

ST. MARY'S COLLEGE (Autonomous),  
Re-accredited with 'A+' by NAAC (4<sup>th</sup> Cycle)  
Thoothukudi- 628001, Tamil Nadu

**Department of Mathematics**



**Newsletter**

**Academic Year 2021-2022**

## *Editorial Team*

- ✚ **Dr.V.L.Stella Arputha Mary**  
**Head & Associate Professor of Mathematics**
- ✚ **Dr.A.Punitha Tharani**  
**Controller of Examinations &**  
**Associate Professor of Mathematics**
- ✚ **Dr.Sr.S.Kulandai Therese**  
**Vice Principal &**  
**Assistant Professor of Mathematics**
- ✚ **Dr.J.Arul Jesti**  
**Assistant Professor of Mathematics**
- ✚ **Dr.G.Priscilla Pacifica**  
**Assistant Professor of Mathematics**

## H.O.D's Message

Dear Students and Faculty Members,

With immense pride and joy, we present the Department of Mathematics' Newsletter for the academic year 2021-2022. This year has been a testament to our department's unwavering commitment to academic excellence, innovation, and collaborative growth.

From hosting international conferences and workshops to fostering creativity through competitions and interactive sessions, our journey has been vibrant and impactful. Our students and faculty have demonstrated exceptional dedication, evident in the remarkable academic achievements, research contributions, and co-curricular participation throughout the year.

The Platinum Jubilee celebration of our department marked a significant milestone, bringing us together to reflect on our legacy and envision a brighter future. The establishment of the St. Mary's Mathematics Research Forum has further elevated our research endeavors, connecting us with global experts and opening new avenues for knowledge sharing.

As we reflect on our accomplishments, we extend heartfelt gratitude to all who have contributed to this success – the faculty, students, and administrative staff, whose efforts and enthusiasm have made it all possible.

Let us carry forward this spirit of inquiry and collaboration as we step into another year of opportunities and challenges. Together, we continue to build a thriving mathematical community that transforms ideas into impact.

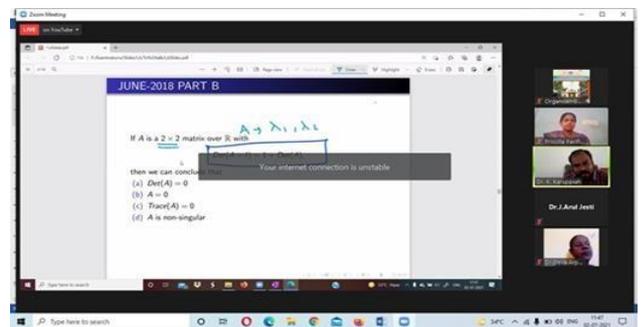
Warm regards,

**Dr.V.L.Stella Arputha Mary**

Head of the Department of Mathematics

## Activities of Mathematics Association

### Virtual Workshop on Mathematical Sciences for CSIR-UGC JRF/NET & GATE Aspirants



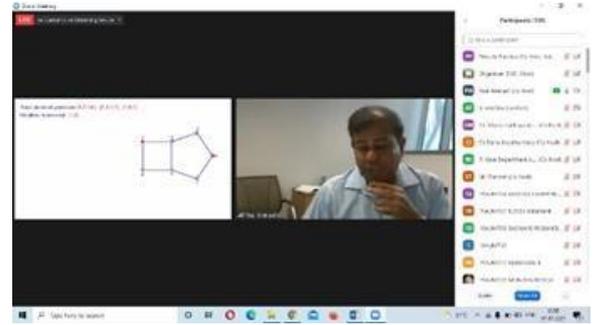
The PG and Research Department of Mathematics, St. Mary's College (Autonomous), Thoothukudi organised a Virtual Workshop on Mathematical Sciences for CSIR-UGC JRF/NET & GATE Aspirants from 28-June-2021 to 02-July-2021 from 10 a.m. to 12.00 p.m. through online mode. Dr. K. Karuppiyah, Assistant professor, Department of Mathematics, Government College of Engineering, Bodinayakkanur, Tamil Nadu was the resource person.

