



# P.K.M. COLLEGE OF EDUCATION

MADAMPAM, KAITHAPRAM PO, KANNUR-670631, Website-www.pkmcollege.org Govt. Aided Teacher Education Institution affiliated to Kannur University Recognized by NCTE and included under UGC 2(f) & 12B category Accredited by NAAC with 'A' Grade, RUSA 2.0 beneficiary

# PROGRAMME PORTFOLIO

DEPARTMENT OF MATHEMATICS 2023 - 25





# **PKM COLLEGE OF EDUCATION MADAMPAM**

**REPORT OF MATHEMATICS OPTIONAL  
CLASS OF THE YEAR 2023-24**

## **OBJECTIVES**

1. To develop, mould, and sculpt motivating math teachers.
2. To acquire mastery in various techniques and hence to create efficient next generation teachers.
3. To develop outstanding educators through discussion, criticism and demonstration classes.
4. To be skilled at planning and executing lessons.
5. To develop proficiency in instructing exceptional children and all types of children.
6. To develop competency in student teachers to pass K-TET exams.
7. Provide opportunities to student teacher that enable learning experience to make subject matter meaningful at secondary level.
8. To prepare competent and dedicated teachers for improvement of the school education system.
9. To understand the history of mathematics and mathematician so that the student teachers get motivated, decrease their anxiety related to the subject.
10. To build positive attitude towards the subject and have a better understanding about mathematics.

## **ACTIVITIES PLANNED**

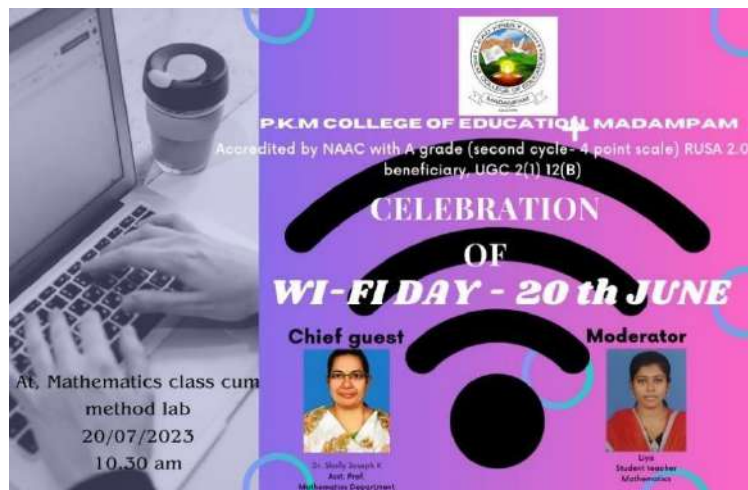
1. Wifi day celebration
2. Workshop on Video editing
3. National Statistics Day
4. Reading day celebration
5. Criticism Class
6. Pre Internship Orientation
7. Workshop on Geogebra
8. School Internship
9. Paper presentation in National seminar
10. Third semester seminar
11. SET, K TET, C TET holders
12. Workshop on Brochure making
13. Workshop on Google Form Making
14. Birth anniversary celebration of Adrien Marie Legendre
15. Workshop on YouCut video editing.
16. Birth anniversary celebration of Bernhard Riemann
17. Seminar on correlation of mathematics within the subject, with other subjects, real life.
18. World Mathematics Day celebration
19. Panel discussion on role of mathematics in daily life.
20. Seminar on qualities and competencies of Good Mathematics Teacher.

21. Speech competition
22. Seminar on mathematics curriculum.
23. Micro teaching
24. Seminar on reforms in mathematics curriculum.
25. Seminar on professional growth of mathematics teacher – teaching, research and extension.
26. Seminar on the topic: project method & problem solving method.
27. Seminar on orientation to theories of Bruner, Piaget, Gagne, Vygotsky, Chomsky and Gardner & implications of these theories in teaching mathematics.
28. Seminar on teaching techniques.
29. National Mathematics Day Celebration.
30. Workshop on inshot video editing.
31. Workshop on Geogebra.
32. Pi day celebration

# ACTIVITIES EXECUTED

## SECOND, THIRD AND FOURTH SEMESTER (2022-24 BATCH)

### 1. Wifi day celebration



WIFI Day 2023 was celebrated by department of mathematics, PKM College of Education, Madampam on 20 June 2023, Monday, at class cum method lab at 10.30 am

Student coordinator Ms. Jobina Jose gave a welcome address to start in the programme. Then, Ms. Liya, the programme coordinator, presented a lecture on WIFI Day. Ms. Liya presented a video explaining the history of WIFI. The program's presidential address was given by Dr. Sholy Joseph. Then Ms. Chaithanya C.K delivered a vote of thanks.



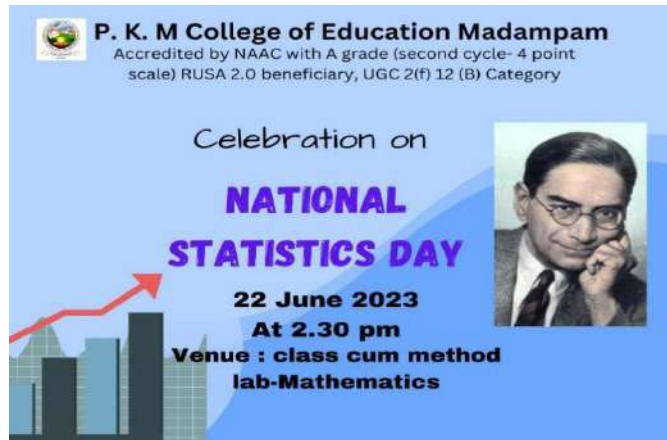
## 2. Workshop on Video editing



P. K. M. College of Education, Madampam, Department of Mathematics conducted a workshop on video editing for first year Mathematics Student-Teachers on 20/06/2023 at 11.30 am in Class Cum Method Lab Mathematics. The main aims of this workshop is to help student teachers develop literacy skill, enabling them to effectively navigate and utilize technology tools for teaching and learning. 5 Student Teachers introduced different video editing app. Mr Akshay. G Introduced the mechanism included in the application VLOG STAR. Mrs Chaithanya C Introduced the mechanism included in the application VN, Mrs Zia. R Introduced the mechanism included in the application INSHOT, Mr Harikishor. K. V Introduced the mechanism included in the application KINEMASTER and Mrs Archana .K. N Introduced the mechanism included in the application YOUCUT. The programme end at 12.30 pm.

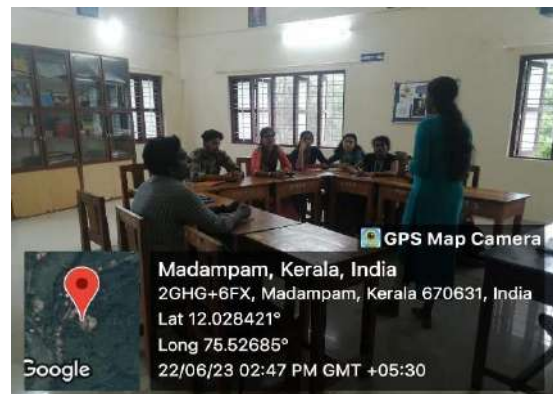


### 3. National Statistics Day

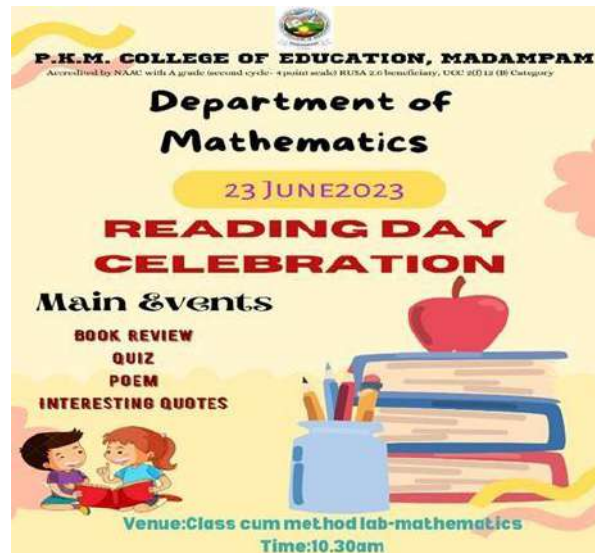


National Statistics Day 2023 was celebrated by department of mathematics on 22 June 2023, Thursday, at class cum method lab.

Student coordinator Ms. Jobina Jose gave a welcome address to start in the programme. Then, Ms. Akhila V, the programme coordinator, presented a lecture on National Statistics Day and Prof. P. C. Mahalanobis, the father of Indian statistics. Ms. Akhila V organized a puzzle competition for the entire class, and Ms. Chaithanya C. K won. The program's presidential address was given by Dr. Sholy Joseph. Then Ms. Liya delivered a congratulatory speech, and Ms. Chaithanya C. K gave a vote of thanks.



## 4. Reading day celebration



On June 23, 2023, at 10.30 am, Reading Day celebration was held at Mathematics Class cum Method Lab. Akshay G welcomed the students. The program was chaired by Zia R.

Every year events and activities are held around the world to make reading more fun and interactive. A Reading Week and Reading Month is being observed from June 19, 2023 to July 18, 2023.



A review of the book “Logicomics, an epic search for truth” was conducted by mathematics student teacher Harikishor KV on behalf of reading week. An innovative and dramatic graphic novel about the treacherous pursuit of the foundations of mathematics. This graphic novel chronicles the spiritual odyssey of philosopher Bertrand Russell. In his intense search for absolute truth, he crosses paths with thinkers such as Gottlob Frege, David Hilbert, and Kurt



Gödel, and finds an enthusiastic student in Ludwig Wittgenstein. But his greatest goal, to establish an unshakable logical foundation for mathematics, remains before him. Through love, hate, peace and war, he continues on the mission, threatening to claim his career and happiness. eventually driving him to the brink of insanity. At its heart, Logicomics is a story about the conflict between idealistic logic and the distorted structure of reality.

