





# 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

IS ORGANISING

ONLINE TWO-WEEK
REFRESHER COURSE IN

MATHEMATICAL SCIENCE

14 - 28 JUNE 2021

CALL FOR REGISTRATION AND PARTICIPATION

### REFRESHER COURSE IN MATHEMATICAL SCIENCE

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

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/social media platform 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 Two-week Refresher Course in Mathematical Science for faculty members and research scholars of higher education in the country.

### **CONCEPT NOTE**

Mathematical Sciences as a subject area have witnessed significant growth in terms of research and applications. The discipline has touched a wide array of activities and processes, ranging from the basic internet search to more complex aspects of computer simulations and digital communication. The cross - disciplinary nature of Mathematical Science has helped it in becoming an integral tool for research in many disciplines, medical science, science & engineering, climate studies, information technology, social science among many others. However, there is a gap between this expansion and the way the subject is generally conceived by its practitioners. It is in this backdrop, the Teaching Learning Centre, Ramanujan Two-week Refresher Course/Faculty offering а College Development Programme to acquaint the participants with the skills and knowledge required to further the cross - disciplinary nature of the field and apply it beyond their own area of expertise.

The Programme aims to train the participants in different software applications and facilitate the participants to apply in their teaching-learning methods and research endeavor. The programme will also focus on providing a comprehensive discussion and training in the effective methods and tools used in writing a research project/paper.

## **THEMATICS**

### **Tools for Research and Analysis**

- Advanced Excel
- Mathematica
- Optimization techniques

R

- Simulation techniques
- MATLAB
- Visualisation tools

Linear Progression
Introduction to Data Science
Writing Research Proposals
Schemes and Scholarships
Copyright and Plagiarism
Intellectual Property Rights
Creative Commons License
Advanced Searching
Deep Web Searching
Writing Tools

- Voice typing, Collaborations
- LaTeX

### Reference Management

Mendeley

Zotero

### Research Journal Metrics and Indexing

- h-index, Impact factor, Altmetrics, Citation Index
- Scopus, Web of Science, Google Scholar, DBLP and more
- ORCID, Publons, ResearchGate, Vidwan

# 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 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) from the discipline of Mathematics, Computer Science, Statistics and allied disciplines 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 remoces.in

# **REGISTRATION DEADLINE: 13 June 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: <a href="mailto:astrw@ramanujan.du.ac.in">astrw@ramanujan.du.ac.in</a>

### **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

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

<u>www.ramanujan.du.ac.in</u> <u>www.ramanujancollege.ac.in</u> <u>www.rcmoocs.in</u>