

# SPECULUM

2024-2025 | REFLECTION OF A CLEAR PAST

*"Without Mathematics, there's nothing you can do. Everything around you is Mathematics, everything around you is numbers".*

These are the precious words by Shankuntala Devi. Every year December 22nd is observed as national mathematics day in India to commemorate the birth anniversary of legendary Mathematician Srinivasa Ramanujan. The day marks the importance of mathematics in our life and encourages people to develop self-learning and rational skills. Mathematics makes our life orderly. Certain qualities that are nurtured by mathematics are power of reasoning, creativity, abstract or spatial thinking, critical thinking, problem solving ability and even effective communication skills. Mathematics is the cradle of all creations, without which the world cannot move an inch. Everyone needs mathematics in their day to day life. A good curriculum of mathematics is helpful with effective teaching and learning of the subject. 2025 is the perfect square year. The next perfect square year is 2116. 2025 can be mathematically represented as the sum of cube of first nine natural numbers.

The Department of Mathematics was established in 1967 with B.Sc. degree in Mathematics. The department strives to maintain high standards of teaching in various areas of Mathematics. Several academic and co-curricular ventures are being conducted by the department. With the constant support and guidance of our staff, some of our students have participated in paper presentation undertaken by the department of Mathematics, Loyola college, Chennai. The department have organized and host a series of seminars catering specifically to students who have a passion for higher mathematics providing them with a unique opportunity

to engage with like-minded individuals, explore new concepts, and deepen their understanding of mathematical principles. While look into co-curricular activities like sports and arts, some of our students have won prizes in sports in International and National level and cultural competitions in Inter Zone, D-Zone and college level. Many of our students have attended Mathematical webinars conducted by academic institutions. Students graduating from the department have a variety of career options like academics, research, management, actuarial sciences, data analysis, social sciences, information technology, law, banking, and entrepreneurship. The Department has conducted special add on programme for UG students to clear competitive examinations. Now the department is supported under the DBT-Star College Scheme.

*"Mathematics is the most beautiful and most powerful creation of the human spirit".*

**-Stefan Banach**

Mathematics as an expression of the human mind reflects the active will, the contemplative reason, and the desire for aesthetic perfection. Its basic elements are logic and intuition, analysis and construction, generality and individuality.

*Nature is written in mathematical language.*

**-Richard Courant, German-American**

*Life is a math equation. In order to gain the most, you have to know how to convert negatives into positives.*

**-Galileo Galilei, Italian astronomer, physicist and engineer**

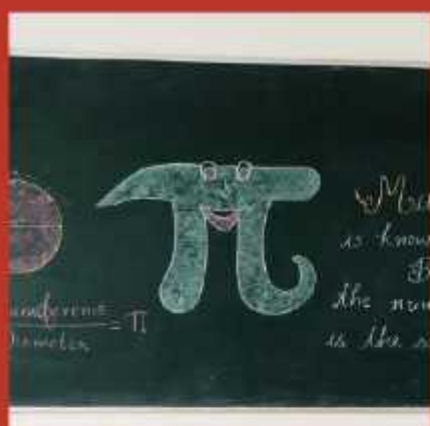


# Association inauguration

The Department of Mathematics Successfully conducted its Association Inauguration on 04-01-2023 . The event was held from 2PM to 3PM at Lissuex Seminar Hall .The Inauguration was done by MS Ms Swarna KL with the light lamping ceremony who also delivered an inspiring talk. Students And faculty members actively participated, making the event a grand success .The session concluded with a vote of thanks.



## \*A Triumph of Pi:A Celebration of Mathematical Excellence\*



The Pi Day event, celebrated on March 14th, 2024, was a clear triumph, marked by strong participation and enthusiastic involvement from both students and faculty. Second-year students presented an engaging talk that highlighted the significant contributions of notable mathematicians Shakuntala Devi and Aryabhata. In addition, these dedicated students organized a lively quiz competition that promoted the enhancement of mathematical skills and sparked a deeper interest in the subject among their classmates.