Chaitanya.C.K reviewed the book "The Story of Zero" by Palliyara Sreedharan as an excellent children's book related to mathematics. The discovery of zero was as revolutionary in mathematics as the invention of the wheel was in machinery.

Mathematics teacher student Archana.K.N reviewed the book "Athbhuta Samkhyakal". Most children are shocked when they hear math. Mathematics is an interesting subject of study which can only be understood by taking a closer look. Keeping this fact in mind, Athbhuta Samkhyakal is a children's literature work written by Palliyara Sreedharan. The characters in this story are Rekha, Rashmi, Unniyettan and Madhaviyamma. Unniyettan works as an engineer in Bangalore. Unniyettan had come to village for Onam vacation. After sharing the details, Unniyettan shows Rekha and Rashmi the wonderful world of numbers. Through this book, the narrator has managed to take the reader into the wonderful world of mathematics.

A review of Praveen Chandra's book "Unnuni and Demons in Math" was done by Anu Maria Jacob. This story book for children is published and distributed by Kerala Shastra Sahitya Parishad, Thrissur. The main character of the story is 'Unnuni', a fifth class student. This fictional book is written as a series of 20 stories featuring ghosts and Unnuni who jumped out of Unnuni's mathematics textbook. People who harbor childishness within can appreciate the story and through it build a positive approach to the concepts of mathematics.

Akshay G, a student teacher of mathematics, has done a book review of the book "The Man Who Knew Infinity". "The Man Who Knew Infinity" is a biography by Robert Kanigel first published in 1991. This book examines the life and work of Srinivasa Ramanujan, an Indian mathematician who made significant contributions to the field of mathematics.

Mathematics teacher student Jobina Jose reviewed the book 'Ganita Kathakal'. A beautiful children's book called 'Ganita Kathakal' written by Palliyara Sreedharan. This is a book that will interest math lovers of all ages. There are 10 stories in total. Palliyara Sreedharan has tried to make mathematics more attractive to children through each of the stories in this book. Akhila V, one of the mathematics teachers, presented the quiz program and Sneha presented her poem. Then mathematics teacher students Liya and Zia pointed out some interesting math quotes from famous math books.

At the end of the program Harikishor KV gave vote of thanks. The program ended at 12.30 pm.



## 5. Criticism Class

As an essential part of B.Ed course criticism classes of mathematics students of 2022-24 batch was conducted on 29/07/23 and 31/07/23. Students prepared well for their class .It was conducted in Maryland HSS ,Madampam. After watching classes of each one, a discussion was conducted and critically examined positive aspects and the points needed to improve. All students and teacher participated in discussion. The criticism classes were very helpful for every students to improve their teaching skills. The topics taken by them are given below.

Name of student teacher	Topic
Akhila V	Fibonacci sequence
Akshay G	Probability
Anu Maria Jacob	Prisms
Archana K N	Angles at semicircle
Chaithanya C K	Similar triangles
Harikishor K V	Introduction to statistics
Jobina Jose	Pascals triangles
Liya	Circles and tangents
Snehadas D S	Proportions
Zia R	Arithmetic progression

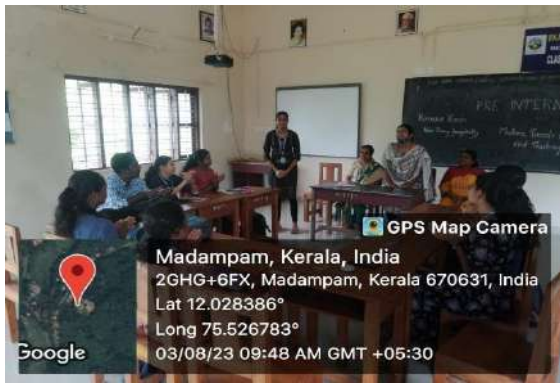
## 6. Pre-internship orientation

P. K. M. College of Education Madampam  
Accredited by NAAC with A grade (second cycle- 4 point scale) RUSA 2.0  
beneficiary, UGC 2(f) 12 (B) Category  
Dept. Of Mathematics in association with IQAC  
presents  
**PRE- INTERNSHIP ORIENTATION**  
On  
**Modern Trends in Lesson Plan Preparation and  
Teaching - Learning Process**

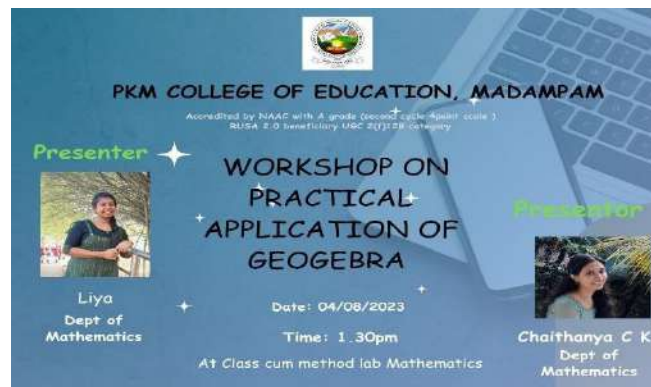
**Resource Person**  
Mrs. Jismy Georgekutty  
UPST, Vayathur UP School, Ulikkel

On 03/08/2023 @9.30 AM  
Venue :Class cum method lab-Mathematics

Internal Quality Assurance Cell of P.K.M College of Education Madampam conducted pre – internship orientation for Mathematics Student Teachers on 3<sup>rd</sup> August 2022. The programme began at 9.45 am in the Mathematics Class Cum Method Lab. Mrs. Jismy Georgekutty, UPST, Vayathur UP School Ulikkel was the resource person of the programme. Mathematics Optional Teacher Asst.Prof. Dr.Sholly Joseph delivered the welcome speech for the programme. After that Mrs. Jismy Georgekutty delivered her teaching experience to the student teachers. The student teachers of mathematics optional cleared their doubts regarding teaching in school. It was a good experience to the student teachers to get an interactive session with an expert before going to their internship programme. Student teacher Ms. Anu Maria Jacob delivered the vote of thanks. The programme ended at 12.30 pm.



## 7. Workshop on Geogebra



P.K.M College of Education, Madampam conducted a workshop on practical application of geogebra for second year B.Ed Mathematics on Tuesday 4/8/2022 at 11.30 am at Mathematics Class Cum Method Lab. Ms. Chaithanya C. K and Ms. Liya introduced Geogebra for other students. Ms. Jobina Jose delivered the welcome address. Moderator Ms. Archana K. N delivered a speech and enunciated the relevance of Geogebra in our academic life. Ms. Chaithanya C K and Ms. Liya explained the geogebra and its applications. The programme came to an end at 12.30 pm.

## **8. School Internship**

School internship for the academic year 2022-24 began on 07/08/2023. Classes started for 8th and 9th standard students 07/08/22 onwards. Around 50 lesson plans were taken for 8th and 9th standard students. 10 classes were taken in HSS or UP classes. Student teachers actively participated in every programme conducted in their respective schools and made School activities record according to that. Total 9 records were prepared and presented by each student on the basis of school internship. Sakunthala devi remembrance and national mathematics day were celebrated successfully on each school and different Mathematics related competitions and events were conducted. It was a different experience for everyone. List of students and their schools are given below

<b>Name of student teacher</b>	<b>School</b>
Akhila V	GHSS Sreekandapuram
Akshay G	GHSS Nedungom
Anu Maria Jacob	GHSS Sreekandapuram
Archana K N	GHSS Sreekandapuram
Chaithanya C K	GHSS Irikkur
Harikishor K V	Maryland HSS Madampam
Jobina Jose	Maryland HSS Madampam
Liya	GHSS Irikkur
Snehadas D S	Maryland HSS Madampam
Zia R	GHSS Irikkur

## **9. Paper presentation in national seminar**

Teacher education centre, Mananthavady conducted a two day national seminar on the theme “NEP 2020 towards multi-disciplinary & holistic education” on 14<sup>th</sup> & 15<sup>th</sup> February 2024. Nine mathematics student teachers attended the seminar and presented their research papers under the guidance of Dr. Sholy Joseph.K. The event featured paper presentations and interactive sessions focused on exploring the implications of the NEP 2020 for promoting multi-disciplinary and holistic education. The seminar provided a valuable platform for students to gain a deeper understanding of the NEP 2020 and its potential impact on the future of education in India. Research topics presented by the student teachers are given below.

