

At Akola **SAFE HANDS** is organizing a camp for RMO which will be conducted by **Aditya Arun Raut** The fee structure will be

- Rs 500/- for student participant selected through RMO Exam conducted on 7th May
- All other students/ teachers will have to pay 1000/- The study material and relevant short notes are included in fees.

The tentative time table of camp is for students of 9th and 10th

Lecture	Short gap G-1	Work out
12:00 to 1:30 PM	1:30 to 1:45 PM	1:45 to 3:00 self-workout

The tentative time table of camp is for students of 11th

Work out	Short gap G-1	Lecture
12:15 to 1:30 PM	1:30 to 1:45 PM	1:45 to 3:15 self-workout

Attached list of topics, sub topics and pre requirements needed for the RMO there is no condition nor expectation that the entire part will be done in camp. The camp will start from Tuesday 9th May 2017 will be till 19 May 2017. Who is **Aditya Arun Raut** who is conducting the workshop.

- He is the one who was preparing for Olympiad from his 9th
- Who got selected for RMO while doing his 10th
- Who got 98.8 % in SSC, and topper from boys
- Who was selected for International Mathematical Olympiad Training Camp (IMOTC),
- He was first student of Akola to get selected for camp.
- He was selected for Asian Pacific Mathematics Olympiad (APMO) got silver medal
- He was ranked 18th in very prestigious exam called as NMTTC (**National Mathematics Talent Context**) which is organized by AMTI (**Association of Mathematics Teachers of India**).
- He is the one who got his admission for IIT for B.Tech. But joined CMI for B.Sc.
- Was having wonderful performance at first year at CMI hence was selected for **Asian Science Camp** and will be held at the institute **UTAR, Malaysia**.
- He will guide for RMO - elementary mathematics - problem solving techniques - methods to use information as tool to solve problem & this will help you to prepare for mathematics Olympiad but what this Olympiad is ?

What is Mathematics Olympiad?

The **International Mathematical Olympiad (IMO)** is an annual six-problem, 42 point **mathematical Olympiad** for pre-collegiate students and is the oldest of the **International Science Olympiads**. The first IMO was held in **Romania** in 1959. It has since been held annually. The Olympiad has developed a rich legacy and has established itself as the pinnacle of mathematical competition between high school students.

The content ranges from extremely difficult pre calculus problems to problems on branches of mathematics not conventionally covered at school and often not at university level either, such as **projective** and complex geometry, functional equations and well-grounded number theory, of which extensive knowledge of theorems is required.

Calculus, though allowed in solutions, is never required; as there is a principle at play that anyone with a basic understanding of mathematics should understand the problems, even if the solutions require a great deal more knowledge. Supporters of this principle claim that this allows more universality and creates an incentive to find elegant, deceptively simple-looking problems which nevertheless require a certain level of ingenuity.

In January 2011, Google gifted \$1 million to International Mathematical Olympiad organization. The donation will help the organization cover the costs of the next five global events (2011-2015).

The syllabus for mathematics Olympiad (regional, national and international) is pre-degree college mathematics. The areas covered are, **arithmetic of integers, geometry, quadratic equations and expressions, trigonometry, co-ordinate geometry, systems of linear equations, permutations and combinations, factorization of polynomials, inequalities, elementary combinatorics, probability theory and number theory, finite series and complex numbers and elementary graph theory.** The syllabus does not include Calculus and Statistics. The major areas from which problems are given are number theory, geometry, algebra and combinatorics. The syllabus is in a sense spread over Class IX to Class XII levels, but the problems under each topic are of exceptionally high level in difficulty and sophistication. The difficulty level increases from RMO to INMO to IMO.

The Mathematics Olympiad Program in India leading to participation in the International Mathematics Olympiad is organized by the Homi Bhabha Centre for Science Education (HBCSE) on behalf of the National Board of Higher Mathematics (NBHM) of the Department of Atomic Energy (DAE)

The INMO examination is conducted by the [MO Cell](#) in February of every year. School students of any class first need to write the Regional Mathematical Olympiad of their respective state or region, usually held sometime between October and December of the previous year. Around thirty students are selected from each region, to write the INMO. Among these 400 or more students, a total of around thirty qualify the INMO. The qualifying students are invited to a one month mathematics camp at the Homi Bhabha Center for Science Education in [Mumbai](#). In this camp, the students are taught Olympiad mathematics and some other general mathematics. Five selection tests are held during this period and the top six students in the selection tests qualify to represent India in the [International Mathematical Olympiad](#)

What does student gain? : Joy of mathematics...!!!! And in addition -

- Students qualifying the INMO are automatically eligible for admission to the B.Sc. (Honors) Mathematics course in the [Chennai Mathematical Institute](#).
- From 2008, INMO awardees applying for B. Stat or B. Math courses of the **Indian Statistical Institute** will be directly called for the interview without going through the written test.
- INMO awardees are also eligible for an NBHM scholarship that currently stands at about **Rs. 2500 per month**, if they continue their studies in mathematics. They are also offered a 4-year program of training in Mathematics through correspondence and periodic contact with a chosen faculty. The program is also available to INMO awardees that do not pursue an undergraduate degree in Mathematics but have special interest in the subject. They are offered an annual **cash award of Rs. 9,000** subject to satisfactory performance in the program.
- Students who make it to the IMO are eligible for the prestigious Kishore Vaigyanik Protsahan Yojana (**KVPY**) fellowship provided they pursue their studies in the science subjects in India. The fellowship amount stands at **Rs. 4000 per month**.
- Indian team members who receive a gold, silver or bronze at IMO are given cash awards by the NBHM of Rs.5,000, Rs.4,000 and Rs.3,000 respectively. In recent years, they have also been felicitated by the Infosys foundation.
- All travel expenses for the IMO Training Camp and all expenses for the **IMO** are borne by the Government of India Homi Bhabha Centre for Science Education offers **no** career incentives (admissions or scholarships) to Olympiad students. **HBCSE views the Olympiads as mainly a promotional program to encourage students towards basic sciences** by providing them with challenging academic opportunities. However, some special merit awards, in the form of books, etc. are given to students in appreciation of merit at the end of the training camps in different subjects of science.
- **How to prepare for Mathematics Olympiad:** A student even of IX can prepare for mathematics Olympiad, keen interest in mathematics is essential, you must be inquisitive and you must have an urge to know the basic behind everything you come across. Along with these **psychological requirements** you also should have some **academic inputs** as basics of geometry with elementary proofs, constructions, properties of and operations on numbers and polynomials, laws of algebra, properties of geometrical figures and top of all **you must be able to enjoy solving problems of mathematics to get joy out of it NOT JUST MARKS.**