Mathelete

Report –AC year 2022-23

Mathematics is the gem among all sciences. It espouses a holistic growth in an individual by building mental discipline, which encourages logical reasoning and mental rigor**.** The domain of engineering is incomplete without the presence of Mathematics. So, the **Department of Applied Science has initiated a Maths Club "Mathelete**" with an objective to stimulate creativity, a spirit of inquiry and a critical attitude with an outlook to solve real time situations.

Various activities conducted by the club during the academic year.

The details are as follows:

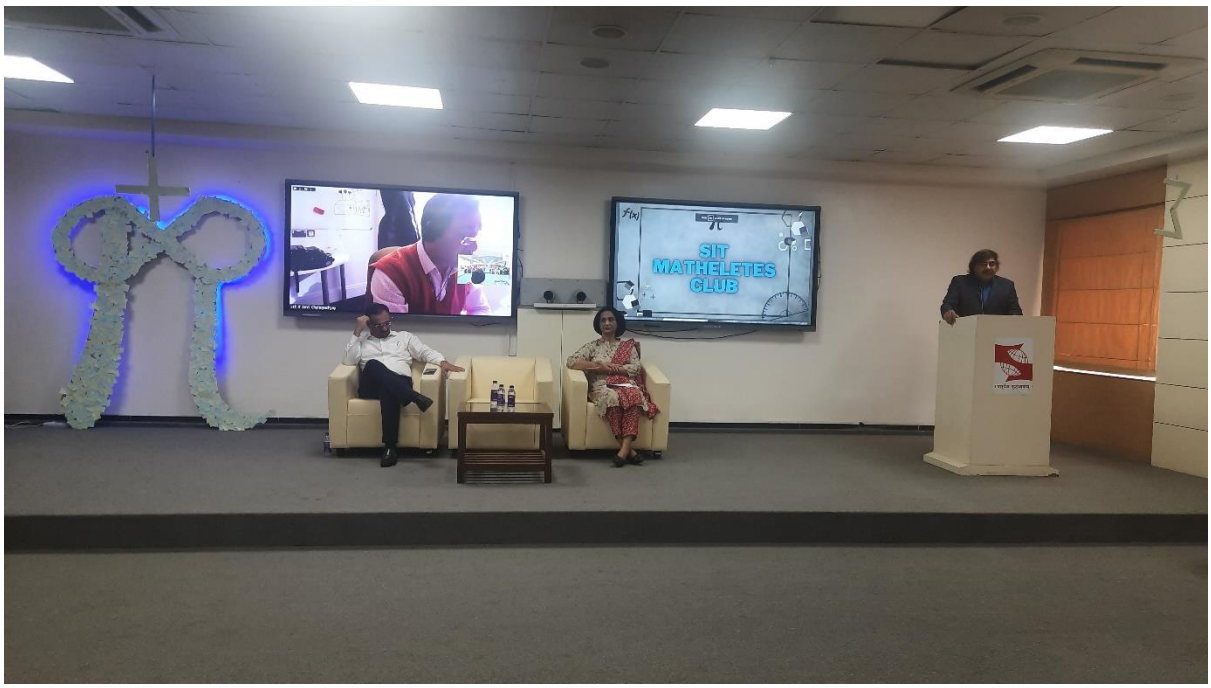
Activity 1.

Opening Ceremony

On 14th March 2023, A **pi Day** is chosen for the inaugural of **Mathelete** – SIT Maths club.

The students of SIT are privileged to have Mr Mahesh Joshi, **Practice Director (IoT Solutions & Services) Birla Soft** and Dr. Amit Chattopadhyay, Research

and teaching, Department of Mathematics, Aston University, Birmingham, UK (Joined virtually), as chief guest of the function.



The Inaugural started with the club head Sanskar Jadhav, gave the insight about the objective of the maths club and importance of the " **pi day**".

Patron of the club Dr. Meena laad, Head of the department, applied science tells the students how important the subject mathematics is for them. She also

introduces the chief guest Mr. Mahesh Joshi and Dr. Amit Chattopadhyay briefly.

Director SIT, Dr. Kotecha congratulate the students and faculty mathematics for the initiation of the club and suggested some further events. In his speech he told the students of AIML about the importance of mathematics in machine learning and artificial intelligence.

