# DEPARTMENT OF MATHEMATICS K A H M UNITY WOMEN'S COLLEGE, MANJERI ANNUAL REPORT 2023-2024



Affiliated to the University of Calicut Reaccredited by NAAC at B++ Grade Narukara PO, Manjeri, Malappuram, Kerala, India

## DEPARTMENT OF MATHEMATICS

## Report of Activities of the Year 2023-24

Established in the academic year 1993-1994 as a subsidiary department alongside BSc Chemistry and BSc Computer Science, the Department of Mathematics at KAHM Unity Women's College has witnessed a significant evolution over the years. Initially conceived to offer foundational mathematical education to students in related scientific disciplines, the department played a crucial supportive role. However, a pivotal moment occurred in the academic year 2014-15 when the department underwent a transformative upgrade to a core Undergraduate (UG) Department. This shift marked a milestone, signifying the department's autonomy with a distinct curriculum and academic offerings. As a core UG Department, the focus broadened from being a subsidiary to providing standalone undergraduate programs in Mathematics. This expansion not only empowered students with a comprehensive understanding of the subject but also opened avenues for faculty to engage in research activities, contributing to the academic reputation of the department. Beyond 2014-15, the Department continues to adapt and develop, playing a pivotal role in shaping the academic landscape of the institution and contributing to the broader educational community.

#### **Vision and Mission:**

#### Vision:

- 1. The students will be able to assimilate and appreciate mathematical skill and thereby boosting the learning of applied sciences.
- 2. To help the students to meet the competencies like programming, preparation of algorithms, derivations of results etc in-order to prepare them for higher studies.
- 3. Students can enhance logical thinking through an integrated approach between various branches of science to foster scientific outlook.

#### Mission

- 1. Support and guide students to enhance their mathematical skills.
- 2. Help students to develop problem solving skills and knowledge of the subjects and thereby prepare for higher studies and career opportunities.

### **Faculty Members:**

Sl No.	Name	Designation	PhD
1	Abdul Rof V	Assistant Professor & Head	Doing
2	Ashitha PA	Assistant Professor	Doing
3	Dr. Bajeel PN	Assistant Professor	Completed
4	Farsana M	Assistant Professor on contract	
		(Statistics)	

## Add-on/ short term/ certificate courses (no and name of course, no of students undertaken)

Name of the	Course Code	Year of offering	No. of times the	Duration of
Add			Course offered	course, No of
on/Certificate			during the year	students
Course				enrolled, no. of
				students
				completed.
Introduction to	MATCC001 1	2023-24	1	30 hours
Python				01/01/2024-
Programming				20/03/ 2024
				Enrolled
				students: 32
				Completed:32

## Faculty participation & positions in various bodies for curriculum development and assessment / evaluation (department/ college/ university)

Sl. No	Name	Name of the body in which	Count
		full time teacher participated	
1	Abdul Rof V	Centralized Valuation Camp	4
		UG Project Viva	1
		Question paper setting-	1
		University of Kerala	
2	Ashitha P A	Centralized Valuation Camp	8
		_	
3	Bajeel p N	Centralized Valuation Camp	6
		UG Project Viva	1

## Details of faculty members and students who have completed online certificate courses from various platforms

SL.NO	Name of faculty/students	Names of certificate course	Course offering platform
1	Hiba Nasrin M	Certificate course in yoga	KAHM Unity Women's
			College, Manjeri
2	Fathima S	Certificate course in yoga	KAHM Unity Women's
			College, Manjeri
3	Risla C	Certificate course in yoga	KAHM Unity Women's
			College, Manjeri
4	Mufeedha K	The Entrepreneurship	Impex Foundation
		Development Programme	
5	Mufeedha K	Course on Right to Act 2005	Institute of Management
			in Government

#### **Class PTA- details**

1 Date: 02-11-2023 (5th Sem B.Sc Mathematics)

Number of Parents attended: 11

2. Date: 09-02-2024 (2nd Sem B.Sc Mathematics)

Number of Parents attended: 23

### **Bridge Course- Department of Mathematics**

The Department of Mathematics, in collaboration with the Department Quality Assurance Cell (DQAC), organized a Bridge Course Orientation Programme for the first-semester BSc Mathematics students. The primary aim of the event was to introduce the students to various courses and faculty members of the BSc Mathematics Programme.

