



P. K. M. COLLEGE OF EDUCATION

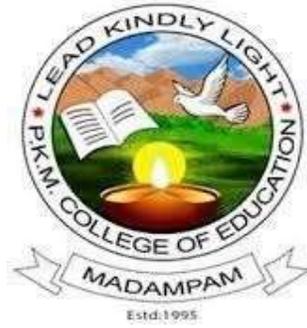
MADAMPAM, KATHAPRAM P.O. KANNUR – 670631
(Govt. Aided Teacher Education Institution affiliated to Kannur University)
Recognized by NCTE and included under UGC 2(f) & 12B category

Re- accredited by NAAC with 'A' Grade (Third cycle) RUSA 2.0 beneficiary, Ranked Third in the KIRF for TEIs

PROGRAMME PORTFOLIO 2024-25

Department of
Mathematics





**P.K.M. COLLEGE OF EDUCATION
MADAMPAM**

DEPARTMENT OF MATHEMATICS

2024-2025

Objectives

- Develop skills in planning and delivering lessons.
- Learn to assess and evaluate student learning.
- Develop classroom management skills to create a productive learning environment.
- Engage students in learning and differentiate instruction for diverse learners.
- Develop reflective practice skills to improve teaching.
- Understand the professional ethics of teaching.
- Learn to use educational software and digital tools to enhance teaching and learning.
- Conduct action research to improve educational delivery.
- Explore innovative practices in education.
- Celebrate and observe national and international mathematics days to promote awareness, appreciation, and education in mathematics.

Wi-Fi DAY AND TAU DAY CELEBRATION 2024

Objectives:

- To create an insight on mathematical milestones by celebrating International Wi-Fi Day and Tau Day.
- To remember and discuss the importance of Greek symbol Tau and its various applications on mathematics background. Also to discuss the importance of Wi-Fi and its evolution till this technical era.
- To encourage fun and creativity among the student teachers.

Planning:

The Head of the Mathematics pedagogy department Dr. Sholy Joseph K and student teachers planned to celebrate International Wi-Fi Day and Tau Day 2024. A meeting was called on the mathematics class to discuss the same.

Anjana Suresh was selected to be the coordinator for this program. After discussions it was decided to organise a presentation on the history and application of Tau in a mathematics background. Also a presentation regarding the Wi-Fi and its dynamic influence in this modern era. Also to make the program more active a logo identification competition was considered.

Execution:

The programme began by sharp 11.00 AM on 13th June 2024. Anchoring was handled by Mr Nijil Sans. The dignitaries on the dias and whole student teachers were welcomed with a welcome speech given by Mr Nijil Sans. The presidential address was given by head of the department Dr. Sholy Joseph Miss. She discussed the impact and influence of Mathematics in diverse fields. He talked on the importance of Tau in diverse field of mathematics. She also made a note on the evolving technologies and impact of Wi-Fi in current world.

The program moved to next phase of presentation. Miss Anusree Anil presented the history and importance of Wi-Fi. She also commented on arising new technologies and how Wi-Fi will get evolving. She also gave a brief comment on negative side of over

usage of these technologies.

Miss. Kavya K gave a presentation on the mathematics symbol Tau. She also presented the history behind this Greek alphabet. She told us about the various mathematical situation of Tau having importance and its conflicting connection with Pi. She spotted that Tau day is celebrated on June 18 because of its value 6.18.

Felicitation to the program was given by Miss. Nandana Das.

The second phase comprises competition. The program moved to next phase of Logo identification competition. Miss Anjana Suresh was the quiz master. Students were given different logo of widely used application. Also the founder, the founded year and current CEO where considered for quiz. everyone. The quiz ended by 12.20 PM.

The programme ended by sharp 12.30 PM with a vote of thanks by the coordinator Miss Anjana Suresh.





Conclusion:

The program was very effective one as it provided valuable insights and guidance for the students about the importance of Tau. This also helped to create an insight on the increasing technologies in this modern era. The program was successful in ingulfing the importance and applications of mathematics in diverse fields of science. The program enhanced the organising capability of student teachers. Attaining all its objectives, the program was highly successful by all means.

SCHOOL ACCLAMATIZATION PROGRAMME 2023 – 2025

MATHEMATICS BATCH 18/06/2024 to 22/06/2024

The School Acclimatization Programme is a crucial component of Kannur University’s Two-Year B.Ed. Curriculum, typically conducted during the second semester. This program enables student teachers to gain a deeper understanding of schools before embarking on teaching practice in the third semester. By visiting innovative educational institutions for a week, student teachers can adapt to the school environment and observe classroom interactions without delivering lessons. They may assist teachers, participate in classroom activities, or undertake tasks assigned by educators.