Dr. Amit Chattopadhyay, who joined from UK virtually in his speech congratulated everyone for the successful inauguration of the Mathelete Club, and then talked about how math helps to analyse the things around in real world. To demonstrate this, he shared a power point presentation on the statistical analysis of Covid data that was collected during the pandemic. He also showed how mathematics helps in drug analysis which he demonstrated by taking three data models for each drug and strategically correlated them.

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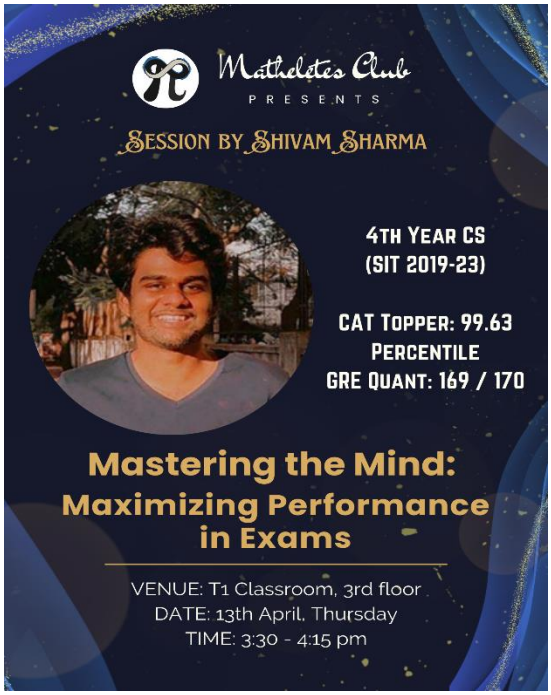
Activity 2.

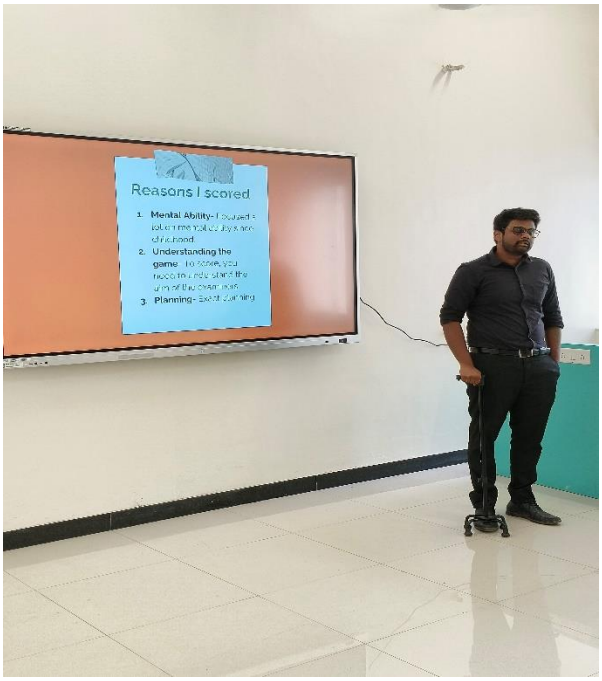


Date: 13th April 2023

Time: 3:30 to 4:45

SIT student of fourth year Shivam Sharma conducted a session on "Mastering the minds: Maximizing performance in Exams"

Shivam explain how one can solve mathematical questions in in a competitive exam.



Activity 3.

Date: 28-29 June 2023

Mathelete Club hosted a picture competition, called “The Picture-Perfect Equations” where the participants were asked to post a picture on Instagram, on the official Mathelete club insta handle (i.e., https://www.instagram.com/matheletes_sit/) capturing the existing mathematical designs that can be seen in nature. The picture can be a photo, a drawing, or a model based on a naturally occurring mathematical phenomenon

The top 2 winners based on likes and comments are Vivek Hotchandani and Vidisha Sharma. The club team’s favourite was won by Dhrubo Bhattacharjee

