## Saraswati IKS Center, Shyam Lal College with IQAC

## Organize

## a Workshop on

## Topic: Concept of Algebra and Geometry by Lilavati

The workshop on the concept of Algebra and Geometry, inspired by the pioneering work of Lilavati, commenced with an aim to elucidate the fundamental principles of these mathematical disciplines and their practical applications. Shyam Lal College in collaboration with IQAC organized a workshop on "Concept of Algebra and Geometry by Lilavati" on 6<sup>th</sup> January, 2023. 69 students attended this workshop. Mr. Tejas Rajendra Kulkarni was the resource person in this workshop.

Tejas ji started with the introduction that "Lilavati" is a famous mathematical treatise written by the Indian mathematician Bhaskara II in the 12th century. It covers various mathematical topics, including algebra and geometry.

Next the workshop delved into the core concepts of Algebra, emphasizing its relevance in solving real-world problems. Participants were introduced to Lilavati's techniques for solving equations and manipulating expressions. Students gained insights into algebraic operations such as addition, subtraction, multiplication, and division.

Next the resource person focused on Geometry, elucidating geometric shapes, properties, and theorems. Lilavati's contributions to geometric principles were highlighted, including her pioneering work in solving geometric puzzles. Next focus of the discussion was to bridge the gap between Algebra and Geometry, showcasing how these two disciplines intertwine to solve complex mathematical problems. Lilavati's innovative methods for integrating algebraic and geometric principles were elucidated, empowering students to approach mathematical challenges with a holistic perspective.

The workshop concluded with a renewed appreciation for the profound contributions of Lilavati to the fields of Algebra and Geometry. Students expressed gratitude for the opportunity to deepen their understanding of these mathematical concepts and left with enhanced problem-solving skills and a newfound enthusiasm for mathematics. Overall, the workshop discussed the legacy of Lilavati, whose timeless wisdom continues to inspire generations of mathematicians worldwide.