## Workshop on Real Analysis

The workshop on Real analysis held on 24th July 2023 for final year UG students provided a compressive overview of the fundamental concept and techniques in real analysis .The session was handled by Dr.Sajith G Menon currently working as assistant professor in SS college Areekode who has more than 25 years of teaching experience in mathematics. The workshop was a resounding success fostering encouraged knowledge, sharing and intellectual grow.





# JAM Workshop

A three-day workshop on JAM training was held by the Department of Mathematics from October 8, 2023, to December 8, 2023. Three resource people led the sessions. Lt. Dr. Jacob, Assistant Professor and Head, Department of Mathematics, St. Aloysius College, Elthuruth; Dr. Vinod Kumar P, Associate Professor in the Department of Mathematics, TM Government College, Thrissur; and Dr. Didimose K V, Assistant Professor in the Department of Mathematics, Sacred Heart College, Thevara. The meetings were creative and educational. In addition to Vimala College pupils, other college students also benefited from this initiative.

## Charisma

On October 13th, 2023, the Department of Mathematics at Vimala College (Autonomous), Thrissur, organized "Charisma - A Day with Some Pure Souls" at St. Joseph's Special School, Cheroor, marking World Mental Health Day. The event aimed to build bridges of understanding and create meaningful interactions between our students and the children at the school.

The day was filled with engaging activities, games, and performances, designed to promote joy and inclusivity. Vimala College students actively participated, demonstrating empathy and respect. The smiles and shared moments highlighted the power of human interaction and the importance of fostering a supportive community.



## Story of Women Entrepreneurs

The "Story of Women Entrepreneurs" seminar, conducted by Ms. Nincy and Ms. Fazny and attended by 66 participants, explored the multifaceted journeys and challenges faced by women in the entrepreneurial sphere. Ms. Nincy, the distinguished guest speaker, imparted invaluable insights and shared inspiring anecdotes drawn from her personal experiences as a successful woman entrepreneur.





# NATIONAL SEMINAR on computational mathematics

The two day national seminar on computational mathematics was held at Marian Hall, Vimala College Thrissur, on June 22-23, 2023 and was inaugurated by Dr Sr. Beena Jose. Dr Manju K Menon and Dr joju K T spoke on Day 1. Their topics were some security parameters in “Graphs” and “cryptographic Hash functions”. On Day 2, Dr Aswin V.S and Dr Seema Varghese delivered insightful talks. Their topics were “Artificial Intelligence in Mathematics” and “From Brain Anatomy to Network Topology”. The seminar drew nearly 120 participants from various institutions. It provided a valuable platform for knowledge sharing.



## Math, Coding and AI

Some practical training is unquestionably necessary for a math student to acquire machine language skills in line with their mathematical knowledge. From 2023 August 13 to August 16, the department organized a 5 day 30 hour hands-on training session that teaches U G students the fundamentals of writing mathematical code and algorithms for artificial intelligence using Python.



## VIJNAN SAGAR VISIT



The Department of Mathematics conducted a one day workshop based on design thinking, critical thinking and innovation design on December 12, 2023 at Vijnan Sagar Science Museum. The students were welcomed by museum staff and had a wonderful session with a retired scientist Sri Govindan Kutty from BARC on Indian Space Research and models of scientific experiments.



# YUKTHA 2024:

## Where Logic and Creativity Collide

Vimala College's Department of Mathematics recently played host to YUKTHA, a multi-faceted intellectual extravaganza that transcended the conventional boundaries of academia. From January 23rd to 25th, the campus reverberated with the echoes of fierce competition, with students from across the region vying for glory in a series of intellectually demanding challenges.

The centerpiece of the event was undoubtedly CHATHURANGA, the state-level chess championship. A veritable crucible of strategic brilliance, the tournament saw eighty young minds grapple with complex tactical maneuvers across three distinct categories: Under 12, Under 17, and Under 25.

