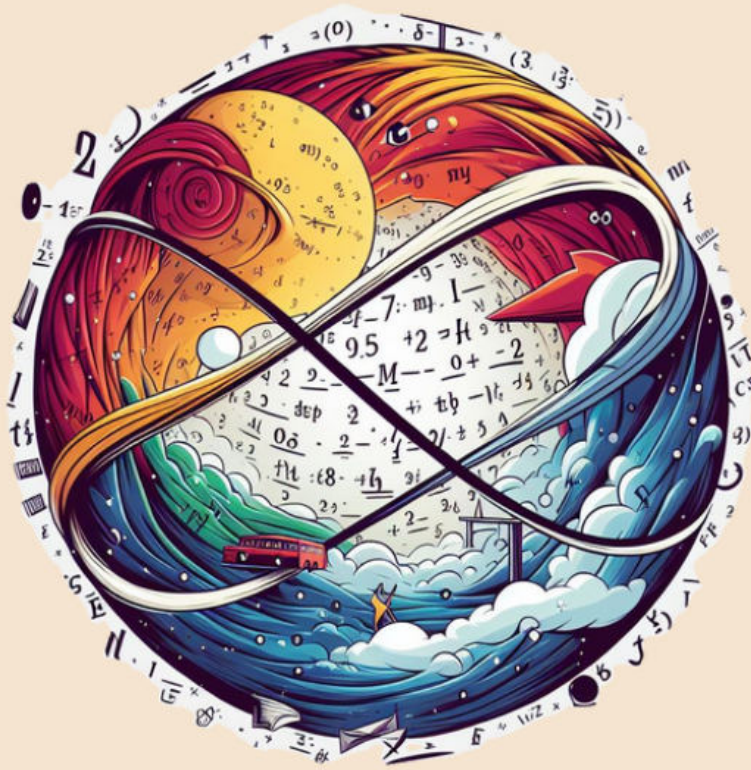




Issue no-5
Volume-5
April 2024

JYOTI NIVAS COLLEGE AUTONOMOUS

Department of Mathematics



NUMERICAL TALES

Unraveling
Mathematical Mysteries

IN THE SPHERE

A Mathematical newsletter



Principal's Message



Dr.Sr.Mary Louisa.S

Dear staff and students of the Department of Mathematics, I congratulate you all on releasing the fifth issue of the mathematics newsletter "Numerical Tales: Unraveling Mathematical Mysteries". Math is the language of the universe, So the more equations you know, the more you can converse with the cosmos. A department newsletter is seen as a tool for kindling scientific reasoning among students. New inventions are always required to explore the unexplored. I wish you all the best for all your future endeavors. Let the sphere roll on to explore the new.

Editorial Message



Welcome to an edition that ventures into the captivating realm of numbers, where mysteries unfold and mathematical marvels abound. In this, we embark on a journey through the intricate landscapes of numerical tales, exploring the depths of mathematical phenomena that both astound and intrigue. We delve into the Fibonacci sequence, a sequence of numbers that appears in unexpected places, from the spirals of seashells to the branching patterns of trees. Join us as we uncover relax, and prepare to be captivated by the beauty and intrigue of mathematics. The journey awaits, and the mysteries of numbers beckon. Happy reading!

Anu Mathew
3rd BSc CSMA



"MATHEMATICAL WONDERS: UNVEILING THE MARVELS OF NUMBERS"

The Beauty of Palindromic Numbers:

Palindromic numbers are numbers that read the same backward as forward. For example, 121, 1331, and 12321 are palindromic numbers.

One intriguing fact about palindromic numbers is that some can also be square numbers. For instance:

- $112=121112=121$
- $1112=123211112=12321$
- $11112=123432111112=1234321$

This pattern can continue indefinitely with larger palindromic square numbers.

What makes this fact fascinating is the simplicity and elegance of palindromic numbers and how they intertwine with the concept of square numbers. It's a delightful mathematical marvel demonstrating the beauty and symmetry of numbers.



Symmetry in Butterfly Wings:



Butterfly wings often display intricate patterns and vibrant colors arranged with bilateral symmetry. The precise arrangement of scales and pigments follows mathematical principles, leading to stunning visual displays that aid in camouflage, mate selection, and predator deterrence.



PLAY TIME

12	+		=	36			
		÷		÷			+
	-		=	4			23
×		=		=	÷		=
		6			×	5	=
=					=		
56		20	-		=	11	3
		+		×			×
84	÷		=				13
		=		=			=
				63	-		=

	7	9	6	3	5			
6								5
		5		7	4			
		6	8	1	3		4	7
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2					7	3	6	9
9	6			8				4
7	2			4				
			3		1			

Departmental Activities



Mathematics Club MAF- DELECANS 2023-24 Election for the office bearers.

On the 11th of August, 2023, the Department of Mathematics began the first event for the new academic year, the elections of the office bearers. The members of the club gathered to know their candidates and voted for the office bearers for the various posts.

The Club Union members elected were:

Divya Susheela – President
Anu Mathew – Vice President
Venentius Cyra S – Secretary
Kamalika Sen – Treasurer
Vinaya Shree M – Media Head

Each student graciously accepted their posts and responsibilities, marking the beginning of the first MAF – DELECANS event for the year.