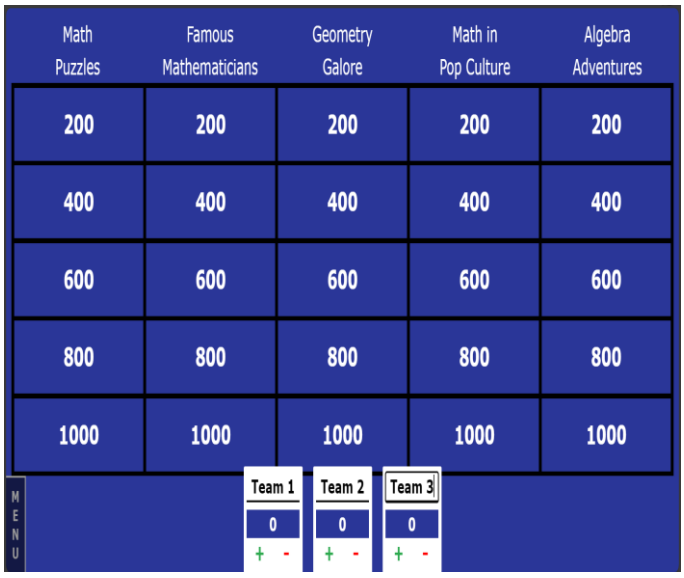
Activity 4.

Tech fest: Mathfest

Date: 20-21 September 2023

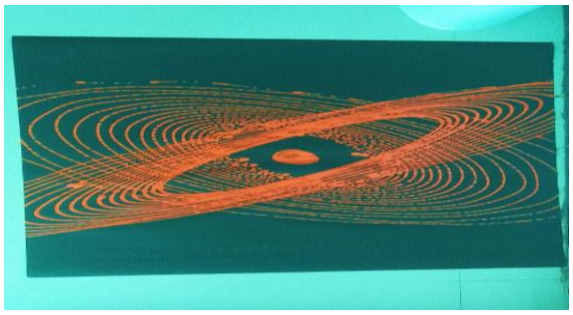
Venue: D-509 and E Wing Common Room (5th floor)

The Mathelete Club held MathFest during the annual SymbiTech ’23 event, which consisted of multiple fun activities including Math Jeopardy, Card games like 21, Bounce It In (ping pong balls and cups), Math Hall of Fame, and Pendulum Art.



Math Jeopardy!

This consisted of a 5x5 board of math questions, each column representing a certain theme with 5 questions ranging from 200 to 1000 points depending on their difficulty.



Pendulum Art

We also set up a pendulum attached to the ceiling using a wire. Below, we placed a cup filled with liquid paint. We kept some chart paper below and after filling the cup, upon letting go, we could create these beautiful artworks that capture the motion of oscillations with new types of spirals. We even performed the art in front of the Bharati Vidyapeeth 9th grade students for them to see.

Fun Games

In the common area, we kept two games: Blackjack (21) and Bounce It in!

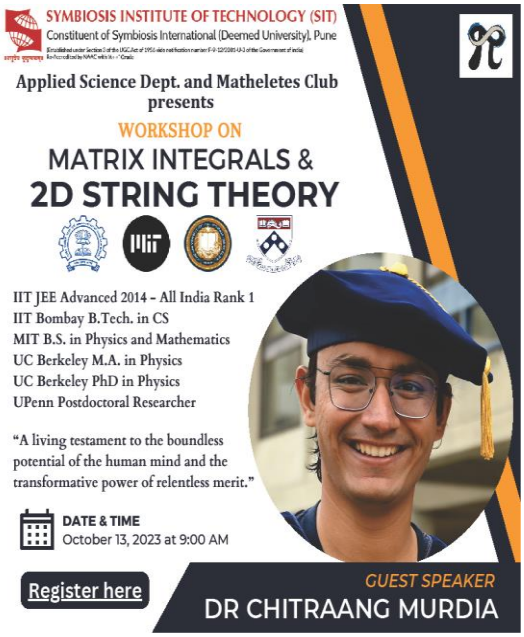
In blackjack, the goal is to have a hand that adds up to 21 or near to 21 but not above it. Face cards (J,Q,K) are worth 10 and the ace (A) can either be 1 or 11.

In Bounce it in, participants were given a few ping pong balls and on the other end of the table, cups were arranged in a triangle formation. Their goal was to bounce the balls into the cups successfully

Activity 5.

International Guest Lecture

The workshop with Dr. Chitrang Murdia on the topic "**MATRIX INTEGRALS & 2D STRING THEORY"** was conducted by Mathelete club.



First year CS students were privileged to have an extremely talented and accomplished person Dr. Mardia who achieved the pinnacle of success at an early age by securing the coveted All India Rank 1 in the JEE Advanced examination 2014 and a seat in IIT Mumbai CS. He completed B.S in Physics and Mathematics from prestigious Massachusetts Institute of Technology (MIT), USA and M.S from UC Berkeley owing to his passion in Science.