The program focuses on four key dimensions:

1. School environment and infrastructure
 2. School dynamics and interpersonal relationships
 3. Teaching-learning processes and methodologies
 4. Understanding children’s behavior, needs, and characteristics
- Successful exploration of these dimensions is essential for student teachers to

become effective educators in the future. The Mathematics Optional students of the 2023-2025batch from P.K.M. College of Education opted for various schools for acclimatization.

Name		Name of the School
Anjana Suresh	-	Iritty HSS
Anusree Anil	-	SN Trust HSS
Aswin Baburaj	-	Iritty HSS
Kavya K	-	Iritty HSS
Mithuna C Nair	-	Raja’s HSS

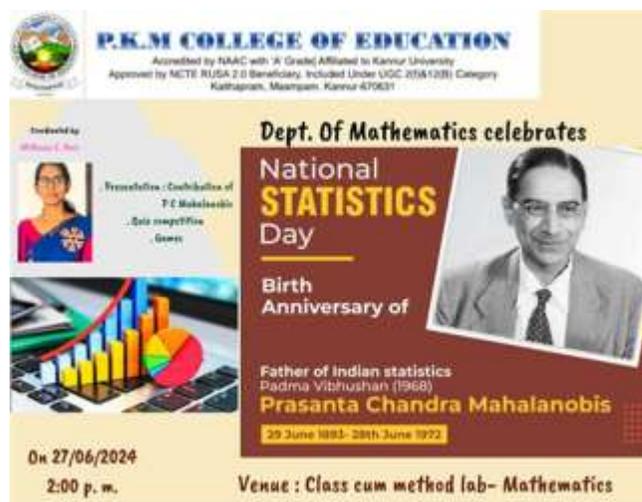
- Nandana Das - St.Thomas HSS,Chirakkal
- Nijil Sans - Sacred Heart HSS,Payyavoor
- Niveditha K V - Raja's HSS

During their School Acclimatization Programme, student teachers capitalize on various opportunities to engage with the school community. These experiences include observing classes led by experienced teachers, participating in interactive sessions with students, and contributing to classes through engaging activities like games, songs, and motivational stories.

Furthermore, student teachers are immersed in the school's daily operations, including discipline duty, examination supervision, and support for programs such as mid-day meals and other extracurricular activities. This comprehensive involvement enables student teachers to gain a deeper understanding of the school's functioning and culture.



NATIONAL STATISTICS DAY CELEBRATION



Dr. Sholy Joseph.K, the associate professor, department of mathematics, PKM college of education Madambam initiated the Planning of National Statistics Day as the Birth Anniversary of Prof. P C Mahalanobis, programme by selecting the coordinator Mithuna C. Nair and the accompanying team members Anusree Anil, Aswin Baburaj, Nandana Das, Nijil Sans, Kavya K, Nivedhitha, Anjana Suresh on 27th June 2024. As a part of it we conducted a meeting which is primarily discussed about the programmes and Brochure. In the subsequent days the committee members engaged in deciding the diverse programs for the occasion. It was decided to Conduct a power point presentation, Quiz Competition and Games for second year students. The programme was executed well by remembering the contributions of Mahalanobis and get idea about how statistics influenced our day to day life activities.

PRE INTERNSHIP ORIENTATION FROM 17/07/2024- 21/07/2024

Objectives:

- Bridge the gap between theoretical knowledge and real classroom experience.
- Develop essential teaching competencies like lesson planning, classroom management, and student engagement.
- Familiarize student-teachers with the school environment, infrastructure, and functioning.
- Build confidence and communication skills through micro-teaching and simulated activities.
- Encourage reflective thinking and professional growth before the full teaching internship.

Planning:

The programme was planned to be conducted for 2 weeks. It consists of the following sessions: Orientation session on the internship process, Workshops on pedagogy, assessment, and classroom techniques, Preparation of teaching aids and lesson plans, Micro-teaching sessions with peer feedback

Execution:

The first day an Orientation and Theory Refresher programme was conducted. It introduces the structure and expectations of the internship. It Conduct sessions on classroom ethics, record-keeping, and school culture. The second day was Micro-Teaching and Peer Observation. It Practice mini- lessons in a simulated environment. It also Record sessions for self-assessment and mentor feedback. The third day was Reflection and Readiness and Discuss challenges and learnings from school visits. It Finalize lesson plans for the upcoming internship. It also helps in reflective writing and feedback from mentors.

