# **Department of Mathematics**

## **Department Activities**

2021 - 2022

#### a) Alumnae Meet 2022

Department of Mathematics, Vellalar College for Women organized **Alumnae Meet on 19.03.2022** (02:00 p.m. – 03:30 p.m.). **Ms. M. Dheva Dharshni** (2017 – 2020 Batch) currently pursuing II M.Sc., Mathematics at Bharathiar University, Coimbatore and an online Tutor at Byju's, delivered a talk. There was a discussion on **Career Opportunities and online resources like Chegg and EdTech**. She shared her experience and the steps to be taken to become an online Tutor at Byju's. **Ms. M. Santhiya** (2017 – 2020 Batch), Competitive Examinations Aspirant gave a talk on "how to crack TNPSC, IBPS PO, SBI clerk and RRB **Examinations**". In this occasion, students were energized to accomplish their goals by interacting with their Erudite scholars. Totally 33 alumnae of Batch 2017 – 2020 and 2018 – 2021, 150 students and 3 faculty members of Department of Mathematics attended this meet.

### b) Mathmagic Association Meeting on Mental Health and Wellness

Department of Mathematics had organized 'Mathmagic Association Meeting' on "Mental Health and Wellness". **Dr.K.Arunkumar, Physician, Saisuge Homoeopathy Clinic, Erode** acted as resource person. The programme started with a welcome address by Ms.Aafrin.M.Y., I B.Sc., Mathematics. Ms.Karthika.M, Mathmagic Association Secretary, had read the annual report of the department, which includes the activities of the students and department. In continuation, Dr.K.Arunkumar spoke on the impact and causes of mental emotions in internal organs of a human body. He also suggested few remedies, exercises and practices to overcome these issues. The Association competition prizes were distributed by the resource person. Ms.Sneka.K, III B.Sc., Mathematics proposed vote of thanks. On the whole, around 160 UG students, 2 research scholars and 5 faculty members of Department of Mathematics, benefitted through the programme.

### c) Association Competition

Department of Mathematics of Vellalar College for Women organised the Math Magic association competitions to the students of department of Mathematics on **06.12.2019**. The competition for III B.Sc., Maths is Math Quiz in which 16 teams (2 in each team) participated. Out of those 16 teams, preliminary rounds were conducted and 6 teams were chosen to take part for the final round. Dr.C.Brundha, Assistant Professor, Department of Commerce was the judge. The competition for II B.Sc., Mathematics was paper presentation and 5 teams took part. Dr.S.Maheswari, Assistant Professor, Department of Commerce acted as judge. The I B.Sc., Mathematics students were conducted Math modelling competition and 4 teams participated. Dr.M.Yogeswari, Assistant Professor, Department of Physics assessed the models.

The list of prize Winners of the Competitions are given below:

S.No	Name of the Competition	Class	Name of students	Prize
1	Paper Presesntation	III B.Sc., Mathematics	M.Janasruthi S.B.Dharshini	I
2	•		G.Jayavardhini T.D.Shakthipriya	II
3	Math Models Preparation		S.Gokilappriya	I
4		II B.Sc., Mathematics	M.Jannathul Firthous	II
5			V.M.Devasri	I
6	Quiz	I B.Sc., Mathematics	S.Anjana Karthikeyeni	II

### d) Workshop on Career opportunities in Core Mathematics

Department of Mathematics, Vellalar College for Women organized workshop on "Career opportunities in Core Mathematics" on **04.12.2021** [10:00 a.m. to 12:30 p.m.]. **Mr. RP. Ramasubramanian**, Founder and Director of Dr. Saranya Academy of Mathematics enhanced our knowledge about competitive examinations like CSIR – NET/JRF, SET and NBHM. **Dr. S. Saranya**, author of the book CSIR-UGC NET/SET (JRF & LS) Mathematical Sciences (virtually) suggested books and topics to be covered in order to crack competitive

examinations. Totally, 166 students and 5 members of Faculties from Vellalar College for Women and 2 students from Bharathiar University PG Extension Centre, Perundurai participated. This program was propitious for the students who are preparing for IIT - JAM examination.