Intra Class Mathematics Fest- 26-9-2024 & 27-9-2024

On September 27, 2023, the Department of Mathematics hosted its Math-Intra class Fest, sparking enthusiasm among math students with activities ranging from puzzles to lectures in probability and geometry. The fest featured five main events: MATH JEOPARDY, MATH MASTERS CHALLENGE, SUDOKU, MATH MINDS LECTURE CHALLENGE, and MATH RELAY, all aimed at challenging and stimulating young minds. These events allowed participants to delve into the relationship between mathematics and various fields. The event had over 83 participants. The fest was organized by club union member Divya Susheela. K, Anu Mathew, Venantius Cyra S, Kamalika Sen, Vinaya Shree, and Gnanashriya H, creating a vibrant atmosphere of intellectual exploration.





Webinar: Mathematics Is The Backbone Of Artificial Intelligence

On 25/09/2023 The department organized a guest lecture on “Mathematics Is The Backbone Of Artificial Intelligence”, In collaboration with

1. Assumption College Autonomous Changanacherry, Kerala
2. Providence Women’s College, Calicut, Kerala
3. Providence College Autonomous, Coonoor, Tamil Nadu

The resource person was Dr. Xavier Chelladurai, Professor, of Computer Science and Engineering, Christ University. The talk was streamed live to the collaborating colleges.

INAUGURATION AND KEYNOTE ADDRESS

 <p style="margin: 5px 0;">Dr.Sr.Mary Louisa.S Principal Jyoti Nivas College Autonomous Bengaluru</p>	 <p style="margin: 5px 0;">Dr.C. Annal Deva Priya Darshini Assistant Professor in Mathematics Associate Coordinator, Institute for Administration Services Coaching Associate Coordinator, Internal Quality Assurance Cell Madras Christian College, Chennai</p>
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MANTHANEIN a National level Intercollegiate UG Fest on 16-2-2024.

Manthenian 2024 was organized by the Department of Mathematics and Statistics on 16 February 2023, under the aegis of the Institute Innovation Council in collaboration with

1. St. Joseph’s College of Arts and Science for Women, Hosur, Tamil Nadu
2. Providence College for Women, Coonoor, Tamil Nadu
3. Alphonsa College, Pala, Kottayam, Kerala and
4. Mathematics Club MAF DELECANS. The event was streamed online for all the collaborating colleges to participate.

A special thanks to Dr. B Ganga, HOD, Mathematics, Providence College Coonoor, Dr. Sr. Sonia K Thomas, HOD Mathematics, Alphonsa College, Pala, Kerala, and Ms. Jaleesha, HOD Mathematics, St. Joseph’s College of Arts and Science for women, Hosur for collaborating with our college.





MANTHANEIN a National level Inter collegiate UG Fest on 16-2-2024.

A special word of appreciation goes out to our generous sponsors Our Alumni Ms. Vincy, Customer Service Agent at The Probe Group, Melbourne, Australia, Dr. Divya Prasad, Postdoctoral Research Associate, School of Civil and Environmental Engineering, Cornell University, New York USA, Ms Rashmi S, Service Management Analyst Team Lead for Order Management at Unisys Global Services and Priyanka S who is administrator at CMR International School, whose support has played a pivotal role in bringing this fest to existence. Your generosity and commitment to education are deeply appreciated.

The Events were held from 11 am to 3 pm. The events held were :

1. Artistic Geometer - Pattern Coding Competition
2. Math-a-Ron
3. Escape Express
4. CodeCrack Carnival - Treasurer Hunt
5. Pep Talk Contest- Lecture Competition
6. Mime Marvels - Dumb Charades with maths
7. Hypothesis Hurdle - Statistical Quiz
8. Colourful Stillness - Poster Making Competition

There were over 150 participants from 6 colleges



Invited talks/ Public lectures: "Virtual Astronomy –Exploring the Universe from your home".

Dr. C. Annal Deva Priya Darshini, Assistant Professor in Mathematics, Associate Coordinator, IQAC Cell, Madras Christian College Chennai. The speaker joined us online and delivered a lecture on "Virtual Astronomy - Exploring the Universe from your home". This talk was held during the inaugural program of Mathanein 2024.





Field trips:

1. The first-year BSc students and the I MSc Mathematics students were taken to the National Institute of Mental Health & Neuro Sciences, Bengaluru. (Mega Science Exhibition) in celebration of Science Day.
2. The final year students III BSc CSMA, PHMA, and ETMA were taken for a pleasure trip and a field trip to Wonderla.

Awards/Achievements:

The BSc students took part in the inter-collegiate fests conducted by St. Joseph's University, Christ University Main Campus, and Yesvantapur Campus. Inter-college Mathematics Fest in Christ (deemed to be university), Bangalore held on 23 January, 2024.

- ASHA - IIIBSC ETMA and KAMALIKA -III BSC CSMA won second Place in Numerical Estates.



Some Beautiful and Funny Memories



Jyoti Nivas College Autonomous
Manthanein
16-02-2024, 11-24
1293358, 77-61723
WJMB+VBE, KHB Colony, Koramangala Industrial Layout,
Koramangala, Bengaluru

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Student editor
Ms. Anu Mathew

ANSWERS

12	+	24	=	36				22
		÷		÷				+
8	-	4	=	4		55		23
×		=		=		÷		=
7		6		9	×	5	=	45
=						=		
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84	÷	12	=	7				13
		=		=				=
		32		63	-	24	=	39

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