





Teaching Learning Centre Ramanujan College (Accredited Grade A++ by NAAC) (University of Delhi)

Under the Aegis of Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching *Ministry of Education*

> in association with Indian Accounting Association, NCR Chapter Organises

Two Weeks Interdisciplinary Refresher Course

On

Research Methodology and Data Analysis

16th- 30th September, 2022



Highlights of the course:

- Beneficial for CAS
- No NOC Required
- Graded E-Certificates (Blockchain)
 acceptable for all discipline
- Designed for Candidates from all discipline
- Blended Course using LMS and Live sessions

RESEARCH METHODOLOGY AND DATA ANALYSIS

Research is at core of any institution that aims at creation and dissemination of knowledge. However, quality research of global standards and that fits local needs as well has been a key challenge before such institutions. Training in research methodology plays a key role in improving quality of research by both, the existing researchers and the beginners. It imparts the necessary research skills, knowledge and methodological understanding that enable the researchers to develop the most appropriate methodology for their research work. Apart from enhancing researcher's understanding of appropriate tools, it orients the participants about techniques for data collection, management of data, its analysis and presentation of final output in proper form.

Researchers need to know various ways in which they can approach the collection of evidence (data) and its analysis. They must understand different tools and techniques available within the spectrum of each approach .It will enable them to take an appropriate decision regarding use of the methods or techniques relevant for their research.

Research and data analysis is very significant for all professionals to develop decision - making process in the current scenario. Today, Strategic think tanks are using reliable data analysis techniques in the predictive analysis based on historical data. Now- a —days, a software package is accessible to analyse data in a more resourceful manner. Hence, the present Refresher Course is designed to cater to the needs of academicians, researchers, and industry professionals for a sound understanding of research design and use of related software for data analysis.

CONCEPT NOTE

This Online Refresher Course is diligently planned around developing the foundation knowledge needed to step into the arena of research. The programme is an effort towards exploring different dimensions and paradigms of research. The Course will give an interactive on- line training on the models and tools in different subject domains to learn the forecasting and modeling tools. This Course will attempt to kindle the inquisitive minds of the participants and guide them through the enjoyable path of research towards the unknown frontiers of knowledge and wisdom.

The modules intend to enhance the ability of the participants to undertake independent research in a planned manner, identify appropriate and significant literature review, design questionnaires, collect and analyze data, perform simulations and, to assist them in writing research papers for good quality journals. The participants will be trained to use several open source tools that are useful in accomplishing their research outcomes. The Course content is designed to disseminate knowledge of some of the important digital tools used for academic purposes.

THEMATICS

- An Introduction to Concept of Research: genesis, types, design, characteristics and ethics
- Hypothesis formulation, Types of Hypotheses: Null & Directional
- Research process, problem, questions, objectives
- Review of literature , archival sources of data and online research database
- Basics of Quantitative Research
- Tools and procedures of data collection: primary data/secondary data
- Sampling techniques and survey methods
- Questionnaire Designing
- Data processing, representation and analysis: data feeding, Scaling, Editing, Coding and Processing
- Introduction to Quantitative Data Analysis using SPSS and R
- Measurement Assumptions of Normality, Linearity, Homogeneity of Variance
- Uni-variate and Bi-variate Analysis
- Statistical Correlation Analysis using SPSS
- Statistical Linear and Multiple Regression Analysis using SPSS
- Statistical and Linear Regression Analysis in R and R Studio
- Introduction to Qualitative Analysis and its different dimensions Qualitative data analysis using NVivo
- Structuring Literature Review using Mendeley and Latex.
- Writing Research paper and Monograph in High Impact Factor and Scopus Journals
- Citation and Referencing System (Technicalities of Citation Metrics and H Index)
- E-resource Efficacy for Research, Research Integrity, Ethics and Anti Plagiarism Rules.
- Funding Avenues in Research.

WHO SHOULD ATTEND

The Refresher Course is an interdisciplinary course open to Faculty members (regular/ad- hoc/temporary) from any National or International University/College and scholars pursuing research in different areas of study.

The Course is also important and useful for participants seeking promotions under the 7th CPC from AL 10 to AL 11, AL 11 to AL 12 and AL 12 to AL 13.

OBJECTIVE AND LEARNING OUTCOME

After successful completion of the programme, the participants will be able to:

- Bring together faculties, researchers, and research scholars to exchange as well as share their experiences and research results on all aspects of Research Methodologies and Data Analysis.
- Provide an interdisciplinary platform for researchers and educators to present and discuss the most recent innovations, methods, concerns, practical challenges encountered, and solutions adopted in qualitative and quantitative research methods and data analysis.
- Strengthen scholars, researchers, and faculties in analytical skills by providing a blend of conceptual learning and hands-on practical sessions on statistical software like R, SPSS, and qualitative data analysis software NVivo.
- Develop skills that help researchers in their research work and research dissemination.

- To impart skills in the integration of qualitative and quantitative research
- To make the participants user friendly with the statistical softwares for data analysis
- Gain understanding of Research and its implications in decision making process.
- Design questionnaires that are reliable and valid for collection of data.
- Use qualitative and quantitative tools for the purpose of analysis of data.
- Understand the ethical issues in Research including qualitative and quantitative analysis.
- Get hands-on training in some of the tools that shall be useful in Research.

RESOURCE PERSONS

The resource persons include eminent experts in the area of Advance Research Methodology and Statistical Tools from all over India which will use teaching techniques like Group discussions, open question answer sessions and presentations. Some of the resource persons are:



Prof. C.P. Gupta Former Head & Dean, Faculty of Commerce & Business Senior Professor, Department of Financial Studies, South Campus, University of Delhi



Dr Neeraj Kaushik, Associate Professor, Department of Business Administration. National Institute of Technology, Kurukshetra



Prof. Bhakkar Vice Chancellor, ITM University, Gwalior, Madhya Pradesh, India

REGISTRATION

ELIGIBILITY

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

Registration is mandatory for all the participants of the Course.

 All those who meet the eligibility criteria is required to pay For Indian Participants Fee per person (Non-Refundable):- INR 1450/ 50% course fee will be refunded for the specially abled participants on successful completion of the refresher course

- Limited seats, admission on first come, first- serve basis.
- The eligible participants who have made the payment are required to register online.
- Please visit **rcmoocs.in** to get yourself registered.

DURATION

• The refresher course will be of two weeks duration, with a minimum of 72 contact hours in pursuance to requirements of UGC/MoE

PRE-REQUISITES

- The evaluation will be done as per the guidelines promulgated by the MoE/UGC.
- The total marks will be 100 (Assignments 40marks and Multiple Choice Objective Test 60marks)
- Minimum attendance requirement is 90% for successful completion of the Course.
- <u>Graded certificates on the basis of performance will be awarded to the participants.</u>
- As part of the Ministry of Education's requirement under the PMMMNMTT scheme, all participants need to submit online feedback for each session.
- It is the responsibility of the participant to inform their employer, but No NOC required from the participant's end, As per the guidelines prescribed by the Government of India the candidates who are visually impaired (blind/low vision) or orthopedically handicap may use services of subscribe at their own cost for the online assessments.
- Failing to meet any of the above conditions will result in denial of a certificate of completion to the participants.

PAYMENT PROCESS AND STEPS OF REGISTRATION

STEP I – All the aspirants are requested to visit **remoors.in** and register themselves for the course.

Last Date for Registration: 15th^d September, 2022

The payment can also be made on **rcmoocs.in** post successful registration.

ADVISORY COUNCIL & ORGANISING COMMITTEE



For Details E-mail & contact: rmda2022@ramanujan.du.ac.in

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