#### e) One Day Seminar on Certain Applications Of Mathematics

Department of Mathematics, Vellalar College for Women organized a One day seminar on "Certain Applications of Mathematics" on 25.03.2022 (10:00 a.m. - 03:45 p.m.). Dr. Robinson Thamburaj, Associate Professor and Head of the Department of Mathematics, Madras Christian College, Chennai served as the resource person.

In session I, he gave a talk on "Scope of Real Life Applications from Computational Geometry". He described about the Convex Hull and the best way to find the least number of cameras for surveillance. In session II, he gave a talk on "Introduction to Membrane Computing". He described a membrane structure and its' use in p-system and to Automata Theory. The talks were very much interesting and motivated the participants to further study these topics. Paper presentations were done by the students of III-B.Sc., Mathematics on the topic "Various Applications of Operations Research". Totally 164 UG students, 2 Ph.D. Scholars and 5 faculty members of the Department of Mathematics benefitted out of this seminar.

#### f) VET Funded National Science Day Celebration

The VET funded "National Science Day Celebration" was commemorated on 28.02.2020 on the theme "Women in Science". The programme was organized by the Science departments viz., Mathematics, Physics, Chemistry, Botany, Zoology, Nutrition and Dietetics and Computer Science, with the objective of highlighting the significance of celebrating the Science Day in rememberance of Sir Chandrashekhara Venkata Raman for receiving the noble prize for discovery of Raman Effect. Prof.R.Ramaraj, Professor of Eminence, Madurai Kamaraj University and Prof.M.N.Ponnusamy, CSIR Emeritus Scientist, University of Madras, Guindy Campus, Chennai were invited as the Resource persons for the program. In the inaugural session, Prof.R.Ramaraj, insisted the importance of women in higher education and motivated our students for better research while applying innovative ideas.

Technical session – I was initiated on the topic "Science Innovations and its impact on Life." During the session, brief introduction was given on various scientists namely, Albert Einstein, Isaac Newton, Marie Sklodowska Curie, Stephen William Hawking, Erwin Rudolf Josef Alexander and Abhijit Vinayak Banerjee. The presentation emphazised on "Chandrasekhara Venkata Raman", born in Tiruchirapalli on November 7, 1888, the first Asian and first non-White scientist to receive any Nobel Prize in the sciences and elloborated the phenomenon of Raman scattering effect. The presentation focused on the history of science and technology in the Indian subcontinent, and the science and technology in the Republic of India has included automobile engineering, information technology, communications as as space, polar, and nuclear sciences. The session was concluded with, the field of science contributes to innovation and technological capacity in specific ways and serves as a primary source of ideas that are useful for new technical possibilities and applications. Technical session - II was initiated by the resource person **Prof.M.N.Ponnusamy**, **CSIR Emeritus Scientist**, Department of Crystallography & Biophysics, University of Madras, Guindy Campus, Chennai on the topic "Bio-Physics – The Future of Science". The introduction was given on Biophysics, study of physical phenomena and physical processes in living things, on scales spanning molecules, cells, tissues and organisms and an interdisciplinary science, closely related to quantitative and systems biology. The role of Bio-Physics in discovering how atoms are arranged to work in DNA and proteins, Protein molecules perform the body's chemical reactions and the methods to read the DNA blueprints in body and methods to copy the DNA for future generations and usage of principles and methods of physics by Biophysicists to understand biological systems were briefly elucidated.

The faculty members of UGC Paramarsh mentee college also participated in this program. The Programme highly motivated 300 Undergraduate Science students of our college, towards the enthusiastic research work and acquainted broad knowledge and innovative ideas towards the Science and Technology. A Science exhibition was also organized as a part of National Science Day. The school students from the Vellalar Girls Higher Secondary School, Erode, visited the exhibition and nearly 40 students were benefitted.

### **Books received from NBHM**

We received the following books from the National Board for Higher Mathematics,

Department of Atomic Energy, Government of India

S. No.	Date	Name of the Book	Author	Year & Edition	No. of Copies
1	17.03.2022	Cryptography: An Introduction	Alan Tucker	Reprint 2022	1
2		Topics in Applied Abstract Algebra	S.R.Nagpaul, S.K.Jain	Reprint 2022	1
3		The Mathematical Consortium	Magazine	Vol 1,Issue 3&4	1

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