

ST. MARY'S COLLEGE (Autonomous)

Re-accredited with 'A+' by NAAC (4th Cycle)

Thoothukudi- 628001, Tamil Nadu

PG & Research Department of Mathematics



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Ms. A. Ferdina

Assistant Professor of Mathematics

Dr. R. Maria Irudhaya Aspin Chitra

Assistant Professor of Mathematics

Ms. P. Suganya

Assistant Professor of Mathematics

Ms. K. Ambika

Assistant Professor of Mathematics

Ms. J. Jenit Ajitha

Assistant Professor of Mathematics

Ms. S. Kanagalakshmi

Assistant Professor of Mathematics



Welcome to the Department of Mathematics!

Mathematics is considered as one of the most challenging subject, here we make sure that strategies are implemented to satisfy student needs.

Every problem has its algorithm (method) to be followed. No step can be skipped or deleted as a result organizational skills are developed as well. Mathematics makes students life orderly and prevents chaos. In addition, it also nurtures effective communication skills and can later be very useful in developing presentation skills.

- 2019 G. Muthu Jerome of I B.Sc won the first prize in paper presentation participated in Maths Fest 2019 at St.Xaviers College, Palayamkottai on 13.12.2019.
- 2019 K. Priyadharshini and A. Maria Roselin Angel Mary of II B.Sc. Mathematics (B) won the Inter Collegiate Tournament Trophy for table tennis which took place in Vyasa College, Puliyankudi from 26.08.2019 to 28.08.2019

I extend my heartfelt congratulation for their achievements and gratitude to the members of the department.

With Regards

Dr. C. Reena

Coordinator and & Assistant Professor of Mathematics

Activities of the Association

The PG and the Research Department of Mathematics unfurled its activities for the year 2019-2020 with renewed spirit and vigour. On 6th August the office bearers of the Mathematics, Association were elected under the guidance of Dr. P. Anbarasi Rodrigo Associate professor of Mathematics and staff members.

Ms.S. Rakini of II M. Sc Mathematics, Ms.A.Adeline Beulah of III B.Sc Mathamatics, Ms .L.Deeba of II B.Sc Mathematics were elected as the President, Secretary and Vice – President respectively.

On 25th September 2019, the Mathematics Association meeting was conducted. Dr.S.Sylivia, Assistant Professor of Mathematics Government Arts and Science College Kovilpatti delivered a talk on " Applications of Algebra " Students and staff were the beneficiaries.

On 3rd May 2020, Our department organized an "E-Quiz on Numerical Ability and Quantitative Aptitude" The UG and PG students and staff were the beneficiaries

On 13th June 2020, an Webinar on "Mathematical Padoxes" was organized. Dr.M.Evageline Prathibha Assistant Professor of Mathematics, Lady Doak College Madurai. A participants comprising of professors and students benefitted through this Webinar.



Applications of Algebra, Dr.S.Sylivia, Assistant Professor of Mathematics Government Arts and Science College Kovilpatti.



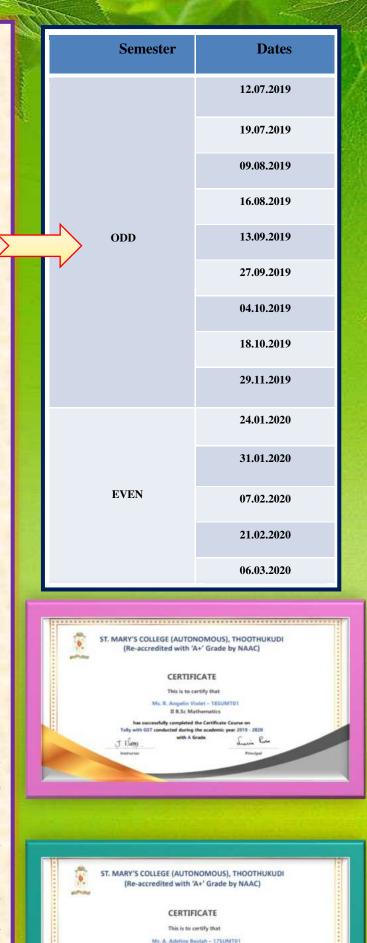
Mentor Mentee System

The System in our department serves as a cornerstone for student support and progression. This initiative aims to nurture the academic and personal growth of every student, ensuring their overall development .Each faculty member mentors a group of students, guiding them through both academic challenges and other aspects of their student life. A Key feature of the system is the Tutor Ward Meet from 2.30 p.m. to 4.00 p.m. These sessions focus on understanding and addressing the psychological and emotional well-being of the students.