The Bridge Course Orientation Programme commenced at 9.30 am with an opening address by Mr. Abdul Rof V, welcoming the first-semester BSc Mathematics students. He emphasized the importance of the course in providing a strong foundation for their academic journey.

The keynote speakers of programme were,

- 1. Mr. Noushad Ali PK Assistant Professor of Arabic
- 2. Dr. Poornima R Assistant Professor of English
- 3. Mr. Haris U Assistant Professor of Computer Science
- 4. Dr. Hikmathulla V Assistant Professor of Malayalam
- 5. Ms. Farsana M Assistant Professor (Ad-hoc) of Statistics
- 6. Dr. Bajeel PN Assistant Professor of Mathematics.

Following the welcome address each faculty member introduced their respective disciplines, providing insights into the different courses of the BSc Mathematics programme.

They outlined the key topics and methodologies of assessment and evaluation that students would encounter during their studies.

Ms. Ashitha PA, as the DQAC Coordinator, explained the role of the DQAC in ensuring academic quality and encouraged students to actively engage with the department's resources.

Throughout the programme, students had the opportunity to interact with the faculty members, ask questions, and gain valuable information to guide them in their academic pursuits. The insights shared by the faculty members will undoubtedly help the students make informed decisions about their academic paths.

#### **Enviornment related activities**

#### **Mathematics of Environment: Poster Presentation**

On the occasion of World Environment Day, Department of Mathematics organized a poster presentation on environmental awareness. The event was held under the auspices of the Department of Mathematics and Mathematics Club, and was highlighted the interconnectedness of the environment and mathematics.

The college Principal, Prof. (Dr) Muhammad Basheer Ummathur, inaugurated the exhibition, which aimed to promote a deeper understanding of the environment through mathematical concepts. The programme was led by the faculty members Ashita PA and Dr. Bajeel N, along with students Fatima, Hiba Jasmin, Fasna, and Najia..

## **Nature Camp**

The Department of Mathematics and the Mathematics and Statistics Club, in collaboration with the NGO Good Earth Organization, hosted a two-day nature camp in Mananthavadi, Wayanad on October 22nd and 23rd, 2023. The camp aimed to nurture a profound understanding and appreciation for nature, wildlife, and environmental conservation. Mr. Tharanath, Beat Forest Officer, South Wayanad, inaugurated the camp, and renowned environmentalist Mr. Hamid Ali, along with Mr. Shaji, Deputy Range Officer, led various informative sessions.

The camp's activities included invigorating trekking to Kuruva Dweep, sky-watching sessions, bird-watching, visits to local tribal settlements, eco-friendly initiatives such as cleaning invasive plants and plastic cleanup, and educational field visits to study forest trees. With 37 enthusiastic BSc Mathematics students participating and the guidance of department head Mr. Abdul Rof V, coordinator Ms. Ashitha PA, and joint coordinator Ms. Farsana M, the camp successfully instilled a deeper connection with nature and a strong sense of environmental responsibility among the attendees.

## No. of Students admitted

Programme name Programme Code		Number of Students admitted	OBC
B.Sc Mathematics	UWCUGMAT	49	43

## Readmission during the tear 2023-24

SL NO	ADMN NO.	NAME	CATEGORY	REJOINED ON	PROGRAMM E	STATE&COU NTRY
1	9677	Ayisha Ferin I	OBC	09/08/20 23	B.Sc Mathematics	KERALA& INDIA
2	9684	Nasha Thondiyil	OBC	09/08/20 23	B.Sc Mathematics	KERALA& INDIA
3	8438	Ummu Habeeba K M	OBC	04/01/20 24	B.Sc Mathematics	KERALA& INDIA
4	8673	Fathima Shahana K	OBC		B.Sc Mathematics	KERALA& INDIA

## Tutorial system - tutors 23-24

SI No	Year	Name of Tutor
1	l year	Abdul Rof V
2	II year	Ashitha P A
3	III year	Dr. Bajeel P N

## Student centric methods/ participative learning/ problem solving / experiential learning methodologies used by the faculty members

### **Weekly Seminar Series**

Department has started a weekly seminar series where students from the 1st, 2nd, and 3rd years are given an opportunity to deliver online classes every Sunday. The seminar series is aimed at promoting research and learning among the students, encouraging them to explore various topics in mathematics and share their findings with their peers.