<b>Name of student teacher</b>	<b>Research Topic</b>
Akhila V	An experimental study to improve concentration power of secondary school students in post covid era
Akshay G	Edtech Revolution: Unveiling the secrets of effective digital learning strategies

Anu Maria Jacob	The lack of interest in doing Mathematics home work among secondary school students
Archana K N	Mathematical learning habits of high school students after covid pandemic
Chaithanya C K	Changes in study habits of secondary school students in Mathematics, before and after Covid-19 pandemic
Harikishor K V	Transforming pedagogy : A comparative analysis of Mathematics teaching methods pre and post covid 19 pandemic
Jobina Jose	Change in attitude of secondary school students in the post covid pandemic
Liya	Social changes among secondary school students after Covid-19 pandemic
Snehadas D S	Teacher-student dynamics post Covid 19: Navigating the new normal



## 10. Third Semester Seminar

The Internship Program was conducted in schools until 8<sup>th</sup> November, 2023. From 9<sup>th</sup> November 2023 ,the student-teachers took seminars on the topics assigned to them. Seminar topics are added below

<b>Name of student teacher</b>	<b>Topic</b>
Akhila V	Exceptional children in Mathematics, dyscalculia, mathematical creativity
Akshay G	Concept of multiple intelligence, governmental and non-governmental initiatives, fields medal, Mathematics Olympiad, NUMATS, NTSE, MTSE

Anu Maria Jacob	Technology integration strategies for mathematics education, familiarizing program for teaching Mathematics in Edubuntu, Econtent development
Archana K N	Using internet for accessing information, technology for teaching individual, audio-visual aids, improvised aids
Chaithanya C K	Selecting the content for instruction, identifying concepts to be transacted at various level with special emphasis on content, organization of concepts for teaching-learning of Mathematics
Harikishor K V	Stating instructional objectives, identifying learning experiences, selecting appropriate strategies
Jobina Jose	Teaching aids, analysis of current VIII,IX,X,XI and XII standard state syllabus text books and comparison of secondary school syllabi under different streams
Liya	Mathematics clubs, Mathematics fairs/ exhibition, Mathematics talent search examination
Snehadas D S	Programmed learning, identifying learner's strength & weaknesses
Zia R	Activities enriching mathematics learning, recreational activities in mathematics learning, cooperative learning ensuring equal partnership of learners with special needs

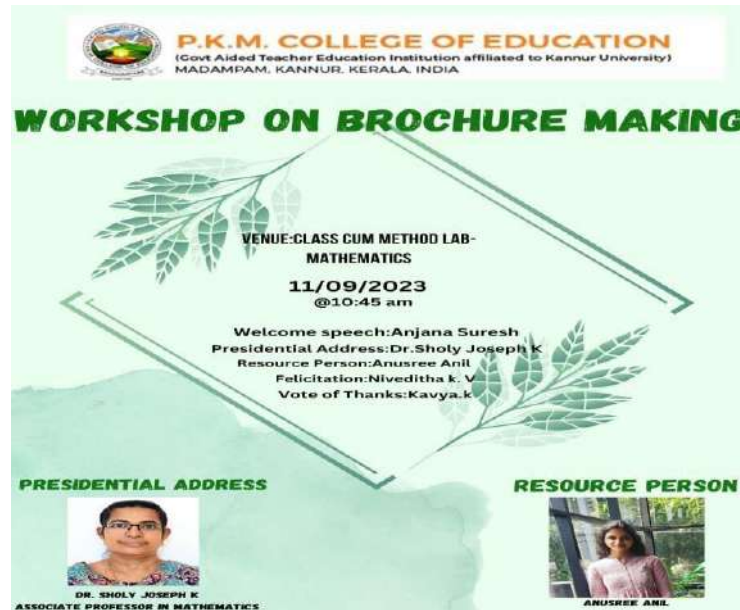
### **11. Set ,K Tet ,C Tet Holders**

In preparation for the competitive exams, the student-teachers came together and discussed the syllabus and previous year's question papers, and each student prepared probabilistic questions on each papers. All students of Mathematics optional appeared for the K TET examination held on 29<sup>th</sup> and 30<sup>th</sup> December, 2024 and seven students, Akhila V, Akshay G, Anu Maria Jacob, Chaithanya C K, Harikishor K V, Liya and Snehadas D S qualified for the K TET 2 & 3. Three students from the Mathematics optional appeared for the SET examination held on January 21, 2024 and three students, Akshay G, Chaithanya C K and Liya qualified for the SET. Five students from the Mathematics optional appeared for the C TET examination held on January 21, 2024 and Akhila V qualified for C TET.

## **FIRST & SECOND SEMESTER REPORT (2023-25 BATCH)**

## 12. Workshop on Brochure Making

### Planning:



Our beloved Mathematics teacher Dr. Sholy Joseph K selected Anusree Anil as the Resource Person for the Workshop on Brochure making Programme on 4 September 2023. Anusree opted the graphic design software tool named canva to conduct the workshop on Brochure making. The programme was decided to be conducted on 11 September 2023.

### Execution:

A Brochure is a Professional, effective, and inexpensive way to provide information to the target audience. They are designed for people to pick up. A well-made Brochure will grab the attention of the reader and provide needed information while inspiring the reader to take action.

Good Brochures present a logical pathway through the panels. By producing an effective Brochure, you are providing your audience with a tangible document that communicates the most important information in a colourful, well-designed, and informative package.

The well-organised programme was named 'Workshop on Brochure Making' which facilitates the students to develop a Brochure by self. By developing a Brochure by self they don't need to depend on others in future. As this programme enables students to practice making Brochures, the most suited name that could be given to this programme was 'Workshop on Brochure Making'. The Programme Venue was the Class Cum Method Lab-Mathematics and the Programme started by sharp 10:45 am.

The Programme was Anchored by Aswin Baburaj. Firstly he invited the student coordinator Anjana Suresh for the welcome speech. She welcomed the dignitaries on the dias and whole students to the Programme wholeheartedly on behalf of our college. The Welcome speech was such that everyone present there feels that their presence had made it more happening. Then



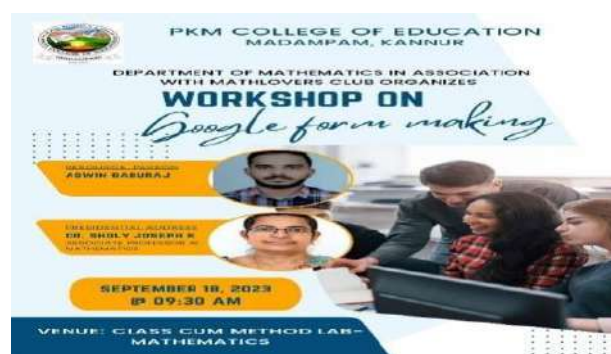
our beloved Mathematics teacher Dr.Sholy Joseph K was welcomed to the stage for the Presidential Address.Mam firstly congratulate all of us for conducting such an essential programme on Brochure making and sincerely thank each and every one who have gathered to make this workshop a grand success and gave directions to continue doing our part in supporting and shaping this Workshop.She made us realise the importance of making Brochures in our society.She taught us that each and every one of us should be equipped with how to develop a Brochure by self without depending on others.Her words encouraged and motivated us to know more about the graphic design software tool ‘canva’ and to develop a Brochure in any situation.Then our Resource Person Anusree Anil was welcomed to the stage for conducting the Workshop.She presented the workshop by using a Projector so that the students could easily grasp the methods effectively. she directed to install the graphic design software tool ‘canva’to all the students inorder to practice developing Brochures. After that she started making a template and explained the steps clearly to everyone. Then everyone followed her steps and lastly developed a Brochure with a concise content of their own wish. The Programme continued with a Felicitation Address by Niveditha K.V. She addressed everyone and felicitate the Resource person for an effective Workshop.

At about 11:40 am, The Programme ended with an official vote of thanks by Kavya.K.

### **OUTCOME:**

The Workshop was an effective one as it provided valuable insights and guidance for the students to develop a brochure in canva by self.This also helped to ensure the use of this tool effectively.By learning how to create an effective Brochure,students will be better equipped to make a strong impression in their field.This workshop helped the students to learn about canva and it also helped to guide the students in developing Brochures.The Workshop ended up being a successful one,facilitating how to develop visually appealing Brochures.

## **13. Workshop on Google Form making Planning:**



Department of Mathematics in Association with the Mathlovers Club decided to organize a workshop on Googleform-making. Our beloved Mathematics teacher Dr.Sholy Joseph K selected Aswin Baburaj as the Resource Person for the Workshop on Google Form Making programme on 5 September 2023.The programme was decided to be conducted on 18 September 2023.

### **Execution:**

A Google Form is an online tool provided by Google that allows users to create and distribute surveys, quizzes, questionnaires, and other types of forms. Users can design custom forms with various question types, such as multiple-choice, short answer, and more. These forms are hosted on Google's servers and can be shared via a link or embedded in websites. Responses to the forms are automatically collected and can be viewed, analysed, and exported in various formats, making it a useful tool for gathering information, conducting surveys, or collecting data from a wide audience.

The well-organised programme was named 'Workshop on Google Form Making' which facilitates the students to develop a Google form by themselves. By developing a Google form by themselves, they don't need to depend on others in future. As this programme enables students to practice making Google forms, the most suitable name for this programme was 'Workshop on Google Form Making'. The Programme Venue was the Class Cum Method Lab Mathematics and the Programme started at sharp 09:45 am.

The Programme was Anchored by Mithuna C Nair. Firstly, she invited Niveditha K V for the welcome speech. She wholeheartedly welcomed the dignitaries on the dais and whole students to the Programme on behalf of the mathematics department and Math lovers club. The Welcome speech was such that everyone present there felt that their presence had made it more happening. Then our beloved Mathematics teacher Dr. Sholy Joseph K was welcomed to the stage for the Presidential Address. Mam firstly congratulated all of us for conducting such an essential programme on Google Form making and sincerely thanked each and everyone who has gathered to make this workshop a grand success and gave directions to continue doing our part in supporting and shaping this Workshop. She made us realise the importance of learning to make Google forms in our society. She taught us that each and every one of us should be equipped with how to develop a Google form by ourselves without depending on others. Then our Resource Person Aswin Baburaj was welcomed to the stage for conducting the Workshop. He presented the workshop using a Projector so the students could easily grasp the methods effectively. He showed how to open Google Forms on a mobile to all the students in order to practice developing Google Forms. After that, he started making a Google form and explained the steps clearly to everyone. Then everyone followed his steps and lastly developed a Google form with concise content of their own wish. The Programme continued with a Felicitation Address by Nandana Das. She addressed everyone and felicitated the Resource person for an effective Workshop. At about 11:40 am, The Programme ended with an official vote of thanks by Nijil Sans.



## OUTCOME:

The Workshop was an effective one as it provided valuable insights and guidance for the students to develop a Google form by themselves. This also helped to ensure the use of this tool effectively. By learning how to create an effective Google form, students will be better equipped to make a strong impression in their field. This workshop helped the students to learn about skills in creating effective and versatile forms for various purposes. The Workshop ended up being a successful one, facilitating how to design user-friendly surveys and questionnaires, collect and analyze data efficiently, and leverage the power of Google Forms for one's professional and personal needs.

