

**PROVIDENCE WOMEN'S COLLEGE,  
CALICUT  
(AUTONOMOUS )**

**DEPARTMENT OF  
MATHEMATICS & STATISTICS**



**NEWS LETTER  
2023-2024**

*Realise your true potential*

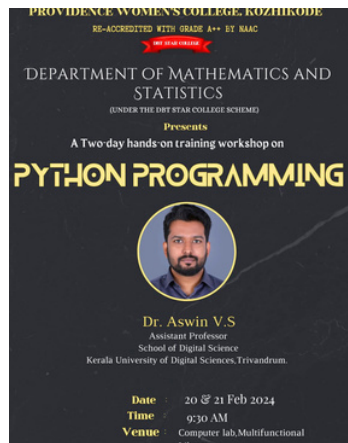
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# PROGRAMS CONDUCTED UNDER DBT STAR COLLEGE SCHEME



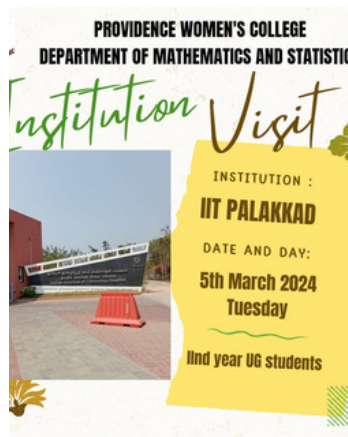
## 20 & 21 DECEMBER 2023 NATIONAL WORKSHOP

The Department organised a two-day National Workshop on 'An Introduction to measure Theoretic Probability' by Dr. Manil T Mohan, Associate Professor, Department of Mathematics, IIT Roorkee. The workshop was conducted as part of Ramanujan week celebration.



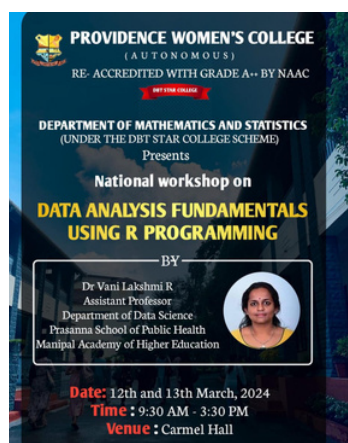
## 20 & 21 FEBRUARY 2024 HANDS - ON TRAINING WORKSHOP

The Department organised a two-day hands-on training workshop on 'Python Programming' by Dr. Aswin V. S., Assistant Professor, School of Digital Science, Kerala University of Digital Sciences, Trivandrum. The 1st year B.Sc Mathematics students participated in the workshop.



## 05 MARCH 2024 INSTITUTIONAL VISIT

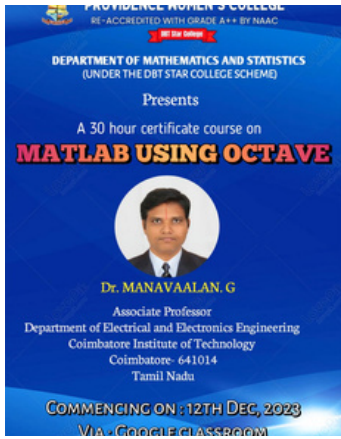
An Institutional visit was conducted for second years on 5th March, 2024 to the Department of Mathematics, IIT Palakkad. A talk was delivered by Dr. M. Ashok Kumar and Dr. Arpan Kabiraj of the Department of Mathematics, followed by an interactive session.



## 12 & 13 MARCH 2024 NATIONAL WORKSHOP

The Department organised a two-day National Workshop on 'Data Analysis Fundamentals using R-Programming' by Dr. Vani Lakshmi R, Assistant Professor, Department of Data Science, Prasanna School of Public Health, Manipal Academy of Higher Education. The 2nd year B. Sc, 1st year M. Sc and 2nd year M. Sc Mathematics students participated in the workshop.

# CERTIFICATE COURSES



## MATLAB USING OCTAVES

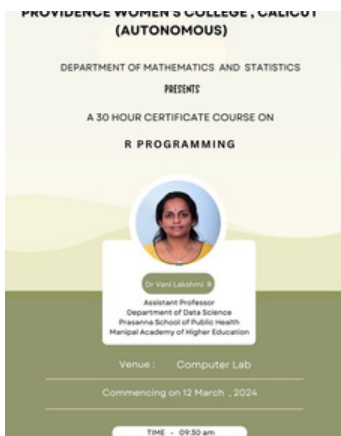
The Department conducted a 30- hour certificate course (under DBT Star College Scheme ) 'Matlab Using Octave ' with Dr. Manavalan. G, Associate Professor, Department of Electrical and Electronics Engineering, Coimbatore Institute of Technology, Tamil Nadu, as the course instructor. The 3rd year B.Sc Mathematics students completed the certificate course.