## Platinum Jubilee



Department of Mathematics celebrated the platinum jubilee on 1<sup>st</sup> July 2021 with the Holy mass in our college chapel. St. Mary's Mathematics Research Forum, was inaugurated on 7<sup>th</sup> July 2021 to mark the Platinum Jubilee of the department Celebrations.

## Inauguration of St. Mary's Mathematics Research Forum

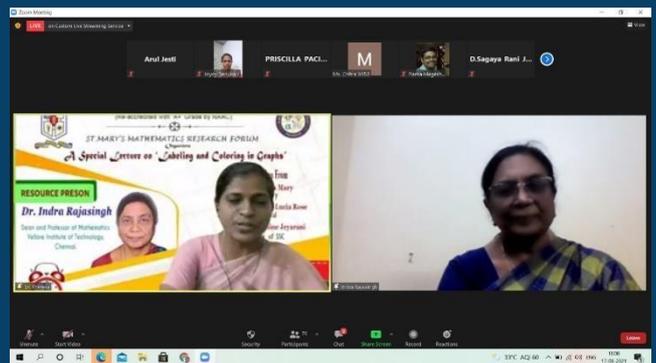


St. Mary's Mathematics Research Forum, the first of its kind in Thoothukudi was inaugurated on 7<sup>th</sup> July 2021 to mark the Platinum Jubilee of the department. Dr. Paul Manuel, Professor of Information Science, Kuwait University, Kuwait conducted the first research discussion after the inauguration of the Forum by our principal Rev. Dr. Sr. A.S.J LuciaRose.

## International Conference on Social Media, Addiction and Artificial Intelligence

St. Mary's Mathematics Research Forum and Department of Commerce, Department of Computer Science & Department of Economics jointly organised an International Conference on Social Media Addiction and Artificial Intelligence through online platform on 20th August 2021. Session 1 was handled by Dr. Paul Manuel, Professor of Information Science, Kuwait University, Kuwait. He delivered a talk on Social Media Addiction from 9.30 a.m. to 10.30 a.m.. Dr. Xavier Chelladurai, Director, HRDC and Professor of Computer Science Christ University handled session 2 and he delivered lecture on Transformation lead by Artificial Intelligence Technologies - Looking forward to a better life from 10.30 a.m. to 11.30 a.m. 89 participants around the globe benefitted from this international conference

## Lecture on Labeling and Coloring in Graphs



St. Mary's Mathematics Research Forum organised a special lecture on "Labeling and Coloring in Graphs" through online platform on 17th August 2021 at 6 p.m. Dr. Indra Rajasingh, Dean and Professor of Mathematics, Vellore Institute of Technology, Chennai delivered lecture on Labeling and Coloring in Graphs. 121 research scholars and faculty members around India benefitted from the lecture.



## National Webinar on "Spectrum of Medical Analytics"



St.Mary's Mathematics Research Forum of Department of Mathematics in collaboration with Fater Academy of India (Tamil Nadu South Chapter) organised a National Webinar on "Spectrum of Medical Analytics" on 6th December 2021 in Zoom Platform. Prof. Dr.Pankaj Srivastava, FAI General Secretary & Professor, M.N. National Institute of Technology, Allahabad was the Resource Person. He explained Medical Analytics as a Cyclic Process, Role of Fuzzy Membership function in Decision Model, etc.,. 123 participants were benefitted.