## 14. Birth Anniversary of Adrien Marie Legendre

### Planning :



Miss. Mithuna C. Nair as the resource person for the programme to celebrate the birth anniversary of Great French mathematician Adrien Marie Legendre was decided to be conducted on 25 September 2023.

### Execution:

Adrien-Marie Legendre (1752-1833) was a distinguished French mathematician renowned for his significant contributions to various areas of mathematics. He made pioneering advancements in number theory, analysis, and celestial mechanics. His name is immortalized in mathematics through concepts like Legendre polynomials and the Law of Quadratic Reciprocity, which continue to be studied and applied in various branches of science and engineering. Celebrating the birth anniversary of Adrien-Marie Legendre is not only a way to pay tribute to his work but also an opportunity to inspire, educate, and promote mathematics as a vital and fascinating discipline with real-world applications. It helps ensure that his legacy continues to inspire and benefit society. The well-organised programme to celebrate the birth

anniversary of Great French mathematician Adrien Marie Legendre, which facilitates the students to honor and pay tribute to their contributions to the field of mathematics. It acknowledges their work, discoveries, and the impact they have had on the world of mathematics. The Programme Venue was the Class Cum Method Lab-Mathematics and the Programme started by sharp 11:45 a.m. The Programme was Anchored by Niveditha. Firstly she invited Aswin Baburaj for the welcome speech. He welcomed the dignitaries on the dias and whole students to the Programme wholeheartedly on behalf of our college. The Welcome speech was such that everyone present there feels that their presence had made it more happening. Then our beloved Mathematics teacher Dr. Sholy Joseph K was welcomed to the stage for the Presidential Address. Mam explained about the conveniences of the era in which Legendre lived and the importance of his inventions. Student coordinator Anjana Suresh delivered the Felicitation speech. Then our Resource Person Mithuna C. Nair was welcomed to the stage for the power point presentation which includes Legendre’s contributions to mathematics, his academic and professional achievements, awards and honors, his later life and legacy. Apart from that, a quiz was conducted through google form. There are 20 questions and the time limit was 10 minutes. Anusree Anil was the winner with 16 points. Our beloved mathematics teacher Dr. Sholy Joseph K did the prize distribution for the winner. At about 12:30 p.m, the programme ended with an official vote of thanks by Anusree Anil.

### **OUTCOME:**

The Programme was an effective one. The birth anniversary celebration of Adrien Marie Legendre was a fitting tribute to a mathematical genius whose work continues to influence and inspire generations. It served as a reminder of the importance of mathematics in our lives and the need to nurture and support budding mathematicians.

## **15. Workshop on Youcut video editing**

### **Planning:**



Our beloved Mathematics teacher Dr. Sholy Joseph K selected Kavya.K as the Resource Person for the Workshop on Video editing Programme on 25 September 2023. Kavya opted the video editing app Youcut to conduct the workshop on Video editing. The programme was decided to be conducted on 3 October 2023.

## Execution:

Video editing is the process of manipulating and arranging video footage to create a finished video product. This can involve cutting and rearranging clips, adding transitions, special effects, audio, and more to enhance the overall quality and storytelling of the video. Video editing is commonly used in filmmaking, television production, online content creation, and various other multimedia projects. It plays a crucial role in shaping the final visual and auditory experience of the audience.

The well-organised programme was named 'Workshop on Video editing in Youcut' which facilitates the students to edit the videos by self. By editing a video by self they doesn't need to depend on others in future. As this programme enables students to practice editing videos, the most suited name that could be given to this programme was 'Workshop on Video editing in Youcut'. The Programme Venue was the Class Cum Method Lab-Mathematics and the Programme started by sharp 11.30 am.

The Programme was Anchored by Niveditha K V. Firstly she invited Nandana Das for the welcome speech. She welcomed the dignitaries on the dias and whole students to the Programme wholeheartedly on behalf of our college. The Welcome speech was such that everyone present there feels that their presence had made it more happening. Then our beloved Mathematics teacher Dr.Sholy Joseph K was welcomed to the stage for the Presidential Address. Mam firstly congratulate all of us for conducting such an essential programme on Video editing and sincerely thank each and every one who have gathered to make this workshop a grand success and gave directions to continue doing our part in supporting and shaping this Workshop. She made us realise the importance of Video editing in our society. She taught us that each and every one of us should be equipped with how to edit a video by self without depending on others. Her words encouraged and motivated us to know more about Youcut app and to edit a video in any situation. Then our Resource Person Kavya.K was welcomed to the stage for conducting the Workshop. She presented the workshop by using Phone. She directed to install the 'Youcut app' to all the students in order to practice editing videos. After that she explained the steps clearly to everyone. Then everyone followed her steps and lastly edited videos with their own wish. The Programme continued with a Felicitation Address by the student coordinator Anusree Anil. She addressed everyone and felicitate the Resource person for an effective Workshop.





At about 12.30 pm, The Programme ended with an official vote of thanks by Anjana Suresh.

## OUTCOME:

The Workshop was an effective one as it provided valuable insights and guidance for the students to edit a video in Youcut by self. This also helped to ensure the use of this tool effectively. This workshop helped the students to learn about Youcut and it also helped to guide the students in editing videos. The Workshop ended up being a successful one, facilitating how to edit videos. .

## 16. Birth anniversary celebration of Bernhard Riemann



### **Planning:**

Miss. Niveditha K V as the resource person for the programme to celebrate the birth anniversary of the great mathematician Bernhard Riemann was decided to be conducted on 4 October, 2023.

### **Execution:**

Bernhard Riemann was a renowned 19th century German mathematician known for his groundbreaking contributions to various fields of mathematics. He made pioneering advancements in number theory, analysis, and function theory. His name is immortalized in mathematics through concepts like Riemann geometry, Riemann hypothesis, Riemann surfaces, and Riemann integration.

Celebrating the birth anniversary of Bernhard Riemann is not only a way to pay tribute to his work but also an opportunity to inspire, educate, and promote mathematics as a vital and fascinating discipline with real-world applications. It helps ensure that his legacy continues to inspire and benefit society.

The well-organised programme to celebrate the birth anniversary of Great German mathematician

Bernhard Riemann, which facilitates the students to honor and pay tribute to their contributions to the field of mathematics. It acknowledges their work, discoveries, and the impact they have had on the world of mathematics. The Programme Venue was the Class Cum Method Lab Mathematics and the Programme started by sharp 11:45 a.m.

The Programme was Anchored by Anjana Suresh. Firstly she invited Aswin Baburaj for the welcome speech. She welcomed the dignitaries on the dias and whole students to the Programme wholeheartedly on behalf of our college. The Welcome speech was such that everyone present there feels that their presence had made it more happening. Then our maths association secretary Ms. Kavya K was welcomed to the stage for the Presidential Address. She explained about the conveniences of the era in which Riemann lived and the importance of his inventions. Student coordinator Mithuna C Nair delivered the Felicitation speech. Then our Resource Person Niveditha K V was welcomed to the stage for the power point presentation which includes Riemann's contributions to mathematics, his academic and professional achievements, awards and honors, his later life and legacy. Apart from that, a puzzle game was conducted. We divided into 2 groups, then she provided 6 integration questions and the time limit was 10 minutes. Mithuna and team were the winner. Our Maths association secretary Ms. Kavya K did the prize distribution for the winner. At about 12:30 p.m, the programme ended with an official vote of thanks by Nijil Sans.





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## OUTCOME :

The programme was an effective one. The birth anniversary celebration of Bernhard Riemann was a fitting tribute to a mathematical genius whose work continues to influence and inspire generations . It served as a reminder of the importance of mathematics in our lives and the need to nurture and support budding mathematicians.

## 17. Seminar on correlation of mathematics within the subject, with other subjects, real life.

### Planning:



The Head of the Mathematics pedagogy Dr. Sholy Joseph K decided to conduct a seminar on the core paper. Anjana Suresh opted the topic “Correlation of Mathematics within the subject, with other subjects and real life”. The seminar was decided to be conducted on 11 October 2023.

### Execution:

The programme began by sharp 11.40 AM on 11th October 2023.. Anchoring was handled by Miss Mithuna C Nair. The dignitaries on the dias and whole student teachers were welcomed with a welcome speech given by Miss Nandana Das. The moderator to the programme was Miss Anusree Anil. She discussed the impact and influence of Mathematics in diverse fields. She also commented the interdisciplinary and dependence of other subjects on Mathematics. She also remembered the famous quoting that " Mathematics is the queen of science ".

The resource talk on the subject was given by Miss Anjana Suresh. The seminar progressed with a good start. The resource person initiated the class by citing the true meaning and various definition of Mathematics. She then progressed further onto the core part of Correlation of Mathematics within the subject. Different branches of Mathematics algebra, geometry,

trigonometry, arithmetical operations , probability and many more are taken into account for citing the inter dependence among each of the branches. Later the seminar shifted to next phase of Correlation of Mathematics with other subjects. Various subjects like chemistry, physics, engineering, arts and literature are taken into account to present their corresponding Mathematical connections. Students enthusiastically gave many examples for establishing the dependency of other subjects on Mathematics. Moving to the last phase of Correlation of Mathematics with real life was really interactive. Students themselves presented tons of mathematical applications in their daily life. The seminar was successful in imparting true knowledge of Mathematical dependency of various fields.