## PYTHON PROGRAMMING

The Department organised a 30- hour certificate course 'Python Programming' with Dr.Aswin V. S., Assistant Professor, School of Digital Science, Kerala University of Digital Sciences, Trivandrum, as the course instructor. The 1st year B. Sc Mathematics students completed the certificate course.

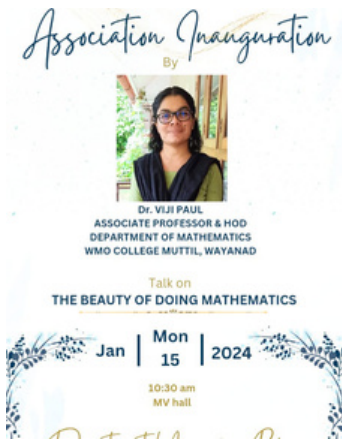
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## R- PROGRAMMING

The Department conducted a 30- hour certificate course 'R- Programming' with Dr. Vani Lakshmi R, Assistant Professor, Department of Data Science, Prasanna School of Public Health, Manipal Academy of Higher Education as the course instructor. The 2nd year B. Sc, 1st year M. Sc and 2nd year M. Sc Mathematics students completed the certificate course.

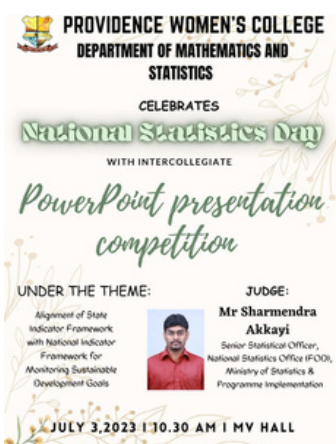
# DEPARTMENT ASSOCIATION ACTIVITIES



15 JANUARY 2024

## ASSOCIATION INAUGURATION

On 15th January 2024, the Department Association was inaugurated by Dr.Viji Paul, Associate Professor & HOD, Department of Mathematics, WMO College Muttill, Wayanad. She also delivered a talk on 'The Beauty of Doing Mathematics' and released the department magazine named "Esperanza".



03 JULY 2023

## INTERCOLLEGIATE POWER POINT PRESENTATION COMPETITION

As part of National Statistics Day, the Department conducted Intercollegiate Powerpoint Presentation Competition on the topic "Alignment of State Indicator Framework with National Indicator Framework for Monitoring Sustainable Development Goals". Mr. Sharmendra Akkayi, Senior Statistical Officer, National Statistical Office (FOD), Ministry of Statistics & Programme Implementation was the chief guest and judge.



14 AUGUST 2023

## FRESHER'S DAY

Fresher's day named "Rubaru" was conducted for the new comers with the aim of getting to know the faculty and the senior students and also to understand briefly the various activities of the Department.



26 FEBRUARY 2024

## FAREWELL

A farewell program "Grand Gala" was conducted to bid farewell to the outgoing students. The Association valedictory was also on the same day where Ms. Aiswarya Paul, HOD addressed the gathering and Ms. Arathi Krishna K C, Association Secretary read out the Association report.

27 OCTOBER 2023

## MOCK EXIT POLL

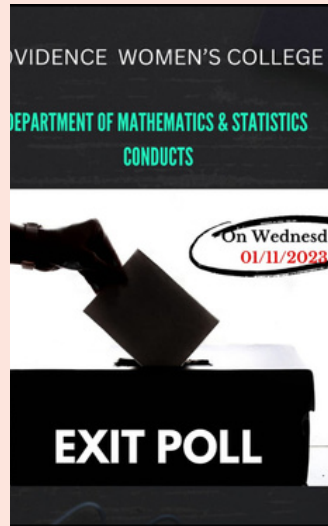
The Department conducted a Mock Exit Poll on 27th October 2023, to stimulate an election for the leaders of the department clubs. This exit poll was designed to experience the election process ahead of the College-level election.



01 NOVEMBER 2023

## THE EXIT POLL

The Department conducted an Exit poll on 1st November 2023 to predict the winners of the College Union Election. The exit poll demonstrated an exceptional success rate of 100%.



