





# TEACHING LEARNING CENTRE

Ramanujan College (Accredited Grade 'A++' by NAAC) University of Delhi

in collaboration with

## NIRMALA COLLEGE

(Accredited Grade 'A++' by NAAC) Muvattupuzha, Kerala

is organising an

# **ONLINE TWO-WEEK REFRESHER COURSE**

# PHYSICS

09 - 23 JUNE 2023

organised under the aegis of

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

CALL FOR REGISTRATION AND PARTICIPATION

#### RAMANUJAN COLLEGE

Ramanujan College, a constituent College of the University of Delhi was established in 1958 as an evening college. The College has been accredited Grade "A++" by the National Assessment and Accreditation Council (NAAC) in its Second Cycle.

At present, Ramanujan College offers sixteen undergraduate programmes in different disciplines. The College has been awarded the DDU KAUSHAL (Deen Dayal Upadhyay - Knowledge Acquisition and Upgradation of Skilled Human Abilities and Livelihood) Kendra (2016) by UGC and Teaching Learning Centre (2017) by the Ministry of Education. The College also offers short-term diploma, certificate, and executive development programmes on contemporary & skill - oriented themes to complement the regular graduation courses.

It is also the Study Centre of Non-Collegiate Women Education Board (NCWEB) and Indira Gandhi National Open University (IGNOU) for various courses. In 2018, the College 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 MoE.

The College has also 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.



# TEACHING LEARNING CENTRE RAMANUJAN COLLEGE

Teaching Learning Centre (TLC) is mandated by the Ministry of Education (MoE) 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 indepth 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.

The courses are offered 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.

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 <a href="YouTube Channel of the College.">YouTube Channel of the College.</a>

#### NIRMALA COLLEGE

Nirmala College, Muvattupuzha was founded in 1953 and it has now become one of the premier educational institutions in India with more than 3000 students and 136 faculty members. It is a Minority Christian institution governed and managed by the Corporate Educational Agency, Syrian Catholic Diocese of Kothamangalam, Kerala. The college is known for its high academic standards, and the students bag university ranks on a continuous basis. The college is reaccredited by **NAAC with A++ grade** (**CGPA 3.73**) in the fourth cycle of accreditation in 2021. The college was ranked on the 91st position in the NIRF rankings 2017 by the Ministry of Education, Government of India and is also bestowed with the prestigious 'Star College' status by the DBT, Government of India. All Science departments of the college are supported by the DST FIST scheme.

The college offers 17 Undergraduate programmes, 14 Postgraduate programmes and One Integrated Postgraduate programme. In addition to this, the college also offers Ph.D. programmes in Seven disciplines.

The campus is adorned with lush greenery and is located in the naturally blessed Nirmala hills which is spread over nearly 53 acres of land with state of art facilities for a constructive learning experience. Around 1.175 acres of land are set apart for the greening efforts like botanical garden, herbal garden, spices garden, bio-diversity garden, vegetable garden, mushroom house etc. Such initiatives of the college were reflected in the **Swachh Campus Report of MHRD in 2019**.



### **CONCEPT NOTE**

Concepts of physics are dispersed from the heart of atoms' nuclei to giants of the celestial world. The understanding of fundamentals of various potential fields of physics and critical analysis of concurrent research has a pivotal role for individuals working in the area of physics for lab-to-industry implementations. Such concurrent knowledge also helps in developing innovative teaching pedagogy. This refresher course has been designed to address the needs of theory, experimentations, and industrial applications. The proposed training program would help researchers, faculties in formulating appropriate strategies to face the upcoming challenges.

# **THEMES**

- Liquid Crystals
- Space Physics
- Plasma Physics
- Nanomaterials
- Atmospheric and Space Sciences
- Quantum Physics
- Thin Films
- Solar Cells, Solar Photo thermal and Photovoltaic devices
- Spectroscopy: Fluorescence & Molecular Spectroscopy
- Fiber Optics Applications in Medical Physics
- Nuclear and Particle Physics
- Condensed Matter Physics/Materials Science
- Superconductors
- Mathematical Physics- Theoretical studies and Simulation techniques

### **REGISTRATION & PAYMENT DETAILS**

# Eligibility

Faculty members (regular/adhoc/temporary) and research scholars from Physics and allied disciplines are eligible to apply.

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: 08 June 2023**

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 is mandatory, and each participant should score atleast 50% aggregate to be eligible for the 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.
- No Objection Certificate (NOC) or Leave is NOT REQUIRED to participate in the Programme. However, participants are expected to inform their authorities about their participation.
  - Failing to meet any of the above conditions will result in the denial of completion certificate.

For further information, write to us at:

physics@ramanujan.du.ac.in

or contact us through WhatsApp:

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# ORGANISING BOARD OF THE PROGRAMME

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