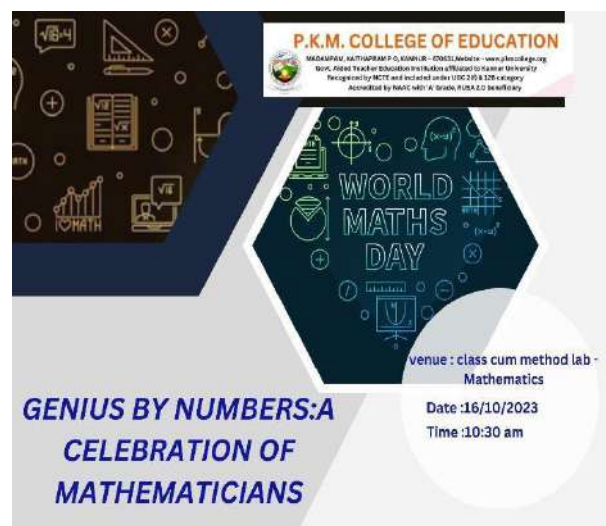
Felicitation to the program was given by Mr Aswin Baburaj. The programme ended by sharp 12.30 PM with a vote of thanks by Mr Nijil Sans.

### **OUTCOME:**

The seminar was an effective one as it provided valuable insights and guidance for the students on the topic ‘Correlation of Mathematics within the subject, with other subjects and real life’. This also helped to create an insight on Correlation of Mathematics in a diverse perspective. The seminar was successful in ingulfing the importance and applications of Mathematics for secondary aspects like another subjects. The class also imparted the knowledge regarding the wide range of Mathematics in all aspects.

## **18. World Mathematics Day celebration**

### **Planning:**



As part of the world maths day the class decided to organize a programme to gain a vast range of knowledge in mathematics. Anusree opted to present the contributions of famous mathematicians in the field of maths. The programme was decided to be conducted on 16 October 2023.

### **Execution:**

World Maths day is celebrated to raise awareness among the people about the importance of mathematics for the development of humanity. It also inculcate a positive attitude towards learning mathematics in the younger generation of the country.

Various programmes were organised in order to spread knowledge among the students about the importance of mathematics. And thereby developing the students to attain great heights in their future.

The well-organised programme was named 'Genius by numbers: A celebration of Mathematicians' which facilitates the students to develop a their knowledge in mathematics. Through conducting such programmes we can gain more information about the different aspects of maths and its history. As this programme enables students to know more about the famous mathematicians, the most suited name that could be given to this programme was 'Genius by numbers: A celebration of mathematicians'. The Programme Venue was the Class Cum Method Lab-Mathematics and the Programme started by sharp 10:30 am.

The Programme was Anchored by Anjana Suresh. Firstly she invited the Academic coordinator Mithuna.C.Nair for the welcome speech. She welcomed the dignitaries on the dias and whole students to the Programme wholeheartedly on behalf of our college. The Welcome speech was really a good one as she welcomes each and everyone of us to the programme wholeheartedly. Then our Student coordinator Anusree Anil was welcomed to the stage for the Presidential Address. She firstly congratulate all of us for conducting such an essential programme on World maths day and sincerely thank each and every one who have gathered to make this programme a grand success and gave directions to continue doing our part in supporting and shaping this programme. She made us realise the importance of conducting such valuable programmes in our society. She also tries to make us aware of the importance of developing mathematics in our society. Her words encouraged and motivated us to know more about the contributions of famous mathematicians in the field of maths.The Programme continued with a Felicitation Address by Niveditha K.V. She addressed everyone and felicitate the whole class for a very valuable session.

At about 11:30 am, The Programme ended with an official vote of thanks by Kavya.K.





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## OUTCOME:

The Workshop was very much effective as it provided valuable knowledge about various contributions of famous mathematicians in the field of mathematics. This also helped to promote collecting more information related to mathematics and contribute in its development. This programme helped in creating awareness among the students to gain more information and to improve their creativity. The programme ended up being a successful one .

## 19. Panel discussion on role of mathematics in daily life.

### Planning:

Firstly our beloved mam Dr. Sholy joseph k decided to conduct a panel discussion on the topic

‘Role of mathematics in daily life’. Then everyone decided to make two groups to present their ideas regarding this topic. The programme was decided to be conducted on 1 October 2023.

### Execution:

A panel discussion our thinking, speaking and listening skills. It also promotes our confidence level. It is an effective tool in problem solving, decision making and personality assessment. It also develops stronger communication skills.

The main purpose of panel discussion is to create a meaningful environment where panelists can share their knowledge and insights regarding the desired topic.

The well-organised programme was named ‘Panel discussion on the topic: Role of mathematics in daily life’ which facilitates the students to develop their knowledge in mathematics. The panel discussion aims at educating the students on a particular topic. The topic selected was really an appreciating one as it focuses on our daily life too. The Programme Venue was the Class Cum Method Lab-Mathematics and the Programme started by sharp :30 am.

The Programme was Anchored by Anjana Suresh. Firstly she invited the Academic coordinator Mithuna. C. Nair for the welcome speech. She welcomed the dignitaries on the dias and whole students to the Programme wholeheartedly on behalf of our college. The Welcome speech was really a good one as she welcomes each and everyone of us to the programme wholeheartedly. Then our beloved teacher Dr. Sholy joseph k was welcomed to the stage for the Presidential Address. She firstly congratulate all of us for conducting such an essential programme and sincerely thank each and every one who have gathered to make this programme a grand success and gave directions to continue doing our part in supporting and shaping this programme. She made us realise the importance of conducting such valuable programmes in our society. She also tries to make us aware of the importance of conducting such panel discussions in order to improve our skills. Her words encouraged and motivated us to make this panel discussion an effective one. The Programme continued with a Felicitation Address by Aswin Baburaj. He addressed everyone and felicitate the whole class for a very valuable session. Then the first group members Nandana as and Anusree Anil presented their views regarding this topic and then the second group members Niveditha K.V. and Nijil Sans shared their views regarding the topic.

At about 10:30 am, The Programme ended with an official vote of thanks by Kavya.K.







## OUTCOME

The Panel discussion was very much effective as it helped to gain knowledge about the role of mathematics in daily life. It gave us a platform to present our opinions and explore the topic. It also helped to analyse the topic at different angles. The programme ended up being a successful one.

## 20.Seminar on qualities and competencies of Good Mathematics Teacher.

### Planning:



### Execution:

The department of Mathematics organized a seminar on “Qualities and Competencies of Good Mathematics Teacher” on 8<sup>th</sup> November 2023 at class cum method lab- Mathematics. The moderator of the seminar is Nijil Sans and the presenter is Nandana Das. She gave a detailed idea about general qualities, special qualities and personal qualities of a good mathematics teacher.

## 21.Speech competition Planning:

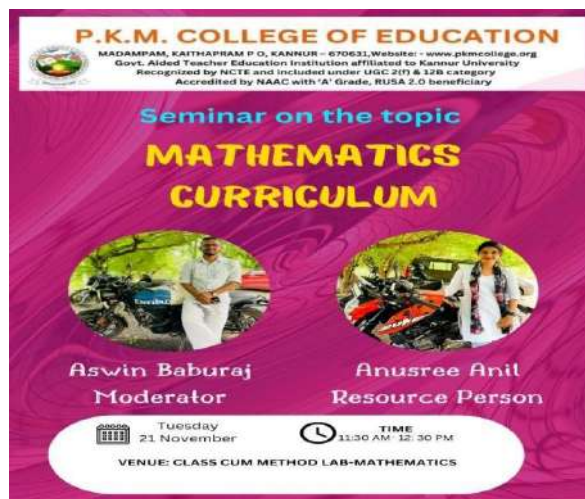


### Execution:

As part of Bharatiya Bhasha Utsav, PKM College of Education Madampam conducted a speech competition related to mathematicians under the auspices of Mathematics department on 15/11/2023 at 3 pm. The program started with a welcome speech by Kavya, representative of Maths department. Dr. Maya Jay Pillai and college librarian Deepa participated in the program as the judges of the competition. Nine contestants participated in the speech competition that followed. After the competition, Head of Mathematics Department Dr. Sholy Joseph announced the winners of the competition and felicitated them. In the competition, the first prize was awarded to Dilna k, a student of Natural Science, the second prize was awarded to Ashly David, a student teacher of English, and the third prize was to Vaishna k, a teacher of Social Science. Then Dr. Maya Jay Pillai gave the feedback of the program. The program ended with a vote of thanks by Program Coordinator Ashwin Baburaj.

## 22. Seminar on mathematics curriculum

### Planning:



Our beloved Mathematics teacher Dr. Sholy Joseph K decided to conduct a seminar. Anusree Anil opted the topic “Mathematics Curriculum”. The seminar was decided to be conducted on 21 November 2023.

### **Execution:**

A seminar has the function of bringing together small groups for focusing each time on some particular subject, in which everyone present is requested to participate.

Good seminar presentations help us to improve our presentation skill. By providing an effective seminar, you are providing your audience with a wide range of knowledge regarding a specific topic.

The well-organised programme was named ‘Seminar on the topic Mathematics Curriculum’ which facilitates the students to gain more information about mathematics curriculum. By presenting a seminar by self not only provides more valuable information to the audience but also helps us to improve our style of presentation. As this programme enables students to gain information regarding Mathematics curriculum, the most suited name that could be given to this programme was ‘Seminar on the topic Mathematics curriculum’. The Programme Venue was the Class Cum Method Lab-Mathematics and the Programme started by sharp 11:30 am.