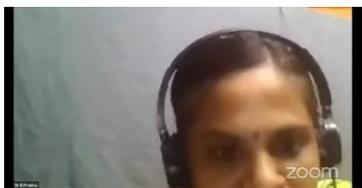
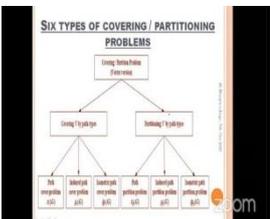
## Inauguration Workshop on Quality Research Proposal and Publication



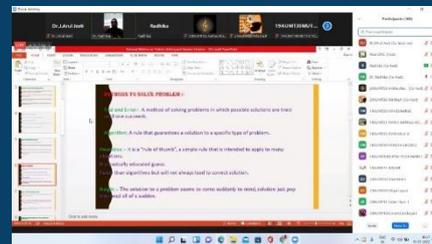
Marian Research Forum and St. Mary's Mathematical Research Forum jointly organized a workshop on Quality Research Proposal and Publication on 17<sup>th</sup> December, 2021. Dr. Stella Arputha Mary, Head and Assistant Professor of Mathematics welcomed the gathering. Dr. Selvam, Assistant Professor of Geology, V. O. Chidambaram College, Thoothukudi was the chief guest.

## A special lecture on "Isometric Path Partition Problem"

St.Mary's Mathematics Research Forum of Department of Mathematics organised a special lecture on "Isometric Path Partition Problem" on 7<sup>th</sup> December 2021. Dr.R. Prabha, Head and Assistant Professor, Department of Mathematics, Ethiraj College for Women , Chennai addressed the gathering. She discussed Isometric Path Partition Number using Peterson graph, Lower Bound of Isometric Path Cover/ Partition Problem, Complexity, etc.,. Also she explained six types of Covering/ Partitioning problems. 168 participants were benefitted.



## National Webinar on "Problem Solving and Ideation Creation"



St. Mary's Mathematics Research Forum PG and Research Department of Mathematics, St.Mary's College (Autonomous), Thoothukudi in association with Institution's Innovation Council organized National Webinar on "Problem Solving and Ideation Creation" on 16th February 2022 at 6 p.m. through online platform. Dr. A. Radhika, Assistant Professor of Psychology, Gargi College, University of Delhi addressed the students on the topic Problem solving and creativity. She explained about various important stages and methods in Problem solving. She also discussed about the solutions to overcome the barriers and gave tips to become effective problem solver. She emphasized creative thinking and gave ideas to develop creative thinking. She motivated the students to be flexible. The total number of participants were 142.

## Mathematics Association Meeting



Thoothukudi, Tamil Nadu, India  
St. Mary's College (Autonomous) R566+8JH, Cruz  
Puram, Thoothukudi, Tamil Nadu 628001, India  
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Long 78.161493\*  
09/03/22 09:31 AM

The Mathematics Association Meeting was conducted on 9th March 2022 in the Star Hall. The meeting was presided over by Dr. R. Sivaraman, Associate Professor of Mathematics, D.G.Vaishnav College, Chennai. The session was made informative by the live examples on Applications of Mathematics. The resource person explained the usage of Pie Mathematics, Engineering in Nature and Tiling through amazing life laws.

## IIC Report

### Video Creation Competition on Impact of Covid-19 affected people in Wave 1 and Wave 2 in Tamilnadu A Statistical Comparison

The PG and Research Department of Mathematics and Institution's Innovation Council jointly organized a Video Creation Competition on Impact of Covid-19 affected people in Wave 1 and Wave 2 in Tamilnadu - A Statistical Comparison. The contestants displayed their video through online mode on 18.09.2021 at 4 p.m.. Ms.J. Jasmine Sheeba Rajathi, Head and Assistant Professor of Department of Visual Communication, Kamaraj College, Thoothukudi served as competition judge.

E-Certificates were distributed to all participants

## Innovative Idea Competition

**St. Mary's College (Autonomous), Thoothukudi**  
(Reaccredited with A+ Grade by NAAC)

**Institution's Innovation Council**  
PG and Research Department of Mathematics  
Jointly Organise

**CASH PRIZES!**

**INNOVATIVE IDEA COMPETITION\*\***

**Rules to be followed:**

- \* The presentation must be original
- \* Your innovative ideas can be come in the form of Poster Making (30 Minutes) / Model (30 Minutes) / Video (5 Minutes) / PPT (15 Minutes) / Any type of Art (30 Minutes)
- \* Submit your files by joining the Google Classroom using the class code *peritbu* on or before 27.02.2022.
- \* Registration is Mandatory.
- \* Only one submission is allowed.