Conducting exit polls using systematic sampling, a fundamental concept in statistics, enriches student's practical understanding of the subject and demonstrates how statistics can be applied in real-life scenarios.

26 JANUARY 2024

## ALUMNI MEET

An Alumni meet was organized on 26th January 2024 where 20 members of the Alumnae participated.



# CLUB ACTIVITIES



08 JUNE 2023

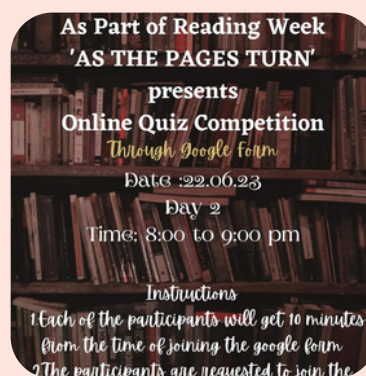
## ENVIRONMENT DAY

On behalf of World Environment Day, the Department conducted a plastic collection competition named "Eco പൊയ്ക". In accordance with the amount of plastic collected the Department of English bagged the first prize.

19 JUNE 2023 - 22 JUNE 2023

## READING WEEK

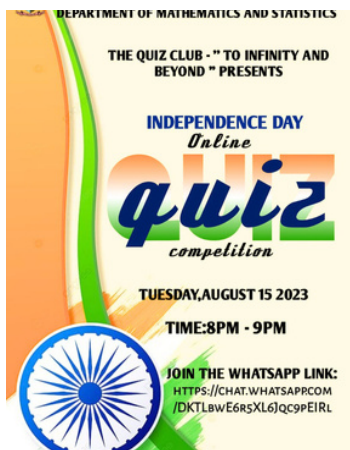
The Department conducted Reading week celebration from June 19 - June 22 which included Intercollegiate digital poster making competition, Fancy dress competition, Book review competition and a Quiz competition. The aim of this programme was to introduce and enhance reading habits amongst youngsters of our College.





## 11 JULY 2023 POPULATION DAY

A quiz competition was conducted on World Population Day to raise awareness about global population issues and encourage students to think critically about population growth and its impact on resources and sustainability. The quiz was related to India's significant and rapidly growing population. This day served as an opportunity for the participants to understand the unique challenges and opportunities that a large population presents, including resource management, urbanization, and social development.

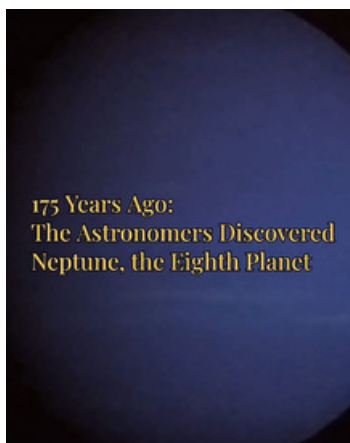


## 15 AUGUST 2023 INDEPENDENCE DAY

On behalf of the 77th Independence Day, the Quiz club "To Infinity and Beyond" of the department, conducted an Online Quiz competition on August 15, 2023. 24 students from our College participated in this competition. This competition was aimed to promote a sense of patriotism and encourage students to connect with the significance of Independence Day in a fun and interactive way, fostering community spirit and national pride.

## 23 SEPTEMBER 2023 NEPTUNE DISCOVERY DAY

To commemorate the contribution of Mathematics in the Discovery of Neptune, a video was portrayed with several information on 23 September, 2023. The video portrayed that the French mathematician Urbain Le Verrier and English mathematician John Couch Adams independently used mathematical models to predict the position of a hypothetical celestial body which caused discrepancies in the orbit of Uranus. Based on their calculations, German astronomer Johann Gottfried Galle discovered Neptune in 1846, confirming the accuracy of their mathematical predictions and highlighting the critical role of mathematics in astronomical discoveries.





15-21 DECEMBER 2023  
RAMANUJAN WEEK



To commemorate the birthday of Srinivasa Ramanujan and to mark the occasion of National Mathematics Day, the Department organised a 1-week programme titled "Sankhya Nirvana" from December 15th to December 21st 2023.

