TEACHING LEARNING CENTRE
RAMANUJAN COLLEGE
(Accredited Grade 'A' by NAAC)
UNIVERSITY OF DELHI

सत्यमेव जयते
Ministry of Education
Government of India

under the aegis of

MINISTRY OF EDUCATION
PANDIT MADAN MOHAN MALAVIYA NATIONAL
MISSION ON TEACHERS AND TEACHING

is organising an

ONLINE TWO - WEEK INTERDISCIPLINARY REFRESHER COURSE/ FACULTY DEVELOPMENT PROGRAMME

RESEARCH METHODOLOGY

20 JULY - 03 AUGUST 2021

CALL FOR REGISTRATION AND PARTICIPATION

TEACHING LEARNING CENTRE, RAMANUJAN COLLEGE

Teaching Learning Centre is mandated by the Ministry of Human Resource Development (MHRD) to organise Faculty Development Programmes (FDPs), Faculty Orientation and Induction Programmes (FIPs), discipline specific and interdisciplinary Refresher Courses, conferences, workshops, through offline and online modes. These programmes are based on in–depth subject knowledge, quantitative and qualitative research methodologies, and on an interdisciplinary approach as is envisaged in the National Education Policy (NEP), 2020.

The TLC, Ramanujan College has been set up with the aim of Reaching the Unreached teachers in terms of regional diversity and geographically remote areas of the country. It has successfully conducted more than hundred learner–centric programmes since October 2017 and trained over one lakh teachers across the country in various discipline specific and interdisciplinary programmes.

In the TLC Programmes distinguished and internationally acclaimed resource persons deliver lectures and conduct sessions on wide ranging disciplines/topics of relevance in the contemporary and ever evolving global scenario to benefit the teaching fraternity, corporates and researchers. The sessions are also uploaded for larger audiences on the official YouTube Channel of the College.

Ramanujan College is a pioneer in offering offline/online courses for faculty members of higher education institutions and research scholars through the customised Learning Management System (LMS), designed by the College's Research Development and Services Cell. It is predominantly participant-friendly and incorporates evaluation methods and comprehensive feedback systems to judge learning outcomes. The LMS is hosted on CLOUD with high scalability and reliability. The College has installed its own Cloud Infrastructure to host its servers for research and data analysis.

Enrichment Spectrum at the TLC, Ramanujan College

- Transforming teachers into knowledge-creators
- Emphasis on creating self-learning space for participants
- Interaction with eminent scholars and academicians
- Four Quadrant Approach (e-tutorial, e-content, Self-Assessment and Web Resources).
- Regular follow-up with the participants through Google Classroom/ Telegram/ Discussion Forum.
- Adaptation skills for the dynamic contemporary environment
- Augmentation of professional capabilities and research-based knowledge
- Inter and cross-disciplinary methodologies of study
- Co-creation and mutual contribution between participants and facilitators
- Formation of knowledge capital
- Online certificates using the Blockchain Technology to ensure authenticity and verifiability

CONCEPT NOTE

Research is a form of systematic enquiry to delve deeper into a subject and produce socially relevant results in different forms like a product, research paper, patent or thesis. There are varied forms of research; each characterized by different methodologies. Research methodology holds prime importance as it outlines the course of the research endeavor and its final outcome. The process of research and the associated tasks need to be conceptualized appropriately to bring in the much needed quality in the research. Every task involved, like collection of data, searching literature review, deriving a mathematical or computational solution or presentation of the results, requires a concrete and systematic approach. Formulation of such an approach requires immense deliberation in terms of the tools and techniques to be deployed as well.

This Online Refresher Course is diligently planned around developing the foundational knowledge needed to step into the arena of research. The programme is an effort towards exploring different dimensions and paradigms of research. 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 primary tools covered are those that would aid a researcher in a systematic background knowledge probe, data visualization, and effective presentation of results, writing research paper, preparation of reports and thesis, and prevention against plagiarism.

The course content is designed to disseminate knowledge of some of the important digital tools used for academic purposes. One will learn how to create individual research profiles, find relevant and good quality journals. The modules would be an amalgamation of the much needed digital skills which can play a significant role throughout the research process.