Certificate Course

Tally with GST was offered as Certificate Course by the Department of Mathematics (SSC) from17 July 2019 – 11 March 2020 to the II year B.Sc Mathematics SSC (Section A & B) students. Ms. J. Flora, the Instructors and the course was held after the regular college hours from 2.00 pm to 4 pm. The students were made to appear for a written test at the end of the programme and certificates were issued with Grade levels according to their percentage of attendance.

Quantitative Aptitude and Reasoning was offered as Certificate Course by the Department of Mathematics (SSC) from 11 July 2019 – 05 March 2020 to the III year B.Sc. Maths SSC (Section A & B) students. Ms. V.Kathirsta, the Instructors and the course was held after the regular college hours from 2.00 pm to 4 pm. The students were made to appear for a written test at the end of the programme and certificates were issued with Grade levels according to their percentage of attendance.



III B.Sc Math

Board Studies

Board of studies meeting of the Department of Mathematics was conducted on 01.02.2020 at 10.00 am in the Audio Visual Room of st. Marys college (Autonomous), Thoothukudi. The subject experts of the board were

J. Xavier Adaikalaraj

Assistant Professor Department of Mathematics, Arul Anandar college (Autonomous) Karumathur, Madurai.

J. Ancy

Software Engineer Larsen and Toubro Infotech DLF IT Park, SEZ Campus, Marapakkam, Chennai.

The Syllabus was designed in the pattern of Outcome Based Education with Choice Based Credit System. The board acknowledged and approved the set pattern.

PTA and Alumnae

The Parents Teachers Association conducted meetings regularly for all the parents and students of the department. The meetings were held respectively II B. Sc & II M. Sc on 27.09.2019 and I B. Sc & I M. Sc on 08.02.2020.





PTA Meetings were held respectively II B. Sc & II M. Sc on 27.09.2019.



PTA Meetings were held respectively I B. Sc & I M. Sc on 08.02.2020.

Research Activities- Faculty

Name	Publication- Journal	Conference	Workshop	FDP
Dr. P. Anbarasi Rodrigo	13		1	2
Dr. C. Reena	6	4	3	
Dr. R. Maria Irudhaya Aspin Chitra			1	
Ms. J. Jenit Ajitha		1	1	1
Ms. P. Suganya	2	3	3	
Ms. K. Ambika		1	3	1
Kanaga			1	3
Ferdina	3	2	4	3
Total	24	11	15	10

CDP Report

The team visited Palayakayal on 10.08.2019 from the Department Mathematics (SSC) for a one day **Survey Programme**. The students enthusiastically participated and spread the message with the pluck cards at every doorstep of the adopted village.



The CDP visit to Palayakayal 03.10.2019 from the Department Mathematics (SSC) for **Jal Shakthi Gram and Swachhata a Hi Sewa Campaign** meeting organized in the Panchayat office, Palayakayal.

The CDP visit to Palayakayal was on 19.10.2019 from the Department Mathematics regarding the meeting organized in the Panchayat office, **Discussion** with village representatives about the environmental issues were discussed for the development of the village.

<mark>Study Tour</mark>

P. G. & Research Department of Mathematics organized a Study Tour for the students both UG and PG (92) as part of their curriculum. The visit was based on Chocolate Factory Kodai Hill Spices Supermarket, Kodaikanal. Four faculty members escorted the students on 28 February 2021.

Observations:

Chocolate Manufacturing Process: Students gained insights into the step-by-step process of chocolate production, including sourcing cocoa, refining, molding, and packaging. They observed the machinery and techniques used in industrial chocolate-making.





Jal Shakthi Gram and Swachhata a Hi Sewa Campaign



Discussion with village representatives the environmental issues.

