

## **Work Report (2021-22)**

### **The Mathematics Society**

The Mathematics Society is one of the oldest and most active societies in college. We strive to ensure students keep on thriving within the vast forum of Mathematics and are able to channelize their love for the subject.

We hold a range of events from fun Mathematical Treasure Hunts to National Level Workshops on Applied Mathematics, from Seminars and Fellowships to a National Level Annual Fest - Integration which garners an impressive student participation from across India including colleges like IITs, NITs, NLU, SRCC and other such top tier colleges of the country.

The society has had a year of extremely successful events with smooth functioning. Even with the online scenario in the odd semester, the events saw a large turnout and we were able to host the events on a big scale. We shifted to offline mode in the even semester and were able to conduct successful events with active participation from students of our college.

In the odd semester, the first event organized by the society was Mathopolis. This online quiz, in collaboration with the Quiz Club of St. Stephen's College was organized on 5th September 2021. There was a turnout of 400+ participants quizzing on everything to do with Mathematics from Leibniz to Lebesgue, from Galois to Game Theory.

The next event was Bezerka. It was held on 23rd and 24th September 2021. It was open to students from all across India and saw a participation of 1500+ people. In the event, participants were made to solve mathematical puzzles on pop culture along with questions testing their logical and cognitive skills.

In order to make the online year more interesting, we came up with the idea of X-tra innings, an event which brought together cricket and Math enthusiasts from different fields. 200+ students from different institutes across the country participated in the 3-day event conducted from 29th to 31st October. The overall theme of the event was IPL 2021. The preliminary round tested the participants on their mental ability, while further rounds included an auction round where team owners purchased players to create the best teams. Members of the winning team then competed against each other to win the competition.

In the month of December, we got the opportunity to interact with the Alumni during the Alumni Reunion Society Showcase. We talked about the society and its events and their experiences so far and created a database of Alumni interested in Mathematics and its applications.

Our most awaited event, Treasure Hunt was put together on the 21st and 22nd January 2022, and this was the first event for the even semester. It required students to solve puzzles, mathematical riddles etc. to reach their desired destinations. We incorporated a pirates theme to make it more interesting and were able to get a turnout of 800+ students from all over the country.

As a part of UNBOXED, the mental health initiative of St. Stephen's College, the society organised a talk on 18th February 2022. The topic of the talk was Math Phobia and was delivered by our own alumni, the World's fastest human calculator, Neelkantha Bhanu Prakash, from the batch of 2020.

The Professor Nagpaul Fellowship started in the month of October. It is a collaboration between a group of students and a teacher where they work together to produce a research paper on a topic in Mathematics. The fellowship started six years ago and is one of the most prestigious fellowships in college. Over the years, it has nurtured budding researchers in the college. St. Stephen's College is well known for undergraduate research and the Professor Nagpaul Fellowship aims at providing the students with just that. It not only provides mathematically motivated students an opportunity to develop an interest in research, but also provides students who are just intrigued by the subject a chance to nurture their interest. This year the presentations were conducted in offline mode on 19th April 2022. 8 students participated and presented their research on a variety of topics, ranging from Functional Analysis to the Application of differential equations in studying financial markets.

The annual fest of our society, 'Integration' 22 was held from 6th to 8th March consisting of events being conducted both in offline and online modes. Multiple events and competitions were conducted during the course of these 3 days. Guesstimate and Shakh-i-Mat Arena were conducted on 6th March on online platforms seeing participation from students all over the country. Treasure Hunt and SymmetriX were conducted on 7th and 8th March in the college premises in which students from different courses participated enthusiastically. More than 200 students from different colleges across the country participated in different events of the fest.

Under the aegis of IQAC, the Department of Mathematics, together with the Mathematics society collaborated with The Mathematics Society of Bulacan State University, Philippines to organise a 2-day online International Symposium on the topic 'Real-Life Applications of Mathematical Concepts' on 22nd and 23rd April 2022. The symposium was conducted on zoom and was open for undergraduate students from all over the world. It was screened in the college seminar room for Stephanians. 180 students attended the Symposium in the online as well as offline mode. We invited Asst. Prof. Harris Dela Cruz (Bulacan State University, Philippines), Prof. Siva Athreya (ISI Bangalore), Dr. A. Satyanarana Reddy (Shiv Nadar University), and Dr. Abhijeet Chandra (IIT Kharagpur) to share their expertise and knowledge with the students.

Our editorial board, When Epsilon Met Delta, released monthly newsletters throughout the year, which included various sections on different developments as well as interesting applications of the field of Mathematics. A special edition of the newsletter was released in August under Azadi ka Amrut Mahotsav, which focussed on Mathematics in India. Our social media handles were kept active through periodic posts, stories and online quizzes.

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