

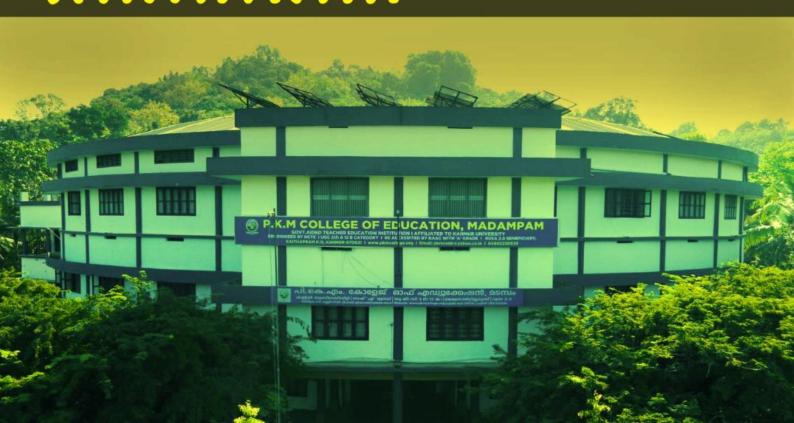
# P.K.M. COLLEGE OF EDUCATION

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

# PROGRAMIE PORTFOLIO

DEPARTMENT OF MATHEMATICS 2019 - 21





# P.K.M COLLEGE OF EDUCATION, MADAMPAM DEPARTMENT OF MATHEMATICS 1st SEMESTER REPORT 2019-2021 Batch

Our first semester class started on 1<sup>st</sup> July 2019. A course initiation ceremony was conducted on 4<sup>th</sup> July 2019. This ceremony was to introduce and to know briefly about the college, management, teachers and non teaching staff. Also a self exposition program was conducted on 10<sup>th</sup> July 2019. Self exposition is a program similar to self introduction. Mathematics students introduced themselves briefly and they exposed their abilities in different areas.

The following are the class activities done in our class room in first semester.

## Whatsapp Group

We created a whatsapp group to make academic conversation fruitful and effective.

#### **Puzzle Presentation**

We were started classes with 5 minutes puzzle presentation in a continuous manner.

#### **Class Presentation**

We were started classes with 5 minutes class on the topic related to mathematics of class 8<sup>th</sup> to 12<sup>th</sup>.

## **Days of Remembrance**

We presented power point presentation about mathematician-life, contributions in mathematics on their birth date.

Name	Mathematician	Date
Anjali Varghese	Arthur Cayley	16 <sup>th</sup> August 2019
Ambili Joseph	Augustin Louis Cauchy	21st August 2019
Angelin Stephen	Pierre De Fermat	27 <sup>th</sup> August 2019
Anju Varghese	Israel Gelfand	2 <sup>nd</sup> September 2019
Arsha M	Bernhard Riemann	17 <sup>th</sup> September 2019
Ragesh T	Adrien Marie	18 <sup>th</sup> September 2019
	Legendre	
Yamuna M M	Bernard Bolzano	5 <sup>th</sup> October 2019
Ribisha E	Ferdinand Georg	22 <sup>nd</sup> October 2019
	Frobenius	

**Album on Mathematician:** We submitted our first assignment about Indian and foreign mathematicians on 12<sup>th</sup> July 2019.

**Geometric Patterns:** On 19<sup>th</sup> July 2019, we submitted our second assignment "Geometric Patterns".

**Number Patterns:** On 26<sup>th</sup> July 2019, we submitted assignment "Number Patterns".

We also did an assignment on the topics nature and scope of Mathematics: pure and applied Mathematics, Role of axioms and postulates, Mathematics as a science, Mathematics as a game, Mathematics as a language, History of Mathematics with special emphasis on teaching of Mathematics

## **Seminars**

1. Every students took seminar on the topic in the syllabus with a moderator from our peer group.

Name	Topic	Date
Yamuna M M	Qualities and competencies of a good Mathematics teacher	17 <sup>th</sup> July 2019
Angelin Stephen	Correlation of mathematics	2 <sup>nd</sup> August 2019
Anju Varghese	Techniques of individualized instructions and teaching Mathematics	21 <sup>st</sup> August 2019
Anjali Varghese	Techniques of teaching Mathematics	30 <sup>th</sup> August 2019
Ribisha E	Professional growth of a Mathematics teacher and role of SCERT and NCERT on professional growth of a teacher	18 <sup>th</sup> September 2019
Ragesh T	Problem solving and project method	9 <sup>th</sup> October 2019

Ambili Joseph	Mathematics	11 <sup>th</sup> October 2019
	curriculum	
Arsha M	Reforms of	18 <sup>th</sup> October 2019
	Mathematical	
	curriculum	

2. Other than the topics in the syllabus, we conducted seminars based on monthly theme of the college connecting with Mathematics.