**Best Wishes Team**

**Rev. Sr. Flora Mary, Secretary**  
**Dr. Sr. A.S. J. Latha Bose, Principal & IIC President**  
**Rev. Sr. Josephine-Jacqueline, Director(SSC)**  
**Rev. Dr. Sr. Shilpa, IIC Vice President**  
**Ms. Amora, IIC Convener**  
**Dr. V.L. Stella Arpantha Mary, Head of the Dept. of Mathematics**

**IIC Members:**  
**Dr. J. Arul Jeeth**  
**Dr. G. Pratheeba Joseph**  
**Dr. R. Maria Irudhaya Aspin Chitra**

**Click Here to Register**

\*\*IPR/Entrepreneurship/Start up

The PG and Research Department of Mathematics both regular and SSC in association with Institution's Innovation Council organized an Innovative Idea Competition in the month of February. The students of Department of Mathematics both regular and SSC presented their innovative ideas in the form of Poster Making, Video, PPT and any type of art in Google Classroom. 27 students were participated. Ms. A. Anitha Apsara of II B.Sc. Mathematics, Ms. Maria Joshy Roy of I B.Sc. Mathematics and S.Jenishlin Oida of III B.Sc. Mathematics(SSC) got the first, second and third prizes respectively.

### Cash prizes were given to the winners.

#### 1 st Prize

A. Anitha Absara,  
II B.Sc Maths

#### 2 nd Prize

B. Santhana Mari  
II B.Sc Maths

#### 3 rd Prize

M. Sri Padmavalli  
II B.Sc Maths

## Mentor Mentee System



The mentor-mentee system play a pivotal role in student's academic, personal, and professional development. The college has organized a Tutor-Ward Meet every Friday from 2:30 p.m. to 4:00 p.m., with an emphasis on addressing students' psychological well-being in addition to their academic progress maintaining their academic records and bio-data.

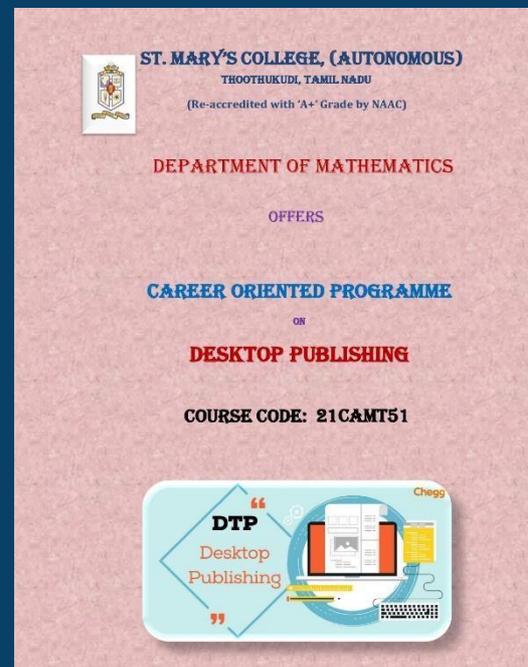
### Mentoring Dates

Odd Semester

Even Semester

## Certificate Course

Desktop Publishing was offered as a Career Oriented Course by the department of Mathematics, St. Mary's College (Autonomous), Thoothukudi to the III UG students from 5th July 2021 to 26th July 2021. Ms. P. Jeyalakshmi, trainer from RJ Computers-Education Centre was the course instructor. The course was held after the regular college hours from 2 p.m. to 4 p.m. for 30 hours. The students were made to appear for the practical test at the end of the programme and were issued certificates with Grade levels according to their involvement towards the course, skill obtained, score in practical test and percentage of attendance. 50 students from III B.Sc. Mathematics benefitted out of this programme.