#### **Weekly Puzzle Competition**

The Department of Mathematics conducts a Weekly Puzzle Competition every Friday . This program is run by first- and second-year BSc Mathematics students, and cash prizes are awarded to the weekly winners.

### Visit to Shashthrayan Open House 2023

On November 17, 2023, the Mathematics Club organized a visit to the Sasthrayan Expo at the University of Calicut with 33 first-semester BSc Mathematics students. The students explored the Departments of Mathematics, Statistics, and Computer Science, delving into interactive sessions and exhibits that showcased practical applications of mathematical concepts. A visit to the Botanical Garden provided an interdisciplinary perspective on the relationship between mathematics and botanical studies. The expo successfully enriched the students' academic experience, fostering a deeper understanding of mathematical principles across various scientific domains.

## **Excursion to Delhi and Agra**

The Department of Mathematics arranged a memorable excursion to Delhi and Agra for the sixth-semester BSc Mathematics students from 12-18 February 2024. The trip aimed to expose students to historical landmarks and cultural experiences relevant to their academic interests.

In Delhi, students visited iconic sites like Qutub Minar, Red Fort, and India Gate, while in Agra, they marveled at the breathtaking beauty of the Taj Mahal. This journey provided valuable insights into India's history and heritage, fostering a deeper appreciation among the students.

#### Programs for slow learners and advanced learners

## Future Focus: A Career Workshop for Advanced Learners of Mathematics Majors

On January 25, 2024, at 1:10 PM, the Mathematics Department hosted "Future Focus," a specialized career workshop for advanced learners. Dr. Muhammed Basheer Ummathur, the college Principal, inaugurated the event.

The workshop featured two distinguished speakers. Dr. Anoop Nair, Assistant Professor in the Department of Mathematics, initiated the discussions with a session on

"Mathematics as the Language of the Future." He insisted on the scope of interdisciplinary applications of mathematics and its pivotal role in shaping the future landscape.

Following this, Aarathi Nambiar from Mathlab Cochin shared insights on "Career Opportunities & Higher Studies in Mathematics." Her session provided students with a comprehensive understanding of the diverse avenues available within the field.

Key figures, including Dr. Shahina Mol A.K, the IQAC coordinator, and Dr. Bajeel PN, enriched the event, emphasizing the importance of initiatives like these, in enhancing the overall learning experience for advanced learners.

The collaborative effort between the Mathematics Department and IQAC ensured a holistic approach, enriching the learning experience for participants. Interactive sessions allowed students to engage in thoughtful discussions, leaving them informed and inspired about potential career paths and higher education opportunities in mathematics.

## Pass percentage of Student during the year

Program Code	Program Name	Number of students appeared in the final year examination	Number of students passed in final year examination	Percent age
UWCUGMAT	B.Sc Mathematics	42	31	73.81

## Seminar/ webinar/ workshops/ etc. Conducted

## **Workshop on E-Poster Making**

The Department of Mathematics organized a skill development workshop on E-Poster Making exclusively for first-year BSc Mathematics students on September 14, 2023. The event took place at the College Digital Studio and was facilitated by Mr. Shabeer Mon M, who currently serves as the Head of the Department of History.

The primary objective of this workshop was to equip our budding mathematicians with essential skills in designing effective electronic posters. In an age where digital communication is paramount, the ability to create visually appealing and informative e-posters is invaluable for both academic and professional success.

## **Community Outreach Programme**

As a part of the 30th Anniversary of K.A.HM Unity Women's College, the Department of Mathematics set up a mathematics laboratory at Government Vocational Higher Secondary School, Agali, in Attappady by BSc students with financial support from the college Governing Body. About 50% of the students in the GVHSS Agali are from different tribal communities.