The Programme was Anchored by Midhuna. C. Nair. Firstly she invited Nijil Sans for the welcome speech. He welcomed the dignitaries on the dias and whole students to the Programme wholeheartedly on behalf of our college. The Welcome speech was such that everyone present there feels that their presence had made it more happening. Then our Student coordinator Aswin Baburaj was welcomed to the stage for the Presidential Address. He firstly congratulate all of us for conducting such an essential programme on the topic Mathematics curriculum and sincerely thank each and every one who have gathered to make this seminar a grand success and gave directions to continue doing our part in supporting and shaping this seminar. He made us realise the importance of conducting seminars in our society. He taught us that each and every one of us should be equipped with how to present a seminar in an effective manner. His words encouraged and motivated us to know more about the topic ‘Mathematics curriculum’. Then our Resource Person Anusree Anil was welcomed to the stage for conducting the seminar. She presented the seminar by using a power point presentation so that the students could easily grasp the topic effectively. She presented the seminar by introducing the relevant topics included in it. After that she concluded the seminar. The Programme continued with a Felicitation Address by Niveditha K.V. She addressed everyone and felicitate the Resource person for an effective seminar.

At about 12:30pm, The Programme ended with an official vote of thanks by Nandana Das.



## OUTCOME:

The seminar was an effective one as it provided valuable insights and guidance for the students on the topic 'Mathematics curriculum'. This also helped to apply mathematical methodologies to open ended real world problems. The seminar also helped to recognize and appreciate the connections between theory and applications. This seminar helped the students to formulate and solve abstract mathematical problems. The seminar ended up being a successful one.

## 23. Micro teaching

### **Planning:**

Our beloved Mathematics teacher Dr. Sholy Joseph K decided to conduct a seminar on microteaching. First of all Miss put all the 8 students into groups of 4. The first group consisted of Kavya, Anjana Suresh, Anusree Anil and Ashwin Baburaj. The second group consisted of Nandana, Mithuna, Niveditha and Nijil. Everyone choose their favorite topics to take the class. The seminar was decided to be conducted on 24 November 2023.

<b>Name</b>	<b>Skill</b>	<b>Topic</b>
Anjana Suresh	Probing questions	Pair of equations
Anusree Anil	Explaining	Identities
Aswin Baburaj	Illustrating with examples	Polygons
Kavya K	Introducing a lesson	Parallelogram
Mithuna C Nair	Probing questions	Set theory
Nandana Das	Use of black board	Parallel lines
Nijil Sans	Illustrating with examples	Money maths
Nivethitha K V	Explaining	Arithmetic

### **Execution:**

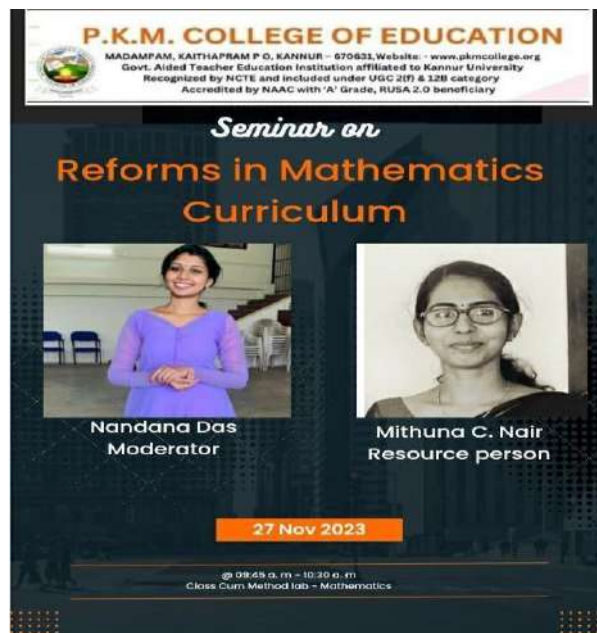
The well-organised programme was named 'seminar on Microteaching'. The Programme Venue was the Class Cum Method Lab-Mathematics and the Programme started by sharp 10.00 am. First, Anjana took the class of pair of equations. Then Anusree took a class on identities. After that Ashwin took a class on the topic called polygon. Then Kavya took the class on the topic of parallelogram, Nandana on parallel lines, Niveditha on Arithmetic sequence, Mithuna on set theory and Nijil on the topic of money maths. Each one took classes for 6 minutes.

## OUTCOME:

Miss observed everyone's classes. Everyone took their classes well. Microteaching is a unique model of practice teaching. It is a viable instrument for the desired change in the teaching behavior. The pupil-teachers trained using microteaching instruments are expected to have a greater range of technical teaching

## 24.Seminar on reforms in mathematics curriculum

### Planning:



Our beloved Mathematics teacher Dr. Sholy Joseph K decided to conduct a seminar. Mithuna C. Nair opted the topic “Reforms in Mathematics Curriculum”. The seminar was decided to be conducted on 27 November 2023.

### Execution:

A seminar has the function of bringing together small groups for focusing each time on some particular subject, in which everyone present is requested to participate.

Good seminar presentations help us to improve our presentation skill. By providing an effective seminar, you are providing your audience with a wide range of knowledge regarding a specific topic.

The well-organised programme was named ‘Seminar on the topic Reforms in Mathematics Curriculum’ which facilitates the students to gain more information about the important reforms in mathematics curriculum. By presenting a seminar by self not only provides more valuable information to the audience but also helps us to improve our style of presentation. As this programme enables students to gain information regarding Mathematics

curriculum, the most suited name that could be given to this programme was 'Seminar on the topic Reforms in Mathematics curriculum'. The Programme Venue was the Class Cum Method Lab-Mathematics and the Programme started by sharp 09:45 a.m.

The Programme was Anchored by Nijil Sans. Firstly He invited Anusree Anil for the welcome speech. He welcomed the dignitaries on the dias and whole students to the Programme wholeheartedly on behalf of our college. The Welcome speech was such that everyone present there feels that their presence had made it more happening. Then our Student coordinator Nandana Das was welcomed to the stage for the Presidential Address. She firstly congratulate all of us for conducting such an essential programme on the topic Mathematics curriculum and sincerely thank each and every one who have gathered to make this seminar a grand success and gave directions to continue doing our part in supporting and shaping this seminar. She made us realise the importance of conducting seminars in our society. She taught us that each and every one of us should be equipped with how to present a seminar in an effective manner. His words encouraged and motivated us to know more about the topic 'Reforms in Mathematics curriculum'. Then our Resource Person Mithuna C. Nair was welcomed to the stage for conducting the seminar. She presented the seminar by using a powerpoint presentation so that the students could easily grasp the topic effectively. She presented the seminar by introducing the relevant topics included in it. After that she concluded the seminar. The Programme continued with a Felicitation Address by Anjana Suresh. She addressed everyone and felicitated the Resource person for an effective seminar. At about 10:30pm, the Programme ended with an official vote of thanks by Kavya K.

### **OUTCOME:**

The seminar was an effective one as it provided valuable insights and guidance for the students on the topic 'Mathematics curriculum'. This also helped to apply mathematical methodologies to open ended real world problems. The seminar also helped to recognize and appreciate the connections between theory and applications. This seminar helped the students to formulate and solve abstract mathematical problems. The seminar ended up being a successful one.



## 25.Seminar on professional growth of mathematics teacher – teaching, research and extension

### Planning:



Our beloved Mathematics teacher Dr.Sholy Joseph K decided to conduct a seminar .Nijil Sans opted the topic “professional growth of mathematics teacher. – teaching, research and extension” The seminar was decided to be conducted on 28 November 2023. **Execution:**

A seminar has the function of bringing together small groups for focusing each time on some particular subject, in which everyone present is requested to participate.

Good seminar presentations helps us to improve our presentation skill .By providing an effective seminar, you are providing your audience with a wide range of knowledge regarding a specific topic.

The well-organised programme was named ‘Seminar on the topic professional growth of mathematics teacher which facilitates the students to gain more information about professional growth of mathematics teacher. By presenting a seminar by self not only provides more



valuable information to the audience but also helps us to improve our style of presentation. As this programme enables students to gain information regarding professional growth of mathematics teacher, the most suited name that could be given to this programme was 'Seminar on the topic professional growth of mathematics teacher'. The Programme Venue was the Class Cum Method Lab-Mathematics and the Programme started by sharp 11:45 am.

The Programme was Anchored by Anusree Anil. Firstly she invited Midhuna C Nair for the welcome speech. He welcomed the dignitaries on the dias and whole students to the Programme wholeheartedly on behalf of our college. The Welcome speech was such that everyone present there feels that their presence had made it more happening. Then our Student coordinator Niveditha K.V. was welcomed to the stage for the Presidential Address. She firstly congratulate all of us for conducting such an essential programme on the topic professional growth of mathematics teacher and sincerely thank each and every one who have gathered to make this seminar a grand success and gave directions to continue doing our part in supporting and shaping this seminar. She made us realise the importance of conducting seminars in our society. She taught us that each and every one of us should be equipped with how to present a seminar in an effective manner. Her words encouraged and motivated us to know more about the topic 'professional growth of mathematics teacher'. Then our Resource Person Nijil Sans was welcomed to the stage for conducting the seminar. He presented the seminar by using a powerpoint presentation so that the students could easily grasp the topic effectively. He presented the seminar by introducing the relevant topics included in it. After that he concluded the seminar. The Programme

continued with a Felicitation Address by Nadana Das .She addressed everyone and felicitate the Resource person for an effective seminar.

At about 12:30pm, The Programme ended with an official vote of thanks by Anjana Suresh.

## OUTCOME:

The seminar was an effective one as it provided valuable insights and guidance for the students on the topic 'professional growth of mathematics teacher. – teaching, reaserch and extension'. This also helped to apply mathematical methodologies to open ended real world problems. The seminar also helped to Enhancing Pedagogical Skills in student teachers. This seminar helped the students to Encouraging Research in Mathematics Education. The seminar ended up being a successful one.





**OUTCOME:**

The seminar was an effective one as it provided valuable insights and guidance for the students on the topic ‘professional growth of mathematics teacher. – teaching, reaserch and extension’.This also helped to apply mathematical methodologies to open ended real world problems.The seminar also helped toEnhancing Pedagogical Skills in student teachers.This seminar helped the students toEncouraging Research in Mathematics Education.The seminar ended up being a successful one.