- Applications of Mathematics: Students identified real-world applications of mathematics in the factory, such as calculations for ingredient measurements, temperature control, production timelines, and optimization of resources.
- The visit highlighted the interdisciplinary connection between mathematics, industrial processes, and business management, encouraging students to think beyond theoretical concepts and relate them to practical scenarios.
- Quality Control Measures: Students observed quality assurance processes in place for both chocolates and spices, gaining awareness of standards and testing methods to maintain product consistency.

Students Activities

During the academic year 2020-2021, the students demonstrated exceptional performance across various cocurricular, extra-curricular and sports competitions and events at different levels. Here's a detailed account of their achievements

- K. Priyadharshini and A. Maria Roselin Angel Mary of II B.Sc. Mathematics (B) won the Inter Collegiate Tournament Trophy for table tennis which took place in Vyasa College, Puliyankudi from 26.08.2019 to 28.08.2019.
- Muthu Jerome of I B.Sc won the first prize in paper presentation participated in Maths Fest 2019 at St.Xaviers College, Palayamkottai on 13.12.2019.



Chocolate Factory Kodai Hill Spices Supermarket, Kodaikanal.



- Fanny Vijannika V., from M. Phil, attended the conference and presented a paper on Pair Sum Labeling of Double Wheel and Double Fan Related Graphs on Advances in Mathematics organized by PG and Research of Mathematics , St. Mary's College (Autonomous) Thoothukudi, on September 12 and 13, 2020.
- Krishnavani .R from M. Phil, attended the conference and presented a paper on A new class of Nearly Open Sets in Topological Spaces in the International Conference on Innovative inventions In Mathematics, Computers, Engineering & Humanities (ICIMCEH 20) held on Don Bosco College of Arts & Science Thoothukudi, on February 14, 2020.
- Krishnavani .R from M. Phil, attended the conference and presented a Paper on Between Regular Closed Sets and Semi Pre-closed Sets on Advances in Mathematics organized by PG and research of mathematics, St. Mary's College (Autonomous) Thoothukudi, on September 12 and 13, 2020.
- Mari Kavitha V., from M. Phil, attended the conference and presented a paper on A Note on Instuitionistic Fuzzy Graceful Labeling of Star Graphs nd Bi-Star Graphs on Advances in Mathematics organized by PG and research of mathematics, St. Mary's College (Autonomous) Thoothukudi, on September 12 and 13, 2020.
- On May 5, 2020, A. Mary Priyadharshini attented a workshop on Documentation using LaTex organized by Stella Mary's College, Chennai.
- Jenishlin Oida attented a seminar on Mathematicians held at Sri Saradha College of Education(Autonomous), Tirunelveli on May 08, 2020.
- Angelin Violet participated in Quantitative apptitude quiz held at Sri Krishnasamy Arts and Science College, Sattur on May 28, 2020.
- A. Maria Roslin Angel Mary participated in Math Quiz on May 19, 2020 and also participated in Quiz "Applied Mathematics" held at Pravin Patil College of Diploma Engineering and Technology, Bhayanda on May 29, 2020.
- B. Parvathi participated in National Level Online Mathematics Quiz on Bhaktavatsalam Memorial College, Chennai for Women on May 30, 2020.

MooC and NPTEL

The students of II M. Sc Mathematics attended MooC course titled, Appiled Multivariate Analysis with subject code ugc19-ma05in the duration of 12 weeks (July – October 2019)

S. No	Reg. No	Student Name	Status
1	19SPMT02	Angel .R	Completed
2	19SPMT06	Christy Lizy .J	Completed
3	19SPMT10	Jeno Sales .X	Completed
4	19SPMT17	Maria Joel .P	Completed
5	19SPMT22	Priyadharshini .P	Completed
6	19SPMT25	Subhalakshmi .S	Completed
7	19SPMT26	Subithra .P	Completed
8	19SPMT27	Visvapriya .R	Completed
9	19SPMT28	Yaamini .K .S	Completed

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	Roll No.	faternal Assessment (out of 30)	Proctored Examination (out of 70)	Total Marka Obtained			Rall No.	Internal Assessment (out of 30)	Prectored Examination (out of 70)	Total Marks Obtained	1
		Marks Obtained	Marks Objained	(out of 100)				Marks Obtained	Marks Obtained	(sut of 100)	-
	105984	23	34	47			185936	23	22	45	
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MooC and NPTEL