N. Shamsuddeen, MLA, inaugurated the laboratory at a function held on 22nd July 2023 Saturday. The mathematics laboratory, meant for high school students, has a variety of charts, working models, and still models. Teachers said that the laboratory would ignite an interest in mathematics among students who were generally averse to that subject.

#### Alumni activities

#### **Inter-departmental Alumni Interaction**

On November 30, 2023, the Mathematics Department conducted an Inter-departmental Alumni Interaction Programme. The speaker was Dr. Poornima R, a distinguished alumna and Assistant Professor of English. Dr. Poornima delivered a presentation titled "Understanding Gender Dynamics in Social Spaces." Her address emphasized the imperative nature of advocating for women's space and rights in society. The session not only captivated the audience but also sparked vibrant discussions among the participating students, fostering a deeper understanding of the intricate dynamics surrounding gender in social contexts.

### **Department of Mathematics Annual Alumni Meeting Report**

On Saturday, January 13, 2024, the Department of Mathematics organized its annual alumni meeting. The event was held in room F101, and it saw active participation from 14 students representing various B.Sc. batches.

Ashitha P A, Assistant Professor and Coordinatorextended a warm welcome to the participants. The Head of the Department of Mathematics presided over the meeting. All department members were present, contributing to the vibrant and engaging atmosphere.

Several alumni from different batches shared their experiences from their time at the College, reminiscing about their academic journey and the impact it has had on their careers. The event concluded with a group photo to commemorate the gathering, capturing the spirit of unity and camaraderie among the alumni and faculty.

The Department of Mathematics looks forward to continuing this tradition of connecting with its alumni and strengthening the bond within the academic community.

## **National Statistics Day Observation**

Department of Mathematics KAHM Unity Women's College Manjeri, jointly with Mathematics and Statistics Club organized a talk on Significance and Applications of Statistics as a part of National Statistics Day observation on 3<sup>rd</sup> July 2023. Dr. Saheeda Riyas, Statistical Investigator, Department of Economics and Statistics Malappuram presented the topic.

She emphasized the importance of statistics in decision-making, policy formulation, and understanding real-world phenomena. Dr. Saheeda Riyas discussed key statistical concepts, tools, and techniques, showcasing their practical application through examples and case studies.

Principal Prof.(Dr.) Muhammed Basheer Ummathur, IQAC Coordinator Dr. AK Shahina Mol, faculty members of the Department, Abdul Rof V, Ashitha PA, Farsana M and student coordinator of Mathematics and Statistics Club, Hiba Sharin addressed the gathering.

## **National Mathematics Day celebration**

On 21st December 2023, the Department of Mathematics, in collaboration with the Mathematics and Statistics Club, hosted a captivating Expo to commemorate National Mathematics Day. This event aimed to make mathematics accessible and enjoyable, featuring participative learning activities and intriguing puzzles.

In the spirit of National Mathematics Day, the Expo facilitated hands-on activities and interactive sessions, fostering active involvement and a deeper understanding of mathematical concepts. The event was led by Ms. Ashitha PA, the Coordinator of the Mathematics and Statistics Club, along with other key contributors such as Ms. Farsana, Ms. Najiya (Association Secretary), Ms. Rifa, and Sadhiya Sherin. Their collective efforts significantly enhanced the success of the Expo.

The Mathematics and Statistics Expo on National Mathematics Day highlighted the department's commitment to creating a positive and interactive learning environment. It successfully celebrated the spirit of mathematics, making the subject accessible, enjoyable, and memorable for all participants.

## **Paper Presentations**

12 students from sixth semester BSc Mathematics presented papers at the International Conference on Recent Trends in Mathematics, Statistics, and Engineering (ICRTMSE), organized by the School of Technology Management and Engineering, SVKM's NMIMS (Deemed-to-be University), Indore, Madhya Pradesh, India. The conference was held in Hybrid Mode on December 22-23, 2023.

The following table presents the details of topic of presentation and collaborations.