## Board of Studies

The Board of Studies Meeting of the Department of Mathematics was conducted on 27.02.2021 at 10 a.m in the Guest House of St.Mary's College(Autonomous), Thoothukudi. The subject experts of the board were Dr. S. Pasunkilipandian, Head & Associate Professor of Mathematics, Aditanar College of Arts and science, Dr. C. Parameswaran, Head & Associate Professor of Mathematics, Ayya Nadar Janaki Ammal College, Sivakasi, Dr. M. Evangeline Prathibha, Assistant Professor of Mathematics, Lady Doak College, Madurai, university nominee was Dr. V. Sankar Raj, Assistant Professor of Mathematics, Manonmaniam Sundaranar University, Tirunelveli and the industrialist was P. Esakkiammal, Accounts officer, Gr.II, Finance Department, V.O.Chidambaranar Port Trust. The syllabus and course structure were acknowledged and approved by the Board.

## PTA and Alumnae Meet

Regular sessions were held by the Parents-Teachers Association every year, bringing together parents and students of the department creating communication between teachers and parents aimed at improving the students' academic outcomes. The meetings were held respectively for I B.Sc Maths on 07.05.2022, II B.Sc Maths on 09.04.2022 and III BSc Maths on 26.03.2022. The Marian Alumnae Meet- 2022 was organised on 23. 04. 2022 .The resource person was Mrs.Thenmathi Dhanuskodi, Administrator, Thenmathi Hospital, Thoothukudi.

## Faculty Research Activities

### Faculty Research Activities/ Participation in RC/OC/Seminars/WS

| Faculty Name               | Publication in Journal | Conference participated | Seminars Participated | Paper presented | Workshops attended | FDP's | Refresher Courses |
|----------------------------|------------------------|-------------------------|-----------------------|-----------------|--------------------|-------|-------------------|
| Dr.V.L.Stella Arputha Mary | 9                      |                         |                       | 4               |                    |       |                   |
| Dr.A.Punitha Tharani       | 10                     |                         |                       |                 |                    | 1     |                   |
| Dr.Sr.Kulanthai Therese    | 1                      | 3                       | 2                     |                 | 4                  | 2     | 1                 |
| Dr.J.ArulJesti             | 3                      | 1                       | 4                     | 7               | 2                  | 4     |                   |
| Dr.G.Priscilla Pacifica    | 3                      |                         | 1                     | 7               | 1                  | 1     |                   |

## Membership in Professional Bodies – DC/BoS/Panel/Selection Committee etc.

| Faculty Name                | Programme  | Position                               | Date                     |
|-----------------------------|--|--|--------------------------|
| Dr.A. Punitha Tharani       | Manonmaniam Sundaranar University  | Chairperson- Paper Presentation        | 11.10.2021               |
|                             | Manonmaniam Sundaranar University  | Chairperson- Paper Presentation        | 13.10.2021               |
|                             | S.T. Hindu College, Nagercoil  | Panel Member                           | 01.02.2022               |
|                             | In-service Teacher Training Program- Rani Anna Government College for Women ,Tirunelveli | Research person- Special Lecture       | 05.05.2022               |
| Dr.V.L. Stella Arputha Mary | A.P.C Mahalakshmi College for Women, Thoothukudi.  | Research person- Special Lecture       | 09.09.2021               |
| Dr.Sr.S. Kulandai Therese   | Jamal Mohamad College, Tiruchi   | Research person- Special Lecture       | 28.02.2022               |
|                             | Loyola College (Autonomous), Chennai   | Chair person- International Conference | 03.03.2022 to 04.03.2022 |
| Dr. G. Priscilla Pacifica   | A.P.C Mahalakshmi College for Women, Thoothukudi   | Research person- Special Lecture       | 26.10.2022               |
|                             | A.P.C Mahalakshmi College for Women, Thoothukudi   | Research person- Special Lecture       | 31.10.2022               |