Conclusion:

The Pre-Internship Programme serves as a foundational stage in teacher training. It equips student-teachers with the necessary skills and mindset to enter classrooms confidently. Through observation, simulation, and reflection, it fosters professional growth, helping future educators understand the realities of teaching and refine their practice before full-time engagement in schools.

CRITICISM CLASS 2023- 2025 BATCH

Objectives:

- Develop teaching skills among student teachers.
- Emphasize organizational excellence among teachers and students.

Planning:

It has been decided to hold the 2023-2024 batch criticism class under the auspices of Mathematics Department, P. K. M. College of Education on 22/07/2024 at Maryland HS Madampam. Standard 8th and 9th are selected for teaching. All the 8 student teachers from mathematics department are planned their lesson plan.

Execution:

The classes began at 9:45 am on 22/07/2024 at Maryland HS Madampam. The first class was done by Anjana Suresh on the topic pie chart for 8th standard students. After that the classes are handled by Anusree Anil on Pascal's Triangle for 9th standard, Aswin Baburaj on Golden Ratio for 9th standard and Nijil Sans on Probability for 8th standard. Others took their class on 23/07/2024. The first class on 23/07/2024 was took by Nandana Das on the topic equations for 8th standard, then by Mithuna C Nair on Fibonacci Sequence for 9th standard, Nivedita K V on Arithmetic Sequence for 9th standard and finally by Kavya K on Prisms for 8th standard.

Conclusion:

The 2023-24 criticism classes concluded on a grand note. Everyone took their classes according to their lesson plans and using teaching aids with great effort.

EVALUATION AND TEST CONSTRUCTION SEMINAR

Objectives:

- To understand the meaning, need, and importance of evaluation in education.
- To explore various types and tools of evaluation.
- To understand the principles and process of test construction.
- To equip student-teachers with the skills to design reliable and valid tests.
- To promote critical thinking on effective assessment practices in teaching-learning processes.

Planning:

The programme was planned to be conducted on 24/07/2024 at Mathematics optional class at 1:30 pm. The student teachers and the coordinator take initiative to plan the seminar. They decided to conduct the seminar for better experience during the Teaching practice period.

Execution:

The seminar began with a formal welcome by Aswin Baburaj. Then the presidential address was given by Dr. Sholy Joseph K, Staff Coordinator. After that the felicitation was given by Anusree Anil. The seminar was led by Dr. Sholy Joseph K. The resource person initiated the session by discussing the concept and purpose of evaluation in education. The student teachers were introduced to formative, summative, and diagnostic evaluation with real-life examples. Various steps in the evaluation pattern and test construction like blue print discussion, marking scheme preparation, and value point distribution was made clear to the student teachers. Different tools such as oral tests, written tests, performance-based assessments, rubrics, and checklists were demonstrated.

The student teachers prepared different blue prints individually by taking a particular topic.

The programme ended up with a vote of thanks by Anjana Suresh.

Conclusion:

The seminar successfully enhanced the understanding of student-teachers on evaluation and test construction. It emphasized the significance of assessment as a continuous process and the role of a teacher in designing effective and unbiased tests. Participants gained hands-on experience in test design, boosting their confidence to apply these principles in real teaching scenarios. The session received positive feedback for its clarity, interactivity, and practical relevance.

TEACHING PRACTICE REPORT OF 2023-25 BATCH

During the period from August 5, 2024, to November 5, 2024, B.Ed students specializing in Mathematics from the 2023-25 batch of P.K.M. College of Education, Madampam, undertook their teaching practice in various schools. This practical training is a crucial component of their curriculum, allowing them to apply theoretical knowledge in real classroom settings and develop essential teaching skills.

The students were assigned to different schools in the region, where they engaged in lesson planning, classroom management, and instructional delivery under the mentorship of experienced teachers. This hands-on experience enabled them to adapt to diverse learning environments and address varying student needs effectively.

Throughout this period, the trainee teachers received constructive feedback, which played a significant role in refining their pedagogical approaches. They also participated in co-curricular activities and contributed to the school community, enhancing their overall professional development.

The successful completion of this teaching practice has equipped the Mathematics B.Ed students with practical insights and confidence, preparing them for their future roles as educators.

The schools allotted were as follows:

- 1) Anjana Suresh – GHSS Irikkur
- 2) Anusree Anil - Govt HSS Sreekandapuram
- 3) Aswin Baburaj - GHSS Irikkur
- 4) Kavya K - GHSS Irikkur

5)Mithuna C Nair - GHSS Nedungome

6)Nandana Das - GHSS Nedungome

7)Nijil Sans - Maryland HS madampam

8)Niveditha K V – Govt HSS Sreekandapuram



WORKSHOP ON TEACHING LEARNING AIDS

OBJECTIVES:

The key objectives of the programme were:

- To introduce and develop innovative teaching-learning aids.
- To enhance student understanding through visual, auditory, and kinesthetic learning methods.
- To encourage creativity among teacher trainees in designing instructional materials.
- To improve the effectiveness of classroom teaching and student engagement.

