



**TEACHING LEARNING CENTRE  
AND  
DEPARTMENT OF ENVIRONMENTAL STUDIES  
RAMANUJAN COLLEGE  
(Accredited Grade 'A' by NAAC)  
UNIVERSITY OF DELHI**

under the aegis of

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

is organising an

**ONLINE TWO-WEEK  
REFRESHER COURSE IN ENVIRONMENTAL STUDIES  
21ST CENTURY ENVIRONMENTAL  
ISSUES, CHALLENGES & SOLUTIONS  
15 - 29 JULY 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 Teaching Learning Centre (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**

Air, water, soil and many other components of the earth have made it habitable for humans and for centuries we have been utilizing them for our survival. No part of the Earth is now untouched by the impacts of anthropogenic activities. The beginning of the industrial revolution and further growth and expansion of industries and developmental projects marked the beginning of the earth's deterioration.

Population upsurge along with massive acceleration in anthropogenic activities has raised several questions on the sustainability of natural resources on our planet. Furthermore, other activities such as deforestation, widespread concretization, species extinction, ecosystem degradation, agricultural expansion, damming of rivers, toxic waste generation is affecting the planet to such an extent that the environment is becoming increasingly unhealthy and unfit for future survival. We need more land, more water, more food, and other



natural resources to survive. According to estimates, Earth at present is going through one of the biggest biodiversity loss phase, the impact of which is unforeseen and unpredictable. Forests are disappearing at an alarming rate to plant more crops, to provide grazing land for animals, etc. and all this is based on the only misconception we had that the earth's supply is infinite. The industrial revolution, the Green revolution, and many such events in the history of human civilization have paved the way for growth and development but the ignorance of its impacts especially concerning human health and environmental safety has brought us all to a critical stage.

Plato in his famous work 'The Republic' raised a very important question 'can morality be taught?' like other subjects such as science, mathematics, and astronomy. As there is no universal principle to formulate the ethical code we do face challenges in everyday conduct in the public and private space. In today's context, the challenging question that needs to be resolved is 'what and how do we take initiative to deal with the Global, National, and local environmental issues? Amid all this, the origin and advance of the COVID-19 pandemic over the past one and half years have brought new social dilemmas and environmental challenges. Maintenance of hygiene through handwashing in the middle of already scarce water resources is the demand of the situation whereas generation of bio-medical waste from the medical sector is an outcome. Both things are further going to add burden to the already suffering planet.

Keeping this scenario in mind, in-depth knowledge of 21st-century environmental challenges is a must to have workable solutions in place. With this objective, Ramanujan College is organizing this Two Week Online Refresher Course in Environmental Science which also aims to not only bring attitudinal changes among the beneficiaries but also motivate and equip them with the latest discoveries and innovations to contribute their best for restoring the balance between Man and Nature.



Due to the introduction of different state-of-the-art facilities, instrumentation and new software, chemical sciences and technology have progressed tremendously in this century. Chemistry and related sciences have made rapid progress in terms of knowledge and invention. This course will touch on a few of the thrust areas.

## **THEMATICS**

- **Relevance of Environmental Education in Social well-being**
- **Pandemic and Global Environmental Changes**
- **Population and Resource Management: A Global Challenge**
- **Tools and Techniques for Waste Management**
- **Current and Future Challenges for Water Resource Management**
- **Development Induced Human Displacement and Rehabilitation**
- **Environmental Governance in India**
- **Climate Change: A Shared Responsibility**
- **Green Energy and Technology**
- **Human Rights, Ethics, and Environment**
- **Sustainability and sustainable development for an Inclusive Future; Challenges and Solutions**
- **Spatial Technologies in Natural Resource Management**
- **Environmental Economics and Ecopreneurship**