The students of II M. Sc Mathematics attended MooC course titled, **Graph Theory** with subject code noc20ma05 in the duration of 12 weeks (Jan-March 2020)

S. No	Reg. No	Student Name	Status
1	19SPMT01	Amutha .C	Elite
2	19SPMT03	Arockia Shegali .N	Elite + Silver
3	19SPMT04	Aswila .A	Completed
4	19SPMT05	Christina Carolin .P	Completed
5	19SPMT07	Crena.S	Elite
6	19SPMT08	Diyana Jude .T	Elite
7	19SPMT09	Jeba Priyadharshini .N	Elite
8	19SPMT11	Jeyashri .R	Elite
9	19SPMT12	Kanthimathi .T	Elite
10	19SPMT13	Karbagaselvi .K	Elite+ Silver
11	19SPMT14	Kavitha .T	Elite
12	19SPMT15	Krency .R	Elite
13	19SPMT16	Maria Infant Mounisha .W	Elite
14	19SPMT20	Padmapriya .G	Elite
15	19SPMT21	Poovinshal .P	Elite
16	19SPMT23	Sowmiya .S	Elite
17	19SPMT24	Subashini .K	Completed







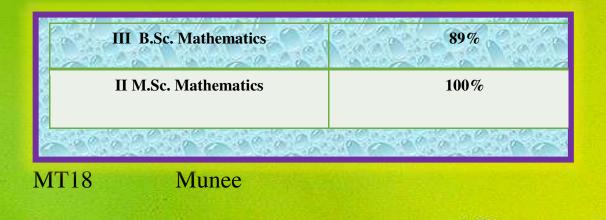
PG Projects

A total of 24 post graduate students of II M.Sc. Mathematics submitted the projects. The details are as follows:

Reg.No	Full name	Project title
18SPMT01	J.Akshara	A Study On Fuzzy Graphs
18SPMT02	R.Anista Sheela	A Study On 2-Vertex Self Switching In Graphs
18SPMT03	Archana.M	A Study On Smarandache-Near-Ring On Ideals
18SPMT04	A.Arockia Vanitha	A Study On Derivations Of Incline Algebra
18SPMT05	A.Cesil Zionisha	A Study On Fuzzy And Anti Fuzzy Ps Ideals Of Ps Algebra
18SPMT06	S.Chinthamani	A Study On P-Fuzzy Algebra
18SPMT07	J.Cross Catherine Ajiba	A Study On Geodetic Number In Graphs
18SPMT08	V.Esaki Shanthia	A Study On Harmonic Mean Labeling Of Graphs
18SPMT10	S.Iswarya	Convex Analysis
18SPMT11	P.John Sheeba	A Study On Fuzzy Ideals In Bci-Algebras
18SPMT12	A.Josephin Amala Praveena	A Study On Super Mean Labeling Of Graphs
18SPMT13	J.Josphine Jegatha	A Study On Cordial Labeling Of Graphs
18SPMT14	R.Kalaivani	A Study On Alpha 1 And Alpha 2 Near Rings
18SPMT15	S.Kasi Eswari	A Study On Edge Magic Labeling For Some Class Of Graphs

18SPMT16	A.Mary Alfi	A Study On Fuzzy Ideals Of Semirings And Near- Rings
18SPMT17	D.Mary Jerline	A Study On Regular Generalized Closed Sets In Topological Spaces
18SPMT18	T.Muneeswari	A Study On Extension Of Edge Graceful Labeling
18SPMT19	N.Muthu Dharini	A Study On Fuzzy Structure In Beta(B) Algebra
18SPMT20	S.B.Praislin	A Study Of Graph Coloring
18SPMT21	Rakini.S	A Study On Hardy Spaces
18SPMT22	R.Ruth Brigit	A Study On New Class Of Open Sets In Topological Space.
18SPMT23	S.Santhiya	A Study On Different Polynomials In Graphs
18SPMT24	X.Sherina	A Study On Prime Ideals In Gamma Near-Rings