PLANNING :

The programme was planned in collaboration with the Student teachers and the staff coordinator Dr.Sholy Joseph K. Teacher trainees worked in groups to create teaching aids based on different schools they went for teaching practice. They decided to present the prepared aids in mathematics optional class.

EXECUTION:

The programme was successfully executed on November 6, 2024, in mathematics optional class. The major activities included: Teacher trainees demonstrated the use of charts, models, and digital tools for effective lesson delivery. Students were encouraged to engage with the teaching aids, making the learning process more interactive. Teacher trainees provided feedback on the effectiveness and usability of the teaching aids. A small exhibition was set up to showcase the teaching-learning materials prepared by the trainees.

The programme started by a welcome speech by Amin Mathew. Then Presidential address was given by Dr.Sholy Joseph K. After that a presentation on teaching aids was given by Anusree Anil. Then the teaching aids was introduced by each student from 2nd years. The felicitation was given by Anjana Suresh.

The programme ended up with a vote of thanks by Kavya K.



CONCLUSION:

The Teaching-Learning Aids Programme was a successful initiative that enriched the classroom experience for students and improved the teaching methodologies of future educators. The programme fostered creativity, innovation, and a practical approach to teaching, benefiting the student teachers.

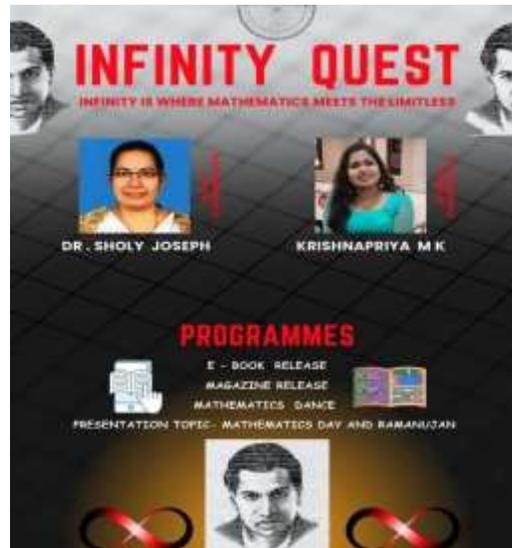
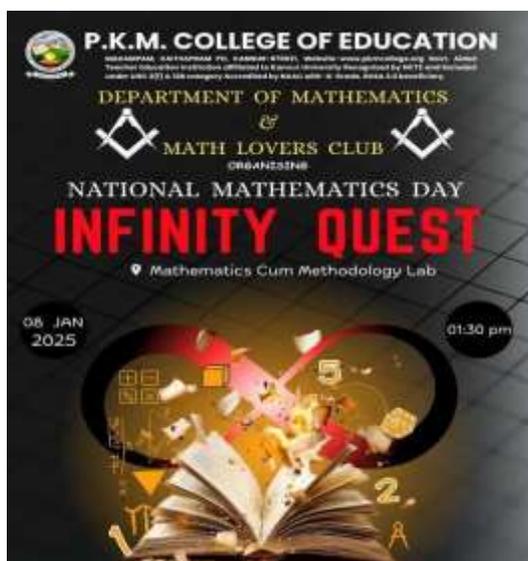
NATIONAL MATHEMATICS DAY CELEBRATION INFINITY QUEST

OBJECTIVES:

- Tributes to Srinivasa Ramanujan who gave remarkable contribution to mathematics which encourage the students to get interest in mathematics.
- Promotion of mathematics which encourages interest and awareness of mathematics as a subject and its application in everyday life.
- It helps to connect cultures and foster collaboration in different areas.

PLANNING:

Our beloved Mathematics department head Dr.Sholy Joseph K selected Krishnapriya M K as the student coordinator of the programme national mathematics day celebration 27November 2024. We are planned to conduct different programmes such as magazine& e-book release, math dance ,Presentaion on the topic Ramanujan and naonal mathemacs day ,puzzle quiz. Due the examinaon of the first semester the programme was decided to conduct on 8 January 2025 at 1.30pm in mathematics cum methodology laboratory.Then we select the name “Infinity Quest” for the programme.