Sl No	Topic	Presented by:
1	Exploring Enjoyable Aspects of Strategy Games: A Review of Game Refinement Theory	Mirshana Sherin KT
	Game Remement Theory	
2	Examining the Impact of Roads and Growth Patterns on the	Sibina
	Dynamics of Invasive Plant Species	
3	Examining Energy Efficiency in Beekeeping for Environmental	Asma Nufaila KP
	Sustainability	
4	A Review of Cancer Research Advancements: Mathematical	Rahma Padikkamannil
	Modelling for Treatment Prediction and Personalized Care	
5	Evaluating the Significance of Mathematical Modelling in	Devika S Anand
	Pathogen Biology and Dynamics of Infectious Diseases	
6	Reviewing the interplay between Graph Theory and	Fathima Busthana K
	Computational Geometry; Insights and Applications	
7	Assessing the Role of Mathematical Modelling in Enhancing	Fida
	Crop Yield Predictions	
8	Metformin in Diabetes Management: A Review of	Shahana P V
	Pharmacokinetics, Modelling and Genetic Influences	

9	Reviewing Pulsating Fibonacci Sequences: Complex Patterns	Shafana Liya V P
	and Insights	
10	Promoting Gender Parity in Mathematics: A Review of	Lulu Najiya K P
	Stereotypes and Math Anxiety	
11	Analysing the Diagonal Function in Natural Rhotrix:A	Hasna V
	Comprehensive Review	
12	Optimizing Employee Recruitment: A Prescriptive Analytic	Fathima Fitha T
	Review	

Mr. Abdul Rof V participated in the International Conference on Advances in Applied Probability and Stochastic Processes (ICAAP & SP - 2024) organized by the Department of Mathematics, St. Aloysius College, Elthuruth, Thrissur in association with Indian Society for Probability and Statistics (ISPS) during January 18-20, 2024 and presented the paper titled Queueing Inventory With Normal and Emergency Replenishments.

Jadheera Parveen K, of sixth semester BSc Mathematics attended the MESMAC International Conference edition 8 held at MES Mampad College on 9th, 10th and 11th January 2024 and presented the paper titled Optimizing employee recruitment: A perspective analytics.

Noor Fathima PP, of sixth semester BSc Mathematics attended the MESMAC International Conference edition 8 held at MES Mampad College on 9th, 10th and 11th January 2024 and presented the paper titled Strategic HR Insights: A Review on analytic tools in focus for recruitement and performance studies.

## **Summer camp on Math Coding and AI**

The Department of Mathematics, in collaboration with MathLab Research Cochin, organized a five-day summer camp on Math Coding and AI for girls who completed 7th grade. The camp was held from April 29th to May 3rd, 2024, at K.A.H.M Unity Women's College Campus. The students learned Python programming for AI, the Mathematics behind AI models, and how to code the AI models. They also participated in personality enhancement, yoga, and fitness activities.

Dr. Mohammed Basheer Ummathur, O. Abdul Ali, and Dr. AK Shahina Mol attended the inaugural session. Expertise was provided by Ms. Hanna Mariam (CEO, MathLab SkillRealm), Mr. Muhammed Hashim (CTO, MathLab Skill Realm), Ms. Anjitha Shivakumar (AI and Machine Learning Specialist, MathLab Research), and Dr. Anoop (Project Director, MathLab Research). The event was led by Mr. Abdul Rof V and Dr. Bajeel PN, along with faculty members Ms. Ashitha PA and Ms. Farsana M.

#### **Teachers credentials**

1. Dr. Bajeel P N attended five day online FDP on "Software Tools using Mathematical Computation" at Muthayammal Engineering College (Autonomous), Rasipuram, Tamil Nadu on 05.06.2023 to 09.06.2023 Organized by Department of Computer Science and Engineering & Department of Mathematics.