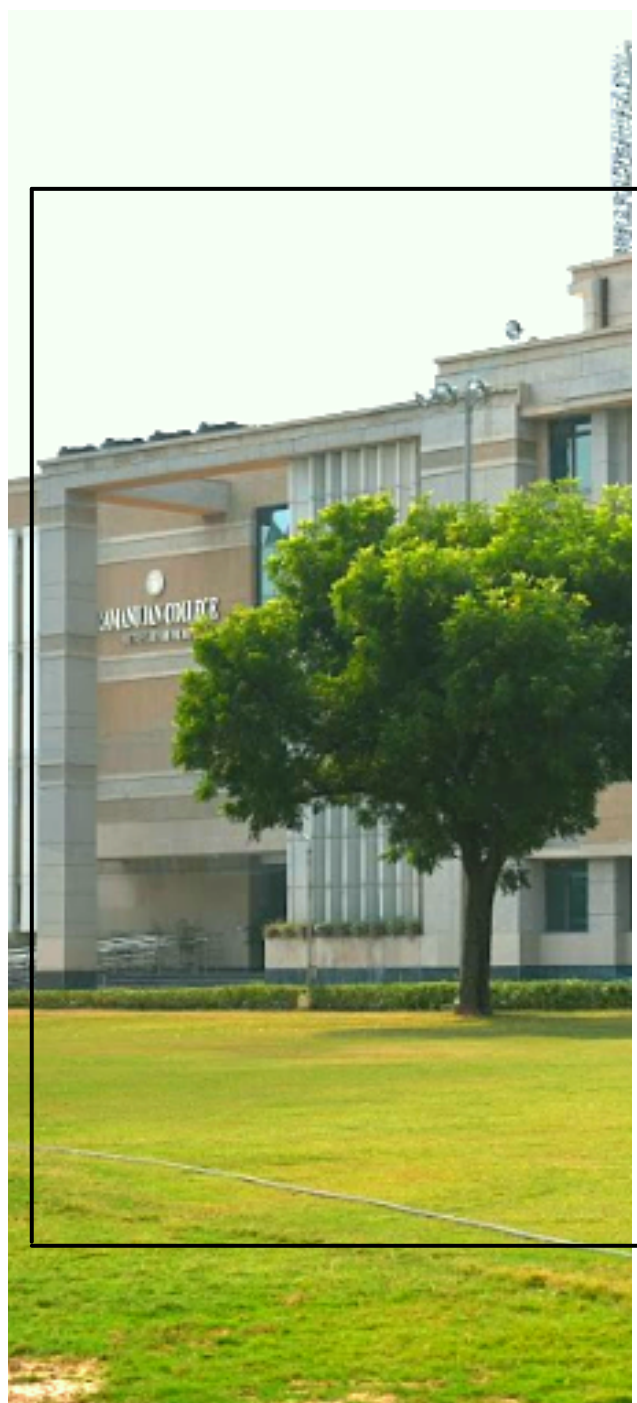


## RAMANUJAN COLLEGE

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 undergraduate programmes in different disciplines. This achievement, in alignment to 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 (PMMMNTT) 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

### ELIGIBILITY

Faculty members (regular/adhoc/temporary) from Environmental studies and allied disciplines are eligible to apply for the course.

All those who meet the eligibility criterion are required to register and pay a **Non-Refundable fee of INR 1450/- by visiting [rcmoocs.in](http://rcmoocs.in)**

### REGISTRATION DEADLINE: 14 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:

**[evsrfc@ramanujan.du.ac.in](mailto:evsrfc@ramanujan.du.ac.in)**



**ORGANISING BOARD OF THE PROGRAMME**  
**(RAMANUJAN COLLEGE, UNIVERSITY OF DELHI)**

**DIRECTOR (Teaching Learning Centre, Ramanujan College)**

**Prof. S.P. Aggarwal, Principal**

**ASSISTANT DIRECTORS (Teaching Learning Centre, Ramanujan College)**

**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*

**CONVENOR**

**Ms. Neha Yadav**

*Assistant Professor, Department of Environmental Studies*

**CO - CONVENOR**

**Dr. Tenzin Thakur**

*Assistant Professor, Department of Environmental Studies*

**COORDINATOR**

**Ms. Nidhi Mathur**

*Senior Assistant*

**TECHNICAL HEAD**

**Mr. Vipin Rathi**

*Assistant Professor, Department of Computer Science*

**MEMBERS**

**Dr. Ashish Kumar Shukla**

*Assistant Professor, Department of Statistics*

**Ms. Shipra Yadav**

*Assistant Professor, Department of Political Science*