**26.Seminar on the topic: project method & problem solving method**

**Planning:**

Our beloved Mathematics teacher Dr.Sholy Joseph K decided to conduct a seminar. Niveditha K V opted the topic “Problem solving method and project method.” .The seminar was decided to be conducted on 4 December 2023.

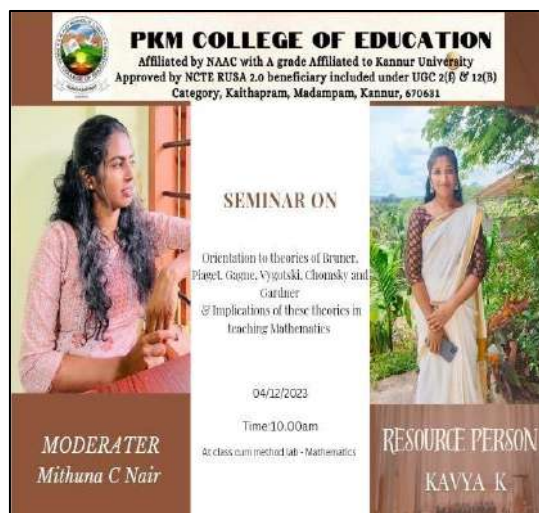
**Execution:**

A seminar has the function of bringing together small groups for focusing each time on some particular subject, in which everyone present is requested to participate. Good seminar presentations help us to improve our presentation skill. By providing an effective seminar, you are providing your audience with a wide range of knowledge regarding a specific topic. The well-organised programme was named 'Seminar on the topic Problem solving method and project method.' which facilitates the students to gain more information about Problem solving method and project method. By presenting a seminar by self not only provides more valuable information to the audience but also helps us to improve our style of presentation. As this programme enables students to gain information regarding , the most suited name that could be given to this programme was 'Seminar on the topic Problem solving method and project method. The Programme Venue was the Class Cum Method Lab-Mathematics and the Programme started by sharp 11:30 am. The Programme was Anchored by Midhuna. C. Nair. Firstly she invited Nandana Das for the welcome speech. He welcomed the dignitaries on the dias and whole students to the Programme wholeheartedly on behalf of our college. The Welcome speech was such that everyone present there feels that their presence had made it more happening. Then our Student coordinator Anjana Suresh was welcomed to the stage for the Presidential Address. She firstly congratulate all of us for conducting such an essential programme on the topic Problem solving method and project method, and sincerely thank each and every one who have gathered to make this seminar a grand success and gave directions to continue doing our part in supporting and shaping this seminar. He made us realise the importance of conducting seminars in our society. He taught us that each and every one of us should be equipped with how to present a seminar in an effective manner. Her words encouraged and motivated us to know more about the topic 'Problem solving method and project method. Then our Resource Person Niveditha K V was welcomed to the stage for conducting the seminar. She presented the seminar by using a power point presentation so that the students could easily grasp the topic effectively. she presented the seminar by introducing the relevant topics included in it. After that she concluded the seminar. The Programme continued with a Felicitation Address by Aswin Baburaj. He addressed everyone and felicitate the Resource person for an effective seminar. At about 11:30pm, The Programme ended with an official vote of thanks by Anusree Anil.

### **OUTCOME:**

The seminar was an effective one as it provided valuable insights and guidance for the students on the topic ' Problem solving method and project method'. This also helped to apply mathematical methodologies to open ended real world problems. The seminar also helped to recognize and appreciate the connections between theory and applications. This seminar helped the students to formulate and solve abstract mathematical problems. The seminar ended up being a successful one.

## 27.Seminar on orientation to theories of Bruner, Piaget, Gagne, Vygotsky, Chomsky and Gardner & implications of these theories in teaching mathematics



### **Planning:**

Our beloved Mathematics teacher Dr.Sholy Joseph K decided to conduct a seminar. Kavya K opted the topic “orientation to theories of Bruner, Piaget, Gagne, Vygotsky, Chomsky and Gardner & implications of these theories in teaching Mathematics”. The seminar was decided to be conducted on 4 December 2023.

### **Execution:**

The well-organised programme was named ‘seminar on orientation to theories of Bruner, Piaget, Gagne, Vygotsky, Chomsky and Gardner & implications of these theories in teaching mathematics’ which facilitates the students to gain more information about educational theories & its implications. The Programme Venue was the Class Cum Method Lab-Mathematics and the Programme started by sharp 10.00am.

The Programme was Anchored by Anusree Anil. Firstly she invited Aswin Baburaj for the welcome speech. He welcomed the dignitaries on the dias and whole students to the Programme wholeheartedly on behalf of our college. Then the Student teacher Mithuna C Nair was welcomed to the stage for the Presidential Address. Then our Resource Person Kavya K was welcomed to the stage for conducting the seminar. She presented the seminar by using a power point presentation so that the students could easily grasp the topic effectively. The Programme continued with a Felicitation Address by Nijil Sans. At about 11:30am, The Programme ended with an official vote of thanks by Nandana Das.

### **OUTCOME:**

The seminar was an effective one as it provided valuable insights and guidance for the students on the topic 'orientation to theories of Bruner, Piaget, Gagne, Vygotsky, Chomsky and Gardner & implications of these theories in teaching Mathematics'.



## 28.Seminar on teaching techniques

**Planning:**



Our beloved Mathematics teacher Dr. Sholy Joseph K decided to conduct a seminar. Aswin Baburaj opted for the topic “Teaching techniques”. The seminar was decided to be conducted on 06 December 2023.

### **Execution:**

A seminar has the function of bringing together small groups to focus each time on some particular subject, in which everyone present is requested to participate.

Good seminar presentations help us to improve our presentation skills. By providing an effective seminar, you are providing your audience with a wide range of knowledge regarding a specific topic.

The well-organised programme was named ‘Seminar on the topic teaching techniques’ which facilitates the students to gain more information about teaching techniques. Presenting a seminar by oneself not only provides more valuable information to the audience but also helps us to improve our style of presentation. As this programme enables students to gain information regarding teaching techniques, the most suited name that could be given to this programme was ‘Seminar on the topic teaching techniques’. The Programme Venue was the Class Cum Method Lab-Mathematics and the Programme started at sharp 11:30 am.

The Programme was Anchored by Nandana Das. Firstly she invited Anusree Anil for the welcome speech. She welcomed the dignitaries on the dias and whole students to the Programme wholeheartedly on behalf of our college. The Welcome speech was such that everyone present there felt that their presence had made it more happening. Then our Student coordinator Kavya K was welcomed to the stage for the Presidential Address. She firstly congratulated all of us for conducting such an essential programme on the topic teaching techniques and sincerely thanked each and everyone who has gathered to make this seminar a grand success and gave directions to continue doing our part in supporting and shaping this seminar. She made us realise the importance of conducting seminars in our society. She taught us that every one of us should be equipped with how to present a seminar effectively. Her words encouraged and motivated us to know more about the topic ‘teaching techniques’. Then our Resource Person Aswin Baburaj was welcomed to the stage for conducting the seminar. He presented the seminar by using a PowerPoint presentation so that the students could easily grasp

the topic effectively. He presented the seminar by introducing the relevant topics included in it. After that, he concluded the seminar. The Programme continued with a Felicitation Address by Niveditha K.V. She addressed everyone and felicitated the Resource person for an effective seminar.

At about 12:30pm, The Programme ended with an official vote of thanks by Midhuna C Nair.

## OUTCOME:

The seminar was an effective one as it provided valuable insights and guidance for the students on the topic 'teaching techniques'. This also helped to apply mathematical methodologies to open ended real world problems. The seminar also helped to recognize and appreciate the connections between theory and applications. This seminar helped the students to formulate and solve abstract mathematical problems. The seminar ended up being a successful one.



## 29.National Mathematics Day Celebration

### Planning:



Our beloved Mathematics teacher Dr. Sholy Joseph K selected Nijil Sans as the student coordinator for the National Mathematics day Programme on 18 December 2023. Nijil selected the members for coordinating the programme. The programme was decided to be conducted on 21 December 2023.

### Execution:

The birth anniversary of Sir Srinivasa Ramanujan, the greatest mathematician of India, the National Mathematics Day is celebrated on December 22, every year. To honour him and his contributions in the field of this subject, the Department of Science & Technology, Government of India decided to mark his birthday as the National Mathematics Day.

This day is celebrated to honour one of the greatest mathematicians the world has seen, Sir Srinivasa Ramanujan and with an aim to emphasize the need to carry forward the legacy of great mathematicians such as Ramanujan, Aryabhata and Brahmagupta, to encourage and nurture the glorious tradition of mathematics in the country. On this day, many colleges, schools and Institutes conduct competitions and seminars to guide students towards a brighter future in the field of mathematics.

The well-organised programme was named 'Numeros' and it was a suitable name for the programme. As this programme enables students to learn more about mathematics field, the most suited name that could be given to this programme was 'Numeros'. The Programme Venue was the Multi-Purpose hall and the Programme started by sharp 1:15 pm.