## Research Centre

### New Scholars

| Scholar          | Guide                       | Commencement Date |
|------------------|-----------------------------|-------------------|
| J Anuf Sarumathi | Dr.V.L. Stella Arputha Mary | 07.10.2021        |
| Mariya Evila M   | Dr. A. Punitha Tharani      | 29.01.2022        |
| Saratha P        | Dr. A. Punitha Tharani      | 31.01.2022        |
| Pratiksha        | Dr. A. Punitha Tharani      | 31.01.2022        |

### Ph.D Awarded

Miss Robina successfully completed her Ph.D. Viva-Voce examination on February 21, 2022, at St. Mary's College under the guidance of Dr. A. Punitha Tharani. This achievement reflects her dedication to research and the invaluable support of her mentor and institution.



## Lab Activities

The course "Math Typing with LaTeX" for II B.Sc Maths students trained them in LaTeX software over 30 practical hours utilizing the computer laboratories. It focused on creating mathematical documents, enhancing their academic and technical skills.

## MOOC Course

**Congratulations** to **Blessy Jebarani** from the Mathematics department who has passed the MOOC course "Introduction to R-Software" with the rank of **Elite+ Silver**.

## Educational Tour

The educational tour for the year 2021-2022 involved 30 students visiting Kumaran Fishnet Pvt. Ltd. in Nagercoil. The visit took place on April 2, 2022, providing students with exposure to the operations of a fishnet manufacturing company. This experience enhanced their practical knowledge and understanding of the industry.

## Project Details and Pass percentage of Outgoing Students

### III UG PROJECTS

|                          |    |
|--------------------------|----|
| No of Projects Submitted | 10 |
|--------------------------|----|

| S.No | Title of the Projects submitted by III UG students  |
|------|---|
| 1.   | Basics of Python and Mathematical Computations Using Python Programming                         |
| 2.   | Fractal Theory  |
| 3.   | Studies on Dynamic Programming  |
| 4.   | A Study on Fuzzy Theories   |
| 5.   | Studies on Fuzzy Graph Theory   |
| 6.   | Introduction To Software  |
| 7    | Recurrence Relations on Combinatorics   |
| 8    | Fourier Transforms: Study Applications in Health and Data Sciences and Coding Through Softwares |
| 9    | Cryptography in Cyber Security and Data Privacy   |
| 10   | Queueing Theory   |

## Pass Percentage of outgoing Students

### AWARD

**Congratulations** to Dr. S. Kulandai Therese, Assistant Professor, Mathematics department, who received the International Eminent Social Worker Award in 2021. The award was granted by the International Institute of Organized Research on November 20, 2021.

Out of 50 students who appeared, all 50 passed, achieving a 100% pass percentage. Among them, 11 students attained exemplary grades, and 31 secured distinctions. This showcases excellent overall performance