THEMATICS

- **Introduction to Research: Research Philosophy and Types**
- **Development of deeper understanding of the dynamics of research philosophy and design and the underlying technology and proficiency**
- **Research Design and Types**
- **Data collection and Data Visualization**
- **Analysis of Data and Techniques**
- **Systematic Literature Review and Meta Data Analysis**
- **Introduction to different Qualitative Research Methods**
- **Developing an understanding about Qualitative and Quantitative Data Analysis**
- **Writing Research Report and Research Papers using LaTeX**
- **Advanced Searching Tools and Referencing Tools**
- **Scientific Journal Finder**
- **Indexing and Impact Factors**
- **Publication Ethics: Patent, Copyright and Plagiarism**
- **Creating Research Profile and Collaborations**

EXPECTED LEARNING OUTCOMES

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

- Comprehend the research process and underlying design principles
- 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 usage of several open source tools that can assist them in their research endeavors
- Effectively analyze and present their data and research outcomes
- Write effective research papers and thesis in the journal designated formats using online tools
- Gain awareness on the concept of originality of research
- Know the process of finding good quality journals for research and publishing
- Establish collaborations with the research community
- Improve their quality of research

RAMANUJAN COLLEGE

Ramanujan College is a constituent College of the University of Delhi (DU). It is inspired by the life and work of Srinivasa Aiyangar Ramanujan, one of the world's greatest mathematicians. The College has been accredited Grade "A" by the National Assessment and Accreditation Council (NAAC) in its First Cycle. It is located in the well-known area of Kalkaji, near Nehru Place, in South Delhi.

The College was established in 1958 as an evening college for boys with just five programmes. Since 2010, Ramanujan College has been expanding and now with the latest addition of B.Sc. Environmental Sciences (Hons) in 2020, it at present offers sixteen undergratuate programmes in different disciplines. This achievement, in alignment to the

the recommendations of the National Education Policy (NEP) 2020, makes the College a centre for interdisciplinary studies and research with a future focus on blended learning. It has gradually grown into a self-sufficient and self-reliant institution owing to its academic vigour and intellectual capital.

Ramanujan College was awarded the Deen Dayal Upadhyay – Knowledge Acquisition and Upgradation of Skilled Human Abilities and Livelihood (DDU KAUSHAL) Kendra in 2016 by the UGC, under which two vocational courses were started in Banking Operations and Software Development.

The College has conducted a Course on Human Rights, Environment and Ethics through its National Resource Centre (NRC), under the Annual Refresher Programme in Teaching (ARPIT) scheme of Ministry of Education (MoE). This Course was uploaded on MoE's Massive Open Online Course (MOOC) platform SWAYAM and many participants registered for it.

Ramanujan College offers various short-term diploma, certificate, and executive development programmes on contemporary and skill-oriented themes. These are conceived and designed by faculty members in consultation with external experts. The courses get exceptional response from the students and are conducted throughout the academic session. They are open to alumni and students of all the colleges. Some of these courses support the curriculum, some prepare the students for higher studies and also accelerate the professional growth.

The College is the Study Centre of School of Open Learning (SOL), Non-Collegiate Women Education Board (NCWEB) and Indira Gandhi National Open University (IGNOU) for various courses. As an initiative towards students and teachers exchange programmes, the College has entered into Memorandum of Understanding(s) with foreign universities. It is also working for collaboration with other higher education institutions located in remote areas of the country, under the Vidya Vistar Scheme of the University of Delhi.

The prestigious Teaching Learning Centre was awarded to Ramanujan College in 2017 by the Ministry of Education, under the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT) scheme.

In pursuit of its vision: "Discover, Empower, Transform: Building A Better World", Ramanujan College is today perceived as one of the best colleges in the country.

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 1450/- by visiting**

rcmoocs.in

REGISTRATION DEADLINE: 19 July 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:

rcm6@ramanujan.du.ac.in

TEACHING LEARNING CENTRE, RAMANUJAN COLLEGE

DIRECTOR

Prof. 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

Accredited Grade 'A' by NAAC
(UNIVERSITY OF DELHI)
Kalkaji, New Delhi - 110019
011 - 26430192
rcm6@ramanujan.du.ac.in
www.ramanujancollege.ac.in
www.rcmoocs.in