Pass Percentage



.Muthu

Placement

Name of the Students Placed	Name of the Employer with Contact Details	Programme Graduated from
Dharshini. S	Assistant Branch post Master, Department Of Posts	B.Sc
M. Jemima Kepsiba	Accountant in tyre shop, Thoothukudi	B.Sc
M. Sandhiya	HR, Butyful Products & Service Pvd Ltd, Tuticorin	B.Sc
M. Saranya	Account Assistant in Muppandhal Green Energy(P) Ltd., Tuticorin	B.Sc
G. Abirami	Hapi Apps Software Lab, Kulaiyankarisal, Thoothukudi	B.Sc
S. Bhavani Devi	Employee in Chit fund company, Thoothukudi	B.Sc
Kanchanadevi .S	Employee in Ideal road ways, Thoothukudi	B.Sc
S. Nivetha	Employee in M.S Solutions, Thoothukudi	B.Sc
Uma Maheswari .A	Insurance Staff, Nellai Trading Automobile Agency, Thoothukudi	B.Sc

Higher Education

The table below displays III B.Sc. Mathematics students future plans for higher education.

Reg No	Name	Name of the program admitted	Name and Place of the institution joined
16SUMT33	Rahini .S	M.Sc Mathematics	V.O.Chindambaram College, Thoothukudi
17SUMT01	Adeline Beulah .A	M.Sc Mathematics	VOC College, Thoothukudi
17SUMT02	Banu Sree .M	M.Sc Mathematics	V.O.Chindambaram College, Thoothukudi
17SUMT07	A. Divine Antonita	M.Sc Mathematics	St.Mary's College(Autonomous), Thoothukudi
17SUMT10	R. Gayathri	M.Sc Mathematics	A.P.C Mahalaxmi College for Women, Thoothukudi
17SUMT11	Hema .M	M.Sc Mathematics	Kamaraj College, Thoothukudi
17SUMT12	B. Janaki	M.Sc Mathematics	St.Mary's College(Autonomous), Thoothukudi
17SUMT17	Karthika .S	M.Sc Mathematics	V.O.Chindambaram College, Thoothukudi
17SUMT20	Maria Danstila .S	M.Sc Mathematics	St.Mary's College(Autonomous), Thoothukudi
17SUMT22	Maria Princy .A	M.Sc Mathematics	St.Mary's College(Autonomous), Thoothukudi
17SUMT26	Muthu Lakshmi .G	M.Sc Mathematics	A.P.C Mahalaxmi College for Women, Thoothukudi
17SUMT29	R. Ramya	M.Sc Mathematics	Dhanalakshmi Srinivasan College of Arts and Science, Perambalur
17SUMT30	Raxi .R	M.Sc Mathematics	St.Mary's College(Autonomous), Thoothukudi
17SUMT31	R. Regika	MBA	Francis Xavier Engineering College, Tirunelveli
17SUMT32	Rema Fernando .G	M.Sc Mathematics	St.Mary's College(Autonomous), Thoothukudi
17SUMT38	Selva Jothi .N	M.Sc Mathematics	St.Mary's College(Autonomous), Thoothukudi
17SUMT43	Vinu .S	M.Sc Mathematics	A.P.C Mahalaxmi College for Women, Thoothukudi
17SUMT47	Abi Priyanka .M	M.Sc Mathematics	St.Mary's College(Autonomous), Thoothukudi
17SUMT55	S. Dhana Lakshmi	M.Sc Mathematics	St.Mary's College(Autonomous), Thoothukudi
17SUMT58	Jenefa .J	M.Sc Mathematics	A.P.C Mahalaxmi College for Women, Thoothukudi
17SUMT62	S. Karthigai Priya	M.Sc Mathematics	Government Arts and Science College, Thoothukudi
17SUMT64	M. Kiruthika	MBA	Manoanmaniyam Sundranar University, Tirunelveli
17SUMT65	R. Linda Roselin	MSW	Lady Doak College , Madurai
17SUMT68	A. Maria Selva	M.Sc Mathematics	Pope's College, Sawyerpuram
17SUMT70	Mesitha Esther .W	M.Sc Mathematics	St.Mary's College(Autonomous), Thoothukudi