- 2. Dr. Bajeel P N, Assistant Professor, Department of Mathematics delivered an invited lecture on Linear Algebra and its applications for B.Sc Mathematics students organized by Department of Mathematics, Sir Syed College, Thaliparamba.
- 3. Ms. Ashitha P A, Assistant Professor, Department of Mathematics has participated in the Faculty Induction Programme (Guru Dakshta) conducted by the UGC- Malaviya Mission Teacher Training Centre, University of Calicut from 08.11.2023 to 07.12.2023
- 4. Dr. Bajeel P N, Assistant Professor, Department of Mathematics attended as a Resource Person in the program Career Orientation for B.Sc Mathematics students organized by Department of Mathematics, Govt. Arts and Science College Kondotty on 27-06-2023.
- 5. Mr. Abdul Rof V, Assistant professor of Mathematics inaugurated Mathematics Club of CHSS ADAKKAKUNDU and delivered a talk on opportunities of Mathematics on 24th July 2023.
- 6. As a part of the DST-STUTI Training Program on Computational Studies of Differential Equations: Modelling, Theory, and Simulation, Dr. Bajeel P N delivered a session focusing on "Lingo Software and its Applications." The esteemed National Institute of Technology Calicut hosted this event, which spanned from July 24 to July 30, 2023, and was organized by the Department of Mathematics.
- 7. Dr. Bajeel P N, a faculty member in the Department of Mathematics, attended a UGC sponsored interdisciplinary refresher course Mathematics and Astronomy at the University of Calicut. The programme was conducted by the UGC Human Resource Development Centre and took place from 28th September 2023 to 12th October 2023.
- 8. Mr. Abdul Rof V participated in the one-day webinar organized by the UGC-Malaviya Mission Teacher Training Centre, University of Calicut. The focus of the webinar was on the Curriculum Framework for the Four-Year Undergraduate Programme (FYUGP).
- 9. Dr. Bajeel P N, Assistant Professor, Department of Mathematics attended as a Resource Person in the program "Career in Mathematics" for B.Sc Mathematics organized by Department of Mathematics, Bharata Mata College Thrikkakkara on 02-02-2024.
- 10. Dr. Bajeel P N delivered a talk on "Optimal Reliability Test Plans in Manufacturing Industries" at two day International Conference on New Trends in Mathematics, hosted at Ansar Women's College, Perumpilavu, on March 6th, 2024
- 11. Mr. Abdul Rof V, Assistant Professor, Department of Mathematics has been the Chief Guest for the inaugural session of the Association activities of Department of Mathematics, MES Mampad College (Autonomous) on February 29, 2024. He also gave an invited talk on the topic "Consequences of Uniform Continuity".
- 12. Dr. Bajeel P N delivered a talk on "Optimal Reliability Test Plans in Manufacturing Industries" at two day International Conference on New Trends in Mathematics, hosted at Ansar Women's College, Perumpilavu, on March 6th, 2024
- 13. Ms. Ashitha P A, Assistant Professor, Department of Mathematics participated in the Two -Day Hands on Workshop to Mastering Mathematical Concepts with Python Programming held on September 17-18, 2023 organized by Indian Mathematics Professors Association and Infinity Research & Development Institute, Coimbatore.

#### **Students Achievements**

- 1. The third-semester BSc Mathematics students, Ms. Hiba Jasmin PP and Ms. Haifa KK from our college, have been selected for the prestigious National Online Foundation Course in Mathematics (OFCM) Workshop. This workshop is organized by the Mathematics Training and Talent Search (MTTS) under the National Board of Higher Mathematics and will take place from August 20th to September 2nd, 2023. During this workshop, they will have the opportunity to participate actively in a series of sessions led by distinguished mathematicians. The curriculum will cover a wide range of fundamental mathematical concepts, including algebra, calculus, number theory, geometry, and probability.
- 2. Alfa T, a first-semester BSc Mathematics student, secured the third prize in the caption writing competition organized by the NSS as a part of the Independence Day celebrations.
- 3. Department of Mathematics bagged first position in the freshers day celebrations.
- 4. The Department of Mathematics bagged the first position in the Pookkalam competition.
- 5. Ms. Rinshida M K of third semester BSc Mathematics participated in the Two Day Hands on Workshop to Mastering Mathematical Concepts with Python Programming held on September 17-18, 2023 organized by Indian Mathematics Professors Association and Infinity Research & Development Institute, Coimbatore.
- 6. 13 students from 3<sup>rd</sup> Year BSc Mathematics attended Mathematics Workshop for Undergraduate Students(MWUS) 2023 conducted by NIT pondicherry on 27th September to 1st October 2023.