- The 2nd year UG students conducted an outreach programme at AMLP School Parambil Bazar on 15th December 2023.
- The Quiz club "To Infinity and Beyond" conducted an online quiz competition on 18th December 2023.
- A puzzle competition was conducted on 18th December 2023 & 19th December 2023.
- A cultural programme named "Mosaic Beats" was conducted by the students of the department at the open stage of our College.
- A two-day National Workshop was organised from 20th December 2023 to 21st December 2023, on the topic 'An Introduction to measure theoretic probability' by Dr. Manil T Mohan, IIT Roorkee.
- Logo quiz was conducted on 21st December 2023.

These efforts were carried out to deepen the understanding of Mathematics and its real-world applications while also highlighting the contributions of Srinivasa Ramanujan to the subject for students of other disciplines.

# R & D CELL ACTIVITIES



20 OCTOBER 2023

## PROJECT PRESENTATION

UG and PG Project presentation was conducted by the R&D cell of the Department of Mathematics and Statistics.

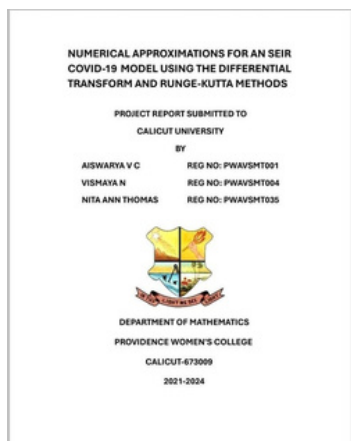
### Details of the presentation:

"Mathematics in Agriculture" by Aleesha Elizabeth Raju and Amrutha N ( 2023 UG batch)

"Vertex Polynomials" by Hasna V A ( 2023 PG batch)

## BEST B.SC PROJECT PRESENTATION WITH PRACTICAL APPLICATIONS

The project on the topic, Numerical Approximations of an SEIR COVID-19 model using Differential Transform and Runge-Kutta methods, was done by Aiswarya V C, Vismaya N and Nita Ann Thomas. An existing mathematical model of COVID-19 was solved using the Differential Transform and Fifth order Runge-Kutta methods. The results obtained from both the methods were tabulated and comparative graphs were plotted. The advantages and disadvantages of the two methods were also discussed. This project bagged 1st prize out of 22 projects of various streams in the UG Project Presentation competition conducted by the R and D cell of the College.



# MoUs OF THE DEPARTMENT

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1. Department of Mathematics, Providence College for Women, Coonor, Tamil Nadu
2. Department of Mathematics, WMO Arts and Science College, Muttill, Wayanad
3. Department of Mathematics, St. Mary's College, Trissur
4. Department of Mathematics, Mar Gregorios College, Chennai
5. Matlab, Cochin

## PROUD MOMENTS

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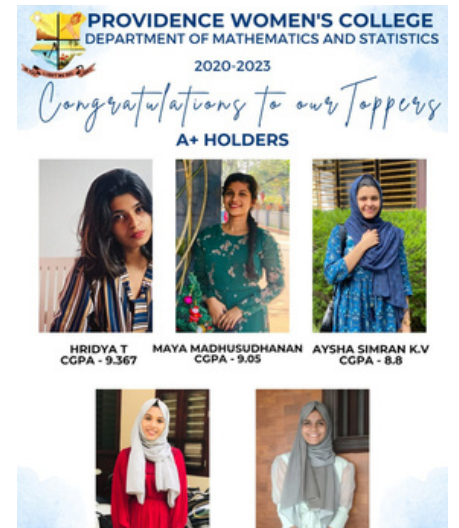
Gopika Ajith of 3rd Year B.Sc Mathematics attended the Advance Leadership Camp held in Trivandrum, from 5th February to 16th February 2024, representing Kerala and Lakshadweep Directorate, and also secured 2nd prize in the quiz competition.



Our faculty, Dr. Shyni U. K. was awarded the Doctoral Degree in Mathematics by the Anna University, Chennai for her thesis on 'Mathematical modeling and Optimal Control of Candida Auris Infection Transmission in Intensive care units'.



Dr. Nitha Niralda, Assistant Professor of the department inaugurated the Association of students of the B. Sc honours in Mathematics, St. Joseph's College(Autonomous) Devagiri on 25th March 2024 and delivered a talk on 'Fractals'.



# OUTGOING BATCHES

## OUTGOING B.SC BATCH

PROVIDENCE WOMEN'S COLLEGE 2021 - 2024  
DEPARTMENT OF MATHEMATICS [ B.Sc ]



## OUTGOING M.SC BATCH

PROVIDENCE WOMEN'S COLLEGE 2022 - 2024  
DEPARTMENT OF MATHEMATICS [ M.Sc ]