Name	Theme	Topic
Ambili Joseph	Teachers as	Fibonacci sequence
	Environmental	in nature
	Protectors	
Angelin Stephen	Teachers as	Rain fall analysis
	Environmental	
	Protectors	
Anju Varghese	Teachers as	Mathematics and
	Humanity	humanity
	Propagators	

# **Sigma 2019 and Video Presentation**

A Mathematics class magazine named as Sigma 2019 was prepared by Mathematics students. It contains student teachers own articles and some other interesting mathematics facts. It was introduced by Dr. Jessy N C by handover to Dr Sholy Joseph K. We also presented a video by including the content of the magazine.

### **Box Quiz**

We conducted a box quiz in association with Mathematics and Mathematics club "MATH LOVERS" for all student teachers and also we distributed the prize for the winners.

#### **Intramural Activities**

- Peace forum 2019-2020 was formed on 19<sup>th</sup> august 2019.Ambili Joseph, Angelin Stephen and Ragesh T from Mathematics were selected as coordinators.
- P.K.M College of Education conducted a workshop on 20<sup>th</sup> august 2019 based on the topic "PASCHIMAGHATTAM ATHIJEEVANATHINTE AASHANKANKAL". Yamuna M M presented a seminar on the topic "Kerala Bhooprakrithiyum Adisthanavivarangalum" and also Angelin Stephen presented seminar on the topic "Kasthoori Rangan report".
- Anju Varghese handled the digital work in teachers day celebration.
- Reading and Reflecting on Text phase 1 held on 18<sup>th</sup> September 2019 in college auditorium. All the student published their individual magazine.
- Reading and Reflecting on Text phase 2 held on 25<sup>th</sup> and 26<sup>th</sup>
  September 2019 in college auditorium. Yamuna M M of
  Mathematics was the coordinator. Ragesh T of Mathematics
  presented the report of the session held on 25<sup>th</sup> September.
  In the valedictory session Arsha M of Mathematics shared her experience.
- Philosophy role play named "Prathidhwani" held on 10<sup>th</sup> October 2019. Programmer coordinator was Arsha M of Mathematics. All students participate in the role play. Anju Varghese prepared the DVD of the program.

- Anju Varghese and Ragesh T of Mathematics were selected as members of YIP.
- Mann Manushyan Mahathmav held on 23<sup>rd</sup> and 24<sup>th</sup> October 2019 conducted bouquet making competition. The second prize was got for the team containing Arsha M and Anju Varghese of Mathematics. Also Yamuna M M of Mathematics presented a seminar on the topic "Krishi chollum Krishi paattum".
- Anju Varghese was selected in library advisory committee as student representative.

#### **Extramural Activities**

- At Kannur Sreepuram St. Teresa High School two day leadership training program was conducted on 23<sup>rd</sup> and 24<sup>th</sup> august 2019.Ambili Joseph, Angelin Stephen and Ragesh T were attended the program.
- All the students of fitness club members visited Kottoorvayal L P School on behalf of national sports day celebration on 29<sup>th</sup> august 2019. Ragesh T was the coordinator of the fitness club. Ambili Joseph, Anju Varghese and Arsha M were participated in the program.

# NATIONAL MATHEMATICS DAY CELEBRATIONREPORT 2019

National Mathematics Day celebrated every year on December 22 <sup>nd</sup>, the birth anniversary of brilliant mathematician Sreenivasa Ramanujan. The declaration was made by Dr. Manmohan Singh former prime minister of India, during the inaugural function of the celebrations to mark the 125<sup>th</sup> birth commemoration of Sreenivasa Ramanujan held at Madras University. It was in acknowledgement of his commitment to science, Government of India chose to observe Ramanujan's birth day as the National Mathematics Day. Since then, National Mathematics Day is celebrated every 22<sup>nd</sup> December with numerous educational events held at schools and universities throughout the country.

In this silver jubilee year, Mathematics department and Math lovers club of P K M College of education conducted national mathematics day celebration on 19<sup>th</sup> December 2019. A 3-D figure competition, seminar on "**December26**<sup>th</sup> **Solar Eclipse: Astronomical and Mathematical Implications**", exhibition about Ramanujan's life, treasure hunt and spots games were conducted as part of national mathematics day celebration.

#### 3-D FIGURE DRAWING COMPETITION

As part of national mathematics day celebration on 19 December 2019, mathematics department and math lovers club organized a 3- D figure drawing competition. The instructions for the competition were announced on 11 December 2019. Ragesh T and Ribisha E took initiative to conduct this competition. There was a stiff competition including 21 participants with a variety of 3-D images like Yin Yang, Road, Tap, Rat tap Loch Ness Monster and so on.

The winner was Sruthi Ramesh of English department who had drawn the Loch Ness Monster.



The 2<sup>nd</sup> and 3<sup>rd</sup> prize went to Thushara K K and Anjali A K respectively.



The chief guest Prof. K V George distributed the prize for the winners during the official programme held on 19 December 2019 at college auditorium.