DIG DELTA, the innovative virtual treasure hunt, proved to be a formidable test of digital acumen. Teams were tasked with navigating a labyrinthine digital landscape, their success contingent upon their ability to decipher cryptic clues and employ sophisticated problem-solving strategies.

The intellectual fervor reached a crescendo with the QUIZTORTION quiz competition. Hosted by luminaries such as Dr. Narayanan P A and Ms. Gopika, the competition witnessed a thrilling clash of intellects, with participants demonstrating an impressive

**POLARIS**

Maths Exhibition

23/01

**S IN A Pi ?**

Presentation Competition

Dig Delta

**THINK OR SINK**

Logical Aptitude Test

DATE: 25 January 2025

TIME: 9 am


**ASWARA**

song competition


**TWIRL 'n'**






**VIMALA COLLEGE (AUTONOMOUS)**  
**THRISSUR**


**DEPARTMENT OF MATHEMATICS**



**23 & 25 JANUARY 2024**

**INTERCOLLEGIATE MATH FEST**

**Principal**  
 Dr. Sr. Beena Jose

**HOD**  
 Ms. Dolly Augustine

**Faculty Coordinator**  
 Ms. Jincy T.P.

**Student Coordinators**  
 Sudharsana K S- 7510650089  
 Poornima K V- 9961311226  
 K Sweetha- 7907807426  
 Rinku P Madhu- 6262247477

**CHATHURANGA**  
 State Level Chess Championship



Reg. Fee: Rs.200/-

DATE: 23 JANUARY 2024  
 TIME: 9:30 AM  
 VENUE: COLLEGE AUDITORIUM




command of a diverse range of subjects.

The "WHAT'S IN A PI?" presentation competition provided a unique platform for students to showcase their creative interpretations of mathematics. Seven teams presented compelling arguments for the real-world applicability of this enigmatic constant, with the team from St. Thomas College ultimately emerging victorious.


The festival also featured a captivating blend of intellectual rigor and artistic expression. The THINK OR SINK logical aptitude test challenged participants to unravel intricate puzzles and transcend conventional modes of thought. Meanwhile, the TWIRL AND SWIRL dance competition injected a vibrant dose of artistic dynamism into the proceedings, culminating in a triumphant performance by a team from Vimala College.

The culmination of this intellectual odyssey was a grand closing ceremony, graced by the mesmerizing musical performance of the renowned singer Arjun K C. This unforgettable event served as a fitting testament to the power of intellectual pursuit and the enduring allure of mathematical exploration.





**Quiz Competition**



**School level**  
 Reg.Fee : Rs 20/-

**College level**  
 Reg.Fee : Rs 30/-





# ACHIVEMENTS



**SATHI T M**

from the **2020-2023** batch,  
got admission at **IISER Trivandrum**





# DZONE AND SPORTS ACHIEVEMENTS



Aswathy jyothish of second year Bsc Mathematics secured second prize in the senior National Cycle polo held at Maharashtra and third prize in the Intercollegiate tug of war championship held at Pathiripala



Sudharsana K S and Archana K B of department of mathematics participated in Thiruvathira and secured third prize in the Calicut university Dzone Kalolsavam 2023



## BOOK PUBLICATION

Published the Book Practical Models for Data Analysis by department of Mathematics, a consolidated Project Book, B.Sc Mathematics(2020-23) .

## PAPER PUBLICATION

- Anjana N, Dilsha O S and Jestina Johny of final year B.Sc Mathematics students presented and published their paper 'RTD and CETD matrices in spherical fuzzy environment' in an international journal 'African Journal of Biological sciences.' Under the guidance of Dr.Remya P B
- Anjana T J and Kashmeera Jeevan Johny of final year B.Sc Mathematics students presented and published their paper 'Spherical fuzzy binary soft sets' in an international journal 'African Journal of Biological sciences.' Under the guidance of Dr.Remya P B







Month Year | Issue Number



# PLEASURE TRIP

The final-year students embarked on a thrilling 4-day excursion to Dandell, gokarna & uduppi



## EDITORIAL BOARD

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**Poornima K V** (Student)  
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