### **Association Inauguration**

On December 20, 2023, the inauguration of the Mathematics Association at KAHM Unity Women's College, Manjeri, was a significant event marked by intellectual insights and scholarly discussions. Najiya Thasneem, the Association Secretary, warmly welcomed the attendees, initiating the event with enthusiasm.

Mr. Abdul Rof V, the Head of the Department of Mathematics, delivered a noteworthy presidential address, offering valuable perspectives on the role of mathematics in education and its impact on students' academic journeys.

A key highlight of the inauguration was the insightful talk by Mr. Shajeeb PU, Assistant Professor at Govt. Victoria College, Palakkad, titled "Real Line to Complex Plane." His discourse captivated the audience, providing clarity on the intricacies and connections within mathematical concepts.

Dr. Shahina Mol AK, IQAC Coordinator, and Fathima Thasni, the Union Representative, extended felicitations. Ms. Nandana offered vote of thanks to the event.

#### **Association Activities**

- 1. On 6th July 2023, the Mathematics Association organized a quiz competition focused on the "History of Mathematics and Statistics Day." The event was successfully led by Fathima S and Hiba Nasrin M, who ensured its smooth execution and engaging atmosphere. Participants showcased their knowledge and enthusiasm, celebrating the rich legacy of mathematics and statistics in shaping our world.
- 2. The Mathematics Association organized a thought-provoking debate on the topic "Artificial Intelligence (AI) versus Human Intelligence" to explore the impact of advancing AI technologies on human society. The debate followed a structured format with two teams, each presenting their arguments and counterarguments. The participants included members of the Mathematics Association.

The debate stimulated insightful discussions, presenting both sides of the AI vs. Human Intelligence argument. While AI demonstrated its potential in revolutionizing industries and augmenting human capabilities, it became clear that human intelligence remains invaluable in areas that require creativity, ethical considerations, adaptability, and emotional connections.

It was concluded that rather than pitting AI against human intelligence, the focus should be on finding ways to harness the strengths of both, creating synergies that can lead to technological advancements while maintaining the human essence of empathy, morality, and creativity.

The debate left everyone with a deeper understanding of the evolving relationship between artificial intelligence and human intelligence and its implications for society.

3. On 14<sup>th</sup> September 2023, the Mathematics association organized an extempore association activity that was a departure from the usual mathematical themes. Instead, the activity focused on general topics, encouraging students to express their opinions, thoughts, and ideas on a variety of subjects. This event was led by Fathima Rifa.

During the event, students had a limited time to prepare their thoughts before presenting their impromptu speeches or discussions. This challenged them to think on their feet and express their viewpoints clearly and persuasively. It also fostered an environment where diverse perspectives and opinions could be shared and discussed.

4. On the 21st of September 2023, the Mathematics Association hosted an enjoyable event that featured engaging games, including the Cup Challenge and the Number Game "Make a Cube." This event was led by Fathima Rifa, and it provided a delightful and entertaining experience for all participants.

The event provided an opportunity for students to unwind, socialize, and enjoy mathematics in a playful and interactive manner. It fostered a sense of camaraderie among participants and showcased the lighter side of mathematics.

5. The association program of the Department of Mathematics on November 16, 2023, featured a talk by MK Vineetha, Assistant Professor of English, focusing on the theme "Learning and Beyond." Ms. Vineetha commenced her presentation by emphasizing the transformative nature of learning, highlighting its significance not only in academic settings but also in personal and professional growth. She under-scored the idea that education extends beyond textbooks, encompassing critical thinking, adaptability, and lifelong learning. The event was led by

- Association Secretary Najiya Thasneem, along with Sajana and Dhilsha, both from the 3rd BSc Mathematics.
- 6. During the association program on November 23, 2023, Mr. Muhammedali Kanniyan, Senior Clerk at KAHM Unity Women's College, facilitated a comprehensive orientation session on office procedures for the Department of Mathematics students. This session played a pivotal role as a guide, providing students with the confidence to interact with the college office for their various needs.
  - Mr. Kanniyan's insights covered essential procedures, empowering students with the knowledge to navigate the college office efficiently. Addressing aspects from understanding document submission protocols to utilizing communication channels, the session offered a clear pathway for students to confidently approach the college office for assistance or task.