## Higher Education

| Name of student           | Program graduated from | Department of graduation from | Name of the institution joined (contact details)                                       | Name of the program admitted (exclude B.Ed.) |
|---------------------------|------------------------|-------------------------------|--|--|
| Angel Mercy J.            | B.Sc.                  | Mathematics                   | V. O. Chidambaram College  | M.Sc. Mathematics                            |
| Anto Snow Sherine. I      | B.Sc.                  | Mathematics                   | V.O.Chithambaram College Tuticorin   | M.Sc. Mathematics                            |
| A. Antony Rosi            | B.Sc.                  | Mathematics                   | St.Mary's College(Autonomous)  | M.Sc. Mathematics                            |
| Ashina Parveen.S          | B.Sc.                  | Mathematics                   | St.Mary's College (Autonomous), Thoothukudi.   | M.Sc. Mathematics                            |
| Blessy Jebarani A         | B.Sc.                  | Mathematics                   | St. Mary's College (Autonomous), Thoothukudi.  | M.Sc. Mathematics                            |
| Dasnavis Robanci.A        | B.Sc.                  | Mathematics                   | Alagappa University Thoothukudi  | M.Sc. Mathematics                            |
| Jebena. J                 | B.Sc.                  | Mathematics                   | Sara Tucker College, Tirunelveli   | M.Sc. Mathematics                            |
| Jeffrina J                | B.Sc.                  | Mathematics                   | Jeppiaar Institute Of Technology, Chennai  | MBA  |
| Joan Morais.R             | B.Sc.                  | Mathematics                   | Xavier Institute Of Business Administration, Thirunelveli                              | MBA  |
| C. Maria Abithaa Victoria | B.Sc.                  | Mathematics                   | Fatima College, Madurai  | MCA  |
| Megi.B                    | B.Sc.                  | Mathematics                   | V.O.Chidambaram College, Thoothukudi   | M.Sc. Mathematics                            |
| Monisha Rose G            | B.Sc.                  | Mathematics                   | St. Mary's College (Autonomous), Thoothukudi.  | M.Sc. Mathematics                            |
| R.Mukila                  | B.Sc.                  | Mathematics                   | Kamaraj College, Thoothukudi   | M.Sc. Mathematics                            |
| Muthu Yogeswari J         | B.Sc.                  | Mathematics                   | V.O.Chidambaram College, Thoothukudi   | M.Sc. Mathematics                            |
| Rashiba. J                | B.Sc.                  | Mathematics                   | St. Mary's College (Autonomous), Thoothukudi   | M.Sc. Mathematics                            |
| Sahaya Perinba Prakasi. K | B.Sc.                  | Mathematics                   | St. Mary's College (Autonomous) Thoothukudi  | M.Sc. Mathematics                            |
| Selin Preethi.A           | B.Sc.                  | Mathematics                   | Vignesh Entrepreneurial Training & Rehabilitation Institute (Vetri Trust), Thoothukudi | M.Sc. Mathematics                            |
| Shalini.M                 | B.Sc.                  | Mathematics                   | V.O.Chidambaram College, Thoothukudi   | M.Sc. Mathematics                            |
| C.Shibania                | B.Sc.                  | Mathematics                   | Loyola College, Chennai  | M.Sc. Data Science                           |
| Varsha. S                 | B.Sc.                  | Mathematics                   | St.Mary's College (Autonomous), Thoothukudi.   | M.Sc. Mathematics                            |
| Vinnarasi M               | B.Sc.                  | Mathematics                   | Kamaraj College  | M.Sc. Mathematics                            |
| S.Yamini                  | B.Sc.                  | Mathematics                   | Holy Cross College (Autonomous), Nagarcoil.  | M.Sc. Mathematics                            |

## Placement

### CONGRATULATIONS ! TO THE STUDENTS GOT PLACEMENT

| Department  | Reg. No  | Student Name      | Name of the employer              |
|-------------|----------|-------------------|-----------------------------------|
| Mathematics | 19AUMT13 | Hemalatha B.      | Post office (Kalvay-Tuticorin)    |
| Mathematics | 19AUMT27 | Michal Felix M.   | Zoi fintech Services, Tirunelveli |
| Mathematics | 19AUMT33 | Paulin Packiam B. | Zoi fintech Services, Tirunelveli |

As we look back on the academic year 2021-2022, the Department of Mathematics at St. Mary's College celebrates numerous milestones and accomplishments. From insightful lectures and international conferences to innovative competitions and workshops, the department has fostered an environment of academic excellence and creativity. The dedication of our faculty, the enthusiasm of our students, and the support of the institution have been instrumental in achieving a 100% pass rate and remarkable participation in various activities. Let us continue to inspire, innovate, and excel as we step into another promising year. Together, we create a vibrant mathematical community that transforms challenges into opportunities.