EXECUTION:

we commemorate the birth anniversary of the legendary Indian mathematician, Srinivasa Ramanujan. To mark this special occasion, we are thrilled to introduce our Mathematics Day program "INFINITY QUEST" featuring engaging presentations, interactive math activities, and inspiring stories of mathematical discoveries. Additionally, we are proud to announce the release of our e-book, "**The Great Mathematician**" which delves into the lives and contributions of influential mathematicians. Furthermore, our latest issue of "**Sigma**" the maths magazine which is full of fascinating articles, puzzles, and student projects.

The programme was anchored by Nikhil James. Then he invited Krishnapriya M K for the welcome speech, she welcomed all dignitaries and whole students to the programme. Then he welcomed. Then he welcomed Dr. Sholy Joseph K for the presidential address, she shared his experience in various programmes and story of mathematics day. Then the felicitation was given by Preethika (first year) and Nijil Sans (second year). Then the main attraction of the "infinity quest" - the different programmes are started.

To unravel the fascinating lives and groundbreaking contributions of history's greatest mathematicians, our brand-new e-book, "GREAT MATHEMATICIANS" was released by Dr. Sholy Joseph K and the sub editor Roshna C. This captivating digital book delves into the stories of iconic mathematicians like Archimedes, Euclid, Ramanujan, Bhaskaracharya, Shakuntala Devi, ... revealing the inspirations and innovations that shaped their work. With engaging narratives, rare archival images, and insightful analyses, "GREAT MATHEMATICIANS" is a must-read for math enthusiasts, students, and anyone curious about the people behind the numbers." Each student prepared details and contributions about three mathematicians.

Then Nikhil James (sub editor) and Dr. Sholy Joseph K introduce Sigma, the ultimate maths magazine. Mathematics department excited to announce the release of our inaugural issue, packed with fascinating articles, brain-teasing puzzles, and inspiring stories of mathematical discovery. Sigma brings the beauty and relevance of mathematics to life and showcasing the brilliance of young minds. From creative math models and creative problem-solving projects to thought-provoking essays and artistic interpretations of mathematical concepts, these talented students demonstrate a deep understanding and passion for mathematics.

Amin Mathew delivered a captivating presentation on the life and legacy of the legendary Indian mathematician, Srinivasa Ramanujan. With enthusiasm and clarity, they shared stories of Ramanujan's remarkable journey from a humble beginning to becoming one of the most influential mathematicians of the 20th century. The presentation highlighted his groundbreaking contributions to number theory, modular forms, and infinite series, as well as his unique collaboration with G.H. Hardy. The audience was inspired by Ramanujan's passion, perseverance, and genius, as brought to life by our students' engaging and informative presentation.

"With rhythm and reason, Bhagyalakshmi, Malavika, Preethika and Roshna took to the stage to showcase their unique blend of mathematics and movement - Math Dance. This innovative performance wove together intricate steps, geometric patterns, and clever choreography to illustrate complex mathematical concepts in a fun and engaging way.

The excitement reached new heights as our Mathematics Day celebration featured a thrilling math-based game show conducted by Asha Mary Jose. Students enthusiastically participated in this interactive competition, showcasing their problem-solving skills, mathematical knowledge, and strategic thinking.

At last the programme was officially ended with a vote of thanks by Bhagyalakshmi M V.





CONCLUSION:

The national mathematics day programme “ INFINITY QUEST” enhanced the mathematical knowledge,skill,enthusiasm among parcipants.It facilitates creave and innovave approach to mathemacs also encourages diversified approach ,and also understand the impact of national mathemtics day and how it influence the people’s mind.

ACADEMIC ACHIEVEMENTS

- CSIR NET WINNER : Aswin Baburaj
- CTET WINNER : Anjana Suresh
- SET WINNERS : Aswin Baburaj
Anjana Suresh
Nandana Das
Niveditha K V
Kavya K

PAPER PRESENTATIONS

1)Anusree Anil presented the paper “The Role of Assistive Technologies for Enhancing Inclusivity For Differently Abled Individuals”at St.Joseph’s College of Education,Mysuru.

2)Mithuna C Nair presented the paper “Impact of Instagram in Mathematics Learning of Secondary Students in Kannur District” at School of Pedagogical Sciences,Kannur University,Dharmasala.

3)Nandana Das presented the paper “A Study on the use of Dynamic Geometry Software among Secondary Students at School of Pedagogical Sciences,KannurUniversity,Dharmasala.

4)Nijil Sans presented the paper “Relationship between Academic Achievement and Technological Usage among Secondary Students” at Devaki Amma Memorial Teacher Education College,Chelembra,Malappuram,Kerala.