

Welcome to the Mathematical Summer Workshop 2K24

“Mathematics is not about numbers, equations, computation, or algorithms, it is about understanding.”

-William Paul Thurston

Dive into the fascinating world of mathematics this summer with our intensive and enriching workshop designed for budding mathematics at all levels. Whether you are a high school student with a passion for problem – solving or a college undergrad looking to deepen your understanding, our program offers something for everyone.

Workshop Highlights:

- **Expert Lectures:** Learn from leading mathematicians and experienced educators who will guide you through advanced concepts and innovative techniques.
- **Interactive Sessions:** Engage in hands-on activities and collaborative projects that make learning math both fun and impactful.
- **Specialized Tracks:** Learn from a variety of focus areas including algebra, calculus, geometry, statistics, and applied mathematics.

➤ **Problem-Solving**

Challenges: Test your skills and creativity with daily math puzzles and competitions designed to sharpen your analytical thinking.

- **Career Guidance:** Gain insights into potential career paths in mathematics, academia, and industry from professionals in the field.

Join us for a summer filled with discovery, growth, and inspiration. Enhance your mathematical skills, make new friends, and explore the endless possibilities that mathematics offer. We look forward to seeing you there!

Duration of the Program: Mathematical Summer Workshop will begin from 11th June, 2024 and it will be concluded on 22nd June, 2024.

Speciality of program: Even if you find math challenging, this summer workshop will help you shine and discover the joy of understanding mathematics! After the period of 2 weeks of rigorous practice, you will see a great change in your analytical thinking.

NOTE: The summer workshop is totally dedicated to Abstract Algebra, Linear Algebra, Calculus and some sort of Analysis.

Faculty involved in this program:

1. Prof. S. A. Katre
2. Prof. V. V. Acharya
3. Prof. Hrishikesh Khaladkar

Co-ordinators:

1. Prof. N. M. Phatangare
2. Akshay Vishwakarma

What we will actually do?

On the very first day, we will confirm the registration process. We will have our first lecture from 10 am to 11:30am. Followed by 30 minutes break (try to make your connections in this period with your peers and teachers). Second lecture will begin from 12 pm and end at 1:30 pm. 1 hour lunch break. We will then begin Problem Solving Session-I from 2:30 pm to 3:30 pm and Problem Solving Session-II from 4 pm to 5 pm. Yes, we do agree at some point of time you would not be able to cope with lectures, even though lectures would be interesting and would be taught in easier manner, but time would be your constraint. But as one said, *“Through rigorous work and dedication, we unlock the true power of mathematics and achieve our greatest potential.”*

Venue: Bhaskaracharya Pratishtan, 56/14, Off Law College Road, Damle Road, Erandwane, Pune, Maharashtra – 411004

Registration Fee: A nominal charge of ₹500. Accommodation for few students will be provided with nominal charges. Students having difficulty in paying registration fee can contact Prof. N. M. Phatangare.

Registration Link:

<https://forms.gle/cLA8mzRPFd9KhF5Z6>

Intended Audience: First year and second year B.Sc / B.A. mathematics student. Students from other equivalent courses are most welcome.

We will have a diagnostic test on the first and the very last date, to observe the changes in the pupil.

Topics we would like to cover:

Vector Spaces, Linear Transformation, Isomorphisms, Diagonalizability, Jordan Canonical form, Basic group theory, Homomorphisms of group, group action, Automorphism, Class Equation, Sequence and series, Limit, Continuity, Differentiation, etc.

Have a note of it: We would be conducting exam on the last day, students qualified in the exam will be certified with the grade by Bhaskaracharya Pratishtan.