The Programme was Anchored by Nandana Das and Kavya. K. Firstly the programme started with a prayer song by Kavya.K. Then Nandana invited the Joint Convenor of Math lovers club Aswin Baburaj for the welcome speech. He welcomed the dignitaries on the dias and whole students to the Programme wholeheartedly on behalf of our college. The Welcome speech was such that everyone present there feels that their presence had made it more happening. Then our Staff coordinator Mrs. Jomol Jose was welcomed to the stage for the Presidential Address. Mam firstly congratulate all of us for conducting such an essential programme on National Mathematics day and sincerely thank each and every one who have gathered to make this programme a grand success and gave directions to continue doing our part in supporting and shaping this programme. She made us realise the importance of gaining knowledge about mathematics in our society. She taught us that each and every one of us should be equipped



with a basic knowledge of Mathematics. Her words encouraged and motivated us to know more about the importance of National Mathematics day. Then the Inaugural address was given by the Principal Dr. Jessy N C. She directed all of us to attend this programme and to gain sufficient knowledge about National Mathematics day. After that Editor’s speech was given by Niveditha K.V. Then the Magazine of Department of Mathematics was launched by the Principal Dr.Jessy N C. The Magazine was named “Sigma”. The Magazine included the various ideas and efforts of each student-Teacher in Mathematics. Then the Felicitation was given by the Convenor of Math lovers club Isabel Sunny. Then the presentation of life story of Ramanujan and the highlights of the movie “The Man who knew Infinity” was presented by the student-Teacher Mithuna C. Nair. It was followed by a ‘Jigsaw Puzzle’ by the Student Teachers of second year Mathematics. Then ‘Tangram Making’ was demonstrated by Niveditha K.V. Then a film screening was done and the film was “Shakuntala Devi”. At about 4:15 pm, The Programme ended with an official vote of thanks by the Student coordinator Nijil Sans.



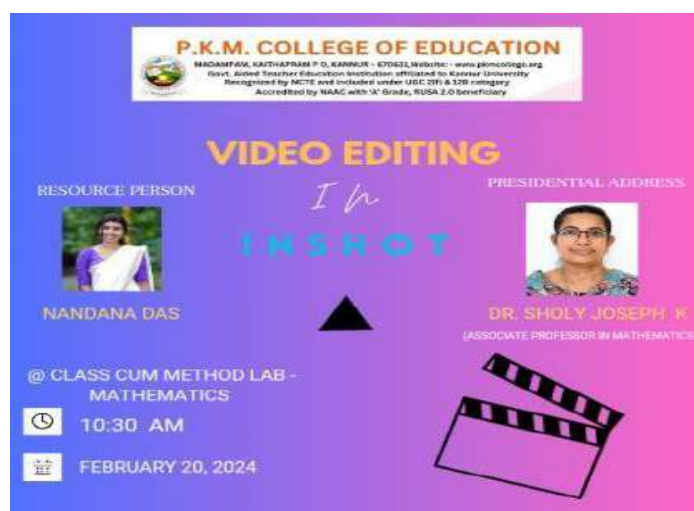


## OUTCOME:

The Programme was an effective one as it provided valuable insights and guidance for the students to gain knowledge about National Mathematics day. The programme helped to spread awareness about the importance of mathematics in the overall development of humanity and society and to have a positive inclination towards gaining knowledge of mathematics. It also helped to guide students towards a brighter future in the field of mathematics and the students will be better equipped to make a strong impression in their field. The Programme ended up being a successful one, facilitating the importance of National Mathematics day.

## 30. Workshop on inshot video editing

### Planning:



P.K. M. College of Education, mathematics department has decided to conduct video editing class for student teachers in mathematics department of 2023-25 batch. An app named inshot was chosen for that.

### Execution :

An inshot video editing class for student teachers of 2023-25 batch was held on 20/02/2024, 10:30 a.m. at class cum method lab mathematics under the chairmanship of Dr. Sholy Joseph, head of mathematics department P.K.M. College of Education Madampam. Miss Kavya K ( Student Teacher ) welcomed and Mr. Aswin Baburaj ( Student Teacher ) gave greetings on the occasion. Then miss Nandana Das ( Student Teacher ) started the video editing

class in inshot. After the class everyone showed their own video. The program was ended with the vote of thanks by Nijil Sans ( Student Teacher )

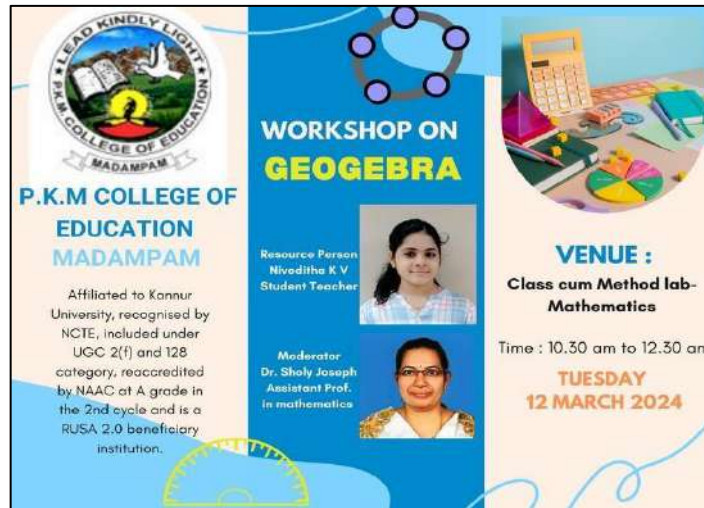


## OUTCOME :

The inshot video editing class organized for the mathematics department student teachers of 2023 - 25 batch ended nicely. Everyone was able to learn video editing and make their own videos. It was a starting point to step into digital activities.

## 31. Workshop on Geogebra

### Planning:



The Head of the Mathematics pedagogy Dr. Sholy Joseph K decided to conduct a workshop on Geogebra. Niveditha K V opted the workshop on "Geogebra". The seminar was decided to be conducted on 12 March 2024.

### **Execution:**

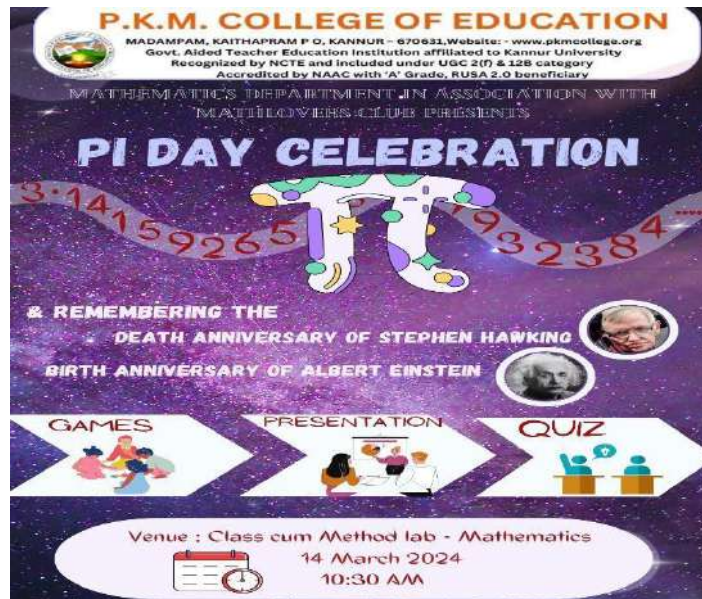
The programme began by sharp 10.40 AM on 12th March 2024. Anchoring was handled by Miss Mithuna C Nair. The dignitaries on the dias and whole student teachers were welcomed with a welcome speech given by Miss Nandana Das. The moderator to the programme was Miss. Anjana Suresh. She discussed the importance of Geogebra to both a mathematics teacher and students. The resource talk on Geogebra was given by Miss Niveditha K V. The workshop progressed with a good start. The resource person initiated the class by introducing the basics of Geogebra. She then progressed further onto the practical problems using Geogebra software, by discussing Basics of Triangles, Congruency of triangles and basics of circles. She explained the method of using Geogebra software and features of its geometric tools. Also she discussed various mathematical concepts using Geogebra tools. The workshop was successful. Students learned about the Geogebra software and its applications. Felicitation to the program was given by Mr Aswin Baburaj. The programme ended by sharp 12.30 PM with a vote of thanks by Mr Nijil Sans.



## OUTCOME:

The workshop was an effective one as it provided valuable insights and guidance for the students on the use of Geogebra Software. This also helped to create an insight on Geogebra software in a diverse prospective .The seminar was successful in ingulfing the importance and applications of Geogebra in mathematics. The class also imparted the knowledge regarding the importance of Geogebra in mathematics.

## 32.Pi day celebration Planning:



The Head of the Mathematics pedagogy department Dr. Sholy Joseph K and student teachers planned to celebrate International Pi 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 Albert Einstein and Stephen Hawking. Also to make the program more active funny mathematics quiz and Sudoku challenge was considered.

### **Execution:**

The programme began by sharp 10.30 AM on 14th March 2024.. Anchoring was handled by Miss Kavya K. The dignitaries on the dias and whole student teachers were welcomed with a welcome speech given by Miss Mithuna C Nair. The moderator to the programme was Mr. Aswin Baburaj. He discussed the impact and influence of Mathematics in diverse fields. He talked on the importance of Pi in diverse field of mathematics. He also gave a brief speech on the history of Pi and Pi day celebration.

Felicitation to the program was given by Miss. Anusree Anil and Mr Nijil Sans. The program moved to next phase of presentation. Miss Anusree Anil presented the ideas of Stephen Hawking. She also shared Hawkings ideas and views on black holes and cosmology. She also gave a brief comment on his works.

Mr Nijil Sans presented the ideas of Albert Einstein. He also presented the famous theory 'The theory of Relativity' in detail. He told us the story about the situation under which the idea of this theory struck Einstein. He discussed the various other works of Einstein.

The second phase comprises of funny games. The program moved to next phase of funny mathematics quiz. The students were grouped into pairs. Miss Anjana Suresh was the quiz master. After the quiz, the same grouping was considered for next event - sudoko challenge. The rules and conditions of Sudoko was well explained to everyone. Everyone was given a medium level Sudoko and 10 minute for the completion.

The programme ended by sharp 3.15 PM with a vote of thanks by the coordinator Miss Anjana Suresh.







## **OUTCOME:**

The program was very effective one as it provided valuable insights and guidance for the students about the importance of Pi..This also helped to create an insight on the valuable scientists Albert Einstein and Stephen Hawking..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.

## **Evaluation**

The planned programmes were successfully executed in this year.