PROVIDENCE COLLEGE FOR WOMEN-COONOOR

DEPARTMENT OF MATHEMATICS

MATHEMATICS CLUB ACTIVITIES (2021-2022)

The main objective of this Mathematics Club is to provide a platform for the students to enrich and discover the elegance of the subject. Besides the academic benefits, Mathematics club also pay a way to meet people and develop teamwork skills.

The activities of the Mathematics club started with the election of Afsheen of III B.Sc., Mathematics, Mehrunnissa of II M.Sc., Mathematics as President of UG and PG respectively and Divya of II B.Sc., Mathematics as Secretary.

Department of Mathematics of Providence College for Women, Coonoor in Collaboration with the Bannariamman Institute of Technology, Sathyamangalam conducted a Faculty Development Programme on Software Tools for Mathematical Education from 30.08.21 to 05.09.21. This FDP emphasized the importance of Mathematical tools, Differential Equations with SAGE, Numerical solutions & Simulations, Data Analysis & Visualization in R, Bite of Python, and Linear Algebra using SCILAB & Mathematica. Students, Research scholars and delegates from all over the world participated.

Department of Mathematics organized an Orientation Programme on e-Tools on 29.10.21. This was organized to motivate the advanced skilled persons to share their skills to other students. Afsheen E of III B.Sc Mathematics was good at organizing events, webinars and various competitions in the Department. Hence, she gave training on how to prepare a brochure, e-certificate, Google forms & posters. She conducted competitions and gave prizes also. Totally 42 students participated.

Department **online certificate course on R-Programming** was inaugurated on 02.10.21. Mr.Vigneswar, Assistant Professor, Department of Mathematics, Sri Ramakrishna Engineering College, Coimbatore was the resource person.

Mr. Vigneswar, gave an introduction about the R-Programming and its benefits. He also explained how R- Programming acts as a domain specific programming language and helps to do data analysis. After the inaugural event the online classes started successfully.

Department of Mathematics of Providence College for Women, Coonoor in Collaboration with K.Ramakrishnan College of Engineering, Trichy conducted a **Student Internship Programme -Virtual Training on Analysis of Water Quality Parameters** from 30.08.21 to 03.09.21. Our II B.Sc Mathematics students attended this STP.

This Internship gave ideas of basics of water technology, determination of chloride content in water sample by Argent metric method. Idea of determination of physic-chemical parameters of water & preparation of double distilled water was also given..

Department of Mathematics organized a 'Workshop on R Programming ' on 30.09.21, Mr. N. Vigneswar, Assistant Professor of Mathematics, Sri Ramakrishna Engineering College, Coimbatore was the resource person. He explained how the software R provides environment for statistical computing, graphical techniques and how R can be extended via packages.

OCTOBER FANTASY was celebrated from 07.10.21 to 21.10.21. A series of competitions like NAIL ART, PENCIL SKETCHING, FLAMELESS COOKING, BRIDAL MAKE UP and WEALTH-OUT OF WASTE were conducted.

As a part of the Olympiad 2022, the **Paper Presentation** competition was conducted on 7th March, 2022, on the topic "Graph Theory and its Applications". **Olympiad-2022** was organized by the Department of Mathematics on 09.03.22. Various competitions like Miming, Quiz, Math—Sketching, Connections & Dumsharads were conducted. Students participated enthusiastically. Sr.Principal presided over the function and distributed the prizes for the winners of all the competition held during this academic year.

Department of Mathematics of Providence College for Women, Coonoor in Collaboration with the Bannariamman Institute of Technology, Sathyamangalam organized a State level Webinar on 'Media and Gender' on 16th April 2022. The resource person was Dr. B. Radha Associate Professor of Media and Communications, Central University of Tamilnadu (CUTN), Thiruvarur. She explained the functions of mass media, social cognitive theory Modeling, Media in everyday lives to socialize, communicate, create, play, learn.

Under the guidance of Unnat Bharath Abhiyan (UBA) to create awareness and inculcate students responsibilities to the immediate neighborhood, a group of the II B.Sc Mathematics students were taken to Shanmuga Nagar on 18.04.2022. They were accompanied by Dr.B.Ganga, Dr.K.Karuppai, Dr. K.Mahalakshmi, Dr.M.Buvaneswari and Mrs. R.Shalini. Survey was taken by our students to know about their family details, basic facilities and difficulties. We also listened to their grievances.

Department of Mathematics of Providence College for Women, Coonoor organized an International level Webinar on 'Understanding Hidden Math behind innovative technologies: A pathway for Career Opportunities' on 23rd April 2022. The resource person was Dr. Saranya Sekar, Post-Doctoral Fellow, Department of Mathematical Sciences-COS, UAE University, United Arab Emirates. She explained the importance of Mathematics in our day-to-day life and the mathematics hidden behind the innovative technologies like iron doom (It is developed by Rafael advanced defense systems and Israel aerospace industries),

Laser Engraving (The aim of Laser Engraving is to engrave a specific picture or logo onto a selected material or to cut separate the shapes), washing machine (Fuzzy Logic is an important consideration when we buy a washing machine), Video game (Video game developers use a lot of math and especially a lot of geometry and trigonometry), Pi or π (It describes by the ancient Babylonians or Egyptians—the number has become a mathematical marvel, captivating practicing scientists and math whizzes alike). She also discussed about Post- Doctoral Fellow and career opportunities in India (government sector and private sector) and abroad those who complete the Mathematics degrees. There were 65 participants from various colleges.

On 28th April 2022, I.B.Sc. and II B.Sc. Mathematics, accompanied by Dr.Mahalakshmi K, Department of Physics and Dr.Buvaneswari M, Department of Chemistry went to Radio Astronomical Centre, Ooty as a field trip. Explanations were given to the students on Radio telescope's construction, functions and the detection of Radio waves from celestial objects. The Institutional visit was useful to enhance them understanding of the Universe.

It was a year full of talent search activities as it gave a lot of opportunities for students and staff to involve enthusiastically in various activities. We thank our Rev.Sr.Principal, who was a pillar of support and strength for us in all our endeavors.

Above all we thank the Almighty for His Blessings, showered on us throughout the year.

Signature of HOD

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Signature of Principal

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