#### **OFFICIAL PROGRAMME**

The official programme as part of national mathematics day celebration was started at sharp 9:45 am on 19 december2019 at college auditorium with the prayer of Sweety mol Shaji. The head of the Mathematics department, Dr. Sholy Joseph K welcomed the gathering. College principal Dr. Sr. Jessy N C presided over the

function. In presidential speech principalsaid that mathematics is an essential in our day today life. Thereafter Prof. K V George, Professor of Mathematics at Vimal Jyothi Engineering College, inaugurated the function. In his inaugural address, he said that mathematics is truth and everything is strict in mathematics.



Later chief guest Prof. K V George distributed the prize to the winners of 3- D figure competition conducted jointly by Mathematics department and Math Lovers Club. Bijila K K, joint convener of Math Lovers club, felicitated the ceremony. The official programme ended at approximately 10:25 am after the thanks giving of programme coordinator Anjali Varghese.

#### **TECHNICAL SESSION 1**

# SEMINAR: "SOLAR ECLIPSE :ASTRONOMICAL AND MATHEMATICALIMPLICATIONS"

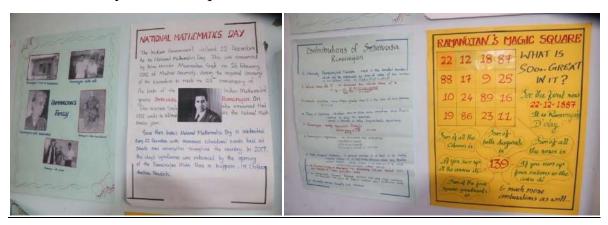
The seminar, "solar eclipse: mathematical and astronomical implications" which is a part of national mathematics day celebration began at 10:30 am. Harsha A T welcomed all. The seminar was led by Prof. K V George, the chief guest of the ceremony. He took a class about the partial solar eclipse appears on December 26 and the myths related to the solar eclipse that exist in the community. Besides he said that the annular eclipse on 26th December occurs when the moon's apparent diameter is smaller than the sun's, blocking most of the sun's light and causing the sun to look like an annulus and the annular eclipse is visible in Saudi Arabia, U A E, Oman, Pakistan, India, Srilanka, Bangladesh, Malaysia, Indonesia, Singapore, Northern Mariana Islands, and Guam. And he also says that it is the last solar eclipse of 2019 and it is completely visible at cheruvathoor in Kasaragod district. He also briefly explained that how to look at horoscopes. At about 11:30 the

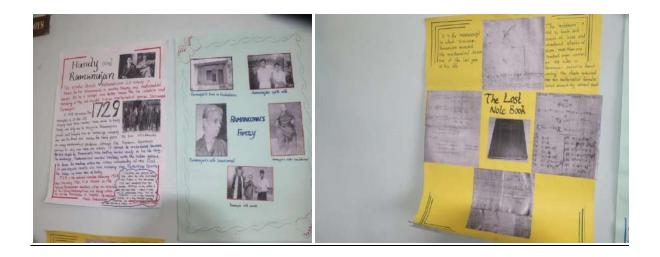
seminar ended. Since it is a periodically important topic, everyone participated in the seminar with great interest and eagerness.



#### **EXHIBITION**

Since National Mathematics Day is Ramanujan's birth anniversary, an exhibition about Ramanujan was held at college auditorium. The images of Ramanujan's family members, descriptions of Ramanujan's 'The lost notebook', magic squares etc. were presented on chart. The exhibition was led by Angelin Stephen and Anjali Varghese. This enabled the teacher students to learn more about Ramanujan's life and his contributions to mathematics. Every one watched the exhibition with great interest. Through this exhibition, the importance of National Mathematics Day was made public.





#### **TECHNICAL SESSION 2**

After a five minutes brake, technical session 2 started at 11:35 am with treasure hunt.6 groups, each containing 3 members participated in the treasure hunt competition. Arsha M, Ambili Joseph and Meenu Stephen had the duty of the game. At the same time other games were also conducted for the remaining students. It was managed by Meritta Stephen and Yamuna M M.



There is a connection between Ramanujan and pi value, since he had tried to find the first 4 digits of pi in his school days. Thus the game was to find the value of pi by calculating 22/7. The participants are given 3 minutes to find the digits and the one who find more digits will be the winner of the game. Giby of second year English won the game by finding 144 digits in the given time.

The next game was named as Addition Master. As the name says, the aim of the game was to find the student who is proficient in mental calculations. The game had two rounds.5 students entered into the second round and Sruthi Ramesh of first year English optional became the addition master.

A video on the life of Ramanujan was presented and a quiz competition was conducted on the basis of the video and charts showed in the exhibition. The winner of the quiz competition was Anjusha M of Physical science optional.

Team members of treasure hunt completed the task successfully. The team of Bisna Narikkodan, Riya Jose and Akhila John were found the treasure. Technical session 2 came to an end at 12:45 pm and the principal, Dr.Sr. Jessy N C distributed the prizes for the winners.





National Mathematics Day celebrations ended in good hands as a result of everyone's collective effort.

