

**DEPARTMENT OF
MATHEMATICS**

- On account of National Statistics Day, an inter-departmental virtual math quiz competition, “MATHSKETEERS -2023 ” was conducted under the topic “Mathematical and Statistical Analysis” on June 29, 2023.
- IQAC and the Department of Mathematics, in association with Eco Club, organized a seminar on “Alternate Energy Resources” on July 21, 2023. Dr. Brindha Banu, Assistant Professor, Department of Biochemistry and Bioinformatics, Dr. MGR Janaki College of Arts and Science for Women, was the Chief Guest of the seminar. She delivered the topic on alternative energy resources.
- A seminar on “Recent Trends in Graph Theory” was conducted on 27.22.23. The resource person gave a brief introduction to graph theory and discussed dominating graphs and their concepts for finding the dominating vertex set.
- The Department of Mathematics organized a π -Rates Book Donation in 2023. It was conducted at Government A.D.W. High School, Thirumangalam, Chennai, on August 17, 2023.
- IQAC and the Department of Mathematics organized a five-day National Level Workshop on Advanced Study in Differential Equations, Cryptography, and Non Monotone Continuous Functions with five different resource persons from August 21, 2023, to August 25, 2023.
- An educational trip to the Ramanujan Institute for Advanced Study in Mathematics was organized on August 18, 2023. Students referred to some mathematical books and journals in the library. The students also referred to the books titled, Algebra, Numerical Methods, Real Analysis, Mechanics, etc.
- A seminar on “Applications of Mathematics in Science and Engineering” was organized on December 22, 2023. The resource person was Dr. Thamizharasi, Savitha Engineering College Chennai, who has motivated the art of solving real world problems. She has deeply explained calculus in designing a car, building a bridge, and calculating the stress and strain on its structure.

- MATH EXPO '24 was conducted on 29.1.24. Students from various schools exhibited their models to showcase their talents and enthusiastically explained their models made by them on different topics in mathematics and statistics, real-life applications of three dimensions, applications of integration and differentiation, etc.,
- One day workshop on Contemporary Research on Mathematics and Statistics in MS Excel Mrs. Sandhya Sabu, Assistant Professor, Department of Computer Science, Thiruthangal Nadar College, was the chief guest for the workshop. The workshop helped the students understand the application and use of the MS Excel tools in a clear manner.
- A workshop on Navigating the New Normal and Applying Modern Change Management Techniques for Researchers was conducted on 22.3.2024.





SHRI KRISHNASWAMY COLLEGE FOR WOMEN
KMAT & MATV VERSATILE CLUB
Five Days - National Level Workshop
ADVANCED STUDY IN DIFFERENTIAL EQUATIONS, CONTINUOUS AND DISCRETE
AND NON-HOMOGENEOUS CONTINUOUS FUNCTIONS
Day - 1 : 9:00 - Nonlinear Principles of Iterative of Continuous Functions
6-Meet Link: <https://meet.google.com/ufj-qybz-ccs> Date: 21 & 20/23 Time: 9:00
Dr. R. Parvathi, Assistant Professor, Department of Mathematics, School of Advanced Sciences, Vellore Institute of Technology, Vellore-632014
Dr. Anja Rajendran (Principal), Shri K. R. Krishnaswami (Dean), Shri K. R. Anon (Dean), Shri K. R. Raj Mohan (Dean)

Figure 8: Non-invertible functions

(a) $h(x) = \begin{cases} 1 & x \leq 0 \\ 1 + x & 0 < x < 1 \\ 2 & 1 \leq x \leq 2 \\ 1 & x > 2 \end{cases}$ and $h'(x) = \begin{cases} 0 & x < 0 \\ 1 & 0 < x < 1 \\ 0 & 1 < x < 2 \\ 0 & x > 2 \end{cases}$

(b) $h'(x) = \begin{cases} 0 & x < 0 \\ 1 & 0 < x < 1 \\ 0 & 1 < x < 2 \\ 0 & x > 2 \end{cases}$

(Q1) For each nowhere constant function $f \in C([J, J])$, is $h'(f)$ countable?

Number of digits	Time
75	104 days
100	74 years
200	3.2×10^7 years
300	4.9×10^{10} years
1000	6.2×10^{30} years

Source: <https://www.computer.org/doi/10.1109/SECURITY.2010.100>