empower themselves through open sources and globally oriented digitalized self-learning processes. The focus is not only on 'what is taught' but also importantly, to 'the way it is taught,' in an effort to develop and enhance individual education, that will eventually go on to define the manner in which the future generations will work and live. The Teaching Learning Centers offer Faculty Induction Programs (FIPs) for newly recruited faculty and Faculty Development Programs (FDPs) for teachers with experience

#### FACULTY DEVELOPMENT PROGRAMME

who wish to update their field of knowledge, expertise and skill with the latest available research, resources and technology. In the FDPs, special emphasis is given to inter and cross-disciplinary methodologies of study.

Currently, the teaching fraternity is missing their lively and interactive classrooms due to COVID-19 Pandemic. To address the present situation, the University Grants Commission (UGC) has intensified its efforts to have a strong virtual engagement with the students through email/WhatsApp 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 Teaching Learning Centre Ramanujan College, University of Delhi is offering a One Week Online Faculty Development Programme on "Data Analysis using SPSS" for faculty members and research scholars of higher education in the country.

## **CONCEPT NOTE**

Research is a continuous process which leads to new ideas, improvements and development. An efficient researcher needs to be informed about the different methods and tools of research. One such aspect is quantitative analysis of data collected. In dribs and drabs, acceptability of research across disciplines has become conditional on its backing by empirical studies so as to make a strong case for proposed arguments. Data analysis tools and methods are useful not only in finding stochastic relationships in mathematical format, but are significant in explaining the relationships among variables. These procedures are used to explain and predict the levels of variables in interest as well as to test hypotheses about their relationships, and the results are often used as evidence in a wide range of policy settings. SPSS (Statistical Package for the Social Sciences) is a software program used by researchers in various disciplines for quantitative analysis of complex data. SPSS is one of the most popular software used by researchers widely as it has enabled academicians and researchers to obtain valuable information from the data. Basic knowledge of SPSS is vital for all users before they proceed to surveys and data analyses.

Using this as a reference point, the current course is an endeavor to bridge the gap between humanities and science by complementing 'thick data' with 'big data'. In other words, the course emphasizes on the use and application of quantitative and computational methods to make better sense of the information at hand. The current course has been designed using the insights from the emergent disciplines of Digital Humanities and Data Science and Public Policy. The objective is to integrate the techniques of Data Science, which are majorly focused on the interpretability of information through Machine Learning models, with a human centred approach. The course, therefore, will use primary data sets from the fields of social sciences and further it through computationally innovative methods and technologies.

With this framework, the course will be useful for improving quantitative skills of teaching faculty and research scholars in both sciences and social sciences. It will also equip the participants across disciplines to work in a new environment by providing them with knowledge about the tools, methods, and theoretical issues central to the field of Digital Humanities. Participants of this faculty development program will learn about the different techniques of data collection and cleansing, data management and visualization, and will also receive training needed to apply these tools to humanistic questions.

## THEMATICS

- Introduction to Quantitative Research Methods
- Fundamentals and Advanced functions of SPSS
- Developing an understanding about Descriptive Statistics
- Inferential Statistics for Parametric comparison of means (ttests, ANOVA) and co-relational regression
- Non parametric statistical analysis

## **EXPECTED LEARNING OUTCOMES**

After successful completion of this course, participants will be able to:

- Gain better understanding on how to identify a research problem and design a valid research project to answer specific research questions
- Get hands-on training in the use of SPSS that can assist them in their research endeavors
- Equip the participants with the advanced features of the programme
- Help research scholars in comprehending new trends and techniques in using appropriate statistical and computational tools for inter – disciplinary research
- Effectively analyze and present their data and research outcomes
- Write effective research papers and thereby, improve their quality of research

# **RAMANUJAN COLLEGE**

Ramanujan College is a University of Delhi college, located in the well-known area of Kalkaji, near Nehru Place, in South Delhi. Ramanujan College has highly qualified, dedicated, and committed faculty members. The college runs 16 courses in different subjects in Humanities, Commerce and Science streams. It is also the study centre for the students of the the Non-Collegiate Women's Education Board University of Delhi, and the Indira Gandhi -



National Open University. The college also runs several professional courses. The teachers of Ramanujan College are highly motivated and have original, published academic and creative work, including journals and other print media articles and educational film making to their credit. Ramanujan College is a premier institution of the University of Delhi and has been accredited grade "A" by the National Assessment and Accreditation Council (NAAC). We at Ramanujan College emphasize the holistic development of personality, meaningful exposure to real-world, and inculcating practical skills amongst our students apart from ensuring academic excellence.

#### Enrichment Spectrum at the Teaching Learning Centre (TLC), Ramanujan College

- Emphasis on creating self-learning space for students
- Hands-on assignments and live projects
- Expert guidance on live projects
- Follow-up tasks
- Provision of study content (wherever required)
- Developing appropriate attitudinal orientation
- A learning experience for personality enrichment
- Augmentation of professional capabilities
- Co-creation and mutual contribution between participants and facilitators
- Access to global resources
- Adaptation skills for the dynamic contemporary environment

# REGISTRATION PROCESS & PAYMENT DETAILS

#### ELIGIBILTY

Faculty members (regular/adhoc/temporary) in teaching profession are eligible to apply for this Faculty Development Programme.

All those who meet the eligibility criterion are required to register and pay a **Non-Refundable fee of INR 950/- by visiting** <u>remoocs.in</u>

#### **REGISTRATION DEADLINE: 24 May 2021**

After successful registration & payment, 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 "Telegram." You are therefore requested to install the Telegram App either from the Play Store or App Store. The link to join the official group will be provided in the confirmation mail.

#### **IMPORTANT:**

- Registration is mandatory for participation.
- Attempting and submitting all the quizzes and assignments are mandatory, and each participant should score a **minimum of 50% in total** to avail of the programme completion certificate.
- Graded certificates on the basis of performance will be awarded to the participants.
- As part of the Ministry of Education's requirement under the PMMMNMTT scheme, all participants need to submit online feedback for each session.
- Failing to meet any of the above conditions will result in denial of a certificate of completion to the participants.
- No Objection Certificate (NOC) or Leave is NOT REQUIRED to participate in the Programme

# For further information, write to us at: <u>spssfdp@ramanujan.du.ac.in</u>

### **TEACHING LEARNING CENTRE, RAMANUJAN COLLEGE**

#### DIRECTOR

Dr. S.P. Aggarwal, Principal

#### **ASSISTANT DIRECTORS**

Dr. Sumit Nagpal Assistant Professor, Department of Mathematics Dr. Nikhil Rajput Assistant Professor, Department of Computer Science Dr. Vibhash Kumar Assistant Professor, Department of Commerce and Management Studies

## **RAMANUJAN COLLEGE**

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