



**FREQUENTLY
ASKED
QUESTIONS**



**REGIONAL MATHEMATICS OLYMPIAD
ONLINE TRAINING PROGRAM 2021-22**

a year-long program for students seeking to ace in RMO

RMO OTP 21-22

FAQ

What is RMO?

Answer: Regional Mathematics Olympiad is one of the most challenging Math exams meant for students of 8th to 12th grade in India. It is the second stage in the Olympiad Program (the first stage is pre-RMO) undertaken by the National Board for Higher Mathematics (NBHM) organised by Homi Bhabha Centre for Science Education (HBCSE).

My child is already doing Olympiad exams in school. Is this the same?

Answer: There are similar too many (so-called) Olympiads that are conducted in India under the name of International Olympiads. If you are aiming for those kinds of exams, then RMO OTP might not be the right program that you may want to consider. This is in preparation for the International Math Olympiad exams which is a reputed and top-notch contest for students passionate about Mathematics.

What are the different stages in the Olympiad program by HBCSE?

Answer: First stage is Pre-RMO which is a test with 30 questions where answers have to be worked out and marked in an OMR sheet within a time frame of 2½ hours. Students who pass this stage qualify for the second stage, RMO, where there are 6 descriptive questions to be solved in a span of 3 hours. Students who clear RMO get selected for Indian National Mathematics Olympiad (INMO) which has 6 questions to be solved in 4 hours. Students who successfully pass INMO automatically qualify for an interview to be selected in one of the best bachelor's programs in Indian Statistical Institute and Chennai Mathematical Institute (This means, if they are clear in doing Computer Science, Statistics, Mathematics or Theoretical Physics, they don't have to go through rigorous training programs like JEE coaching and focus on doing other courses upto their 12th grade).

FAQ

About 35 best students from INMO are selected for a residential training program in April and May called **IMO TC** at HBCSE. Towards the end of this camp, 6 students are selected who get a chance to represent India at the International Mathematics Olympiad (**IMO**).

Note that the above structure was slightly changed for the last exam. For details, please visit the website of HBCSE.

Will there be special coaching for students selected for INMO?

Answer: We have a separate course called Advance Olympiad Training Program (AOTP). Students who qualify for INMO, usually continue with that program from June/July until December/January.

What is unique about the RAM's RMO program?

Answer: The unique feature about the RMO program that RAM does is the distinguished experienced faculty under whose guidance many students have excelled in Olympiads and many others have been in successful careers in pure and applied Mathematics.

What is the targeted skill level of the students?

Answer: This is a difficult question to answer. That is why there will be a qualifying test (as mentioned in the brochure). Based on how the students perform in the test, they will be selected for the program. Students of 8th grade (and exceptional students of 7th grade) who are able to solve Math problems of the level of 8th and 9th grade benefit from the course. However, selection for the program doesn't guarantee that the student will find the course easy. To excel, students are expected to put in self-effort and solve problems beyond what is taught in the class and given as homework. Only then can they grasp the content as they progress.

FAQ

What exactly does the programme hope to achieve?

Answer: The goal of the program is to build a strong foundation of areas of mathematics like Number Theory, Combinatorics, Geometry and Algebra in students who are bright and would like to go outside the school curriculum to explore and learn more in mathematics.

Will the school math curriculum be covered?

Answer: Some of the basic theorems discussed in high school would be discussed in the sessions but most of the content of high school will be expected to be known by the student.

What is the need of doing Mathematics outside the school curriculum? Aren't areas like algebra and geometry covered in school syllabus?

Answer: The school curriculum aims to achieve Mathematics skills that everyone should have. RMO aims to achieve Mathematical skills for those who find curriculum a cake-walk and have an appetite to do more challenging problems in Math.

How much work is expected of the student?

Answer: The students will be given assignments after every session. They would be expected to give their best on the assignments. Some of the problems might take days, weeks or even more than a month to arrive at the answer. Some, even beyond that. That is not because the student is weak but rather the problems are quite challenging. Solutions may not be presented easily because the aim is not to look at a solution but to struggle to find a solution. Through the process, students will learn to deal with frustration and develop patience and perseverance to deal with problems.

FAQ

What are the advantages of preparing for the RMO?

Answer: Students who are passionate about Mathematics get early exposure to various topics in Mathematics that can help them understand what lies in store if they wish to pursue a course in Mathematics.

Do colleges in India and abroad give preference to students who have participated in the Olympiads?

Answer: Institutes like Chennai Mathematical Institute (CMI) and Indian Statistical Institute (ISI) in India do give a preference for students who do well in INMO. While applying to colleges outside India, the ranks in RMO or INMO are good ways to signal one's ability in Mathematics.

What days/time is the class?

Answer: Wednesdays 8:00 to 9:30 pm and Fridays 5:30 to 7:00 pm. The timings may be extended as the course progresses and the days of the week can change if there are some constraints (but that is very unlikely). There may be extra sessions that happen after some months over and above the regular ones of twice a week.

How will the live sessions be conducted?

Answer: The sessions will be conducted on the online platform - Zoom.

Can classes be rescheduled in case of an emergency at the students' end?

Answer: This won't be possible because it won't be a one-on-one session. All sessions will be recorded and uploaded online so that students can go through the recording if they miss any session.

FAQ

If my child misses a class, how can he/she catch up?

Answer: They can catch up with the recordings.

Will there be doubt clarifying sessions?

Answer: *Office hours* (doubts clearing sessions) will be planned periodically as and when there is a need from students.

Will there be regular assignments and/or mock exams? If so, what are the logistics?

Answer: There will be regular assignments that are in some sense mock tests. They will have to do a self-grading for themselves.

Will my child get personal attention?

Answer: No. Being an online session with a group of students, it won't be possible to give personalised attention. However, their queries will be resolved during the sessions

Can my child do a trial class as he/she is not very sure if the class is a good fit?

Answer: The faculty are quite experienced and hence we don't think that a trial class might be necessary to check the teaching methodology. Moreover, it may take a few sessions for a student to get a hang of the topic. Hence, we find doing a trial session does not help in any way and for the same reason and that's why we don't offer any trial classes.

FAQ

What will be the qualification of the faculty?

Answer: More than qualification, what matters more in Olympiad coaching is how experienced the faculty is in Olympiad training. We have three main faculty whose profile is shared at the bottom of this document.

What is the mode of payment?

Answer: Online. Once you are selected, you need to make the payment through the payment gateway that will be provided to your account that you will create on <https://app.raisingamathematician.com/login> when you register. Payments will be non-refundable.

If I don't attend a lecture or a few lectures, do I have to pay for it?

Answer: Yes.

Is there any provision to withdraw in between? Will I get a refund if I do?

Answer: You may choose to discontinue in between but no refund will be possible for any dropouts.

What is the course fee?

Answer: INR 15,000 per year. Need-based scholarships are available.

Is there a monthly instalment plan?

Answer: No. The entire fee has to be upfront before joining the program. Those who may have any financial constraints in doing so may write to us.

FAQ

Should my child apply for the exams through school or can they represent the institute?

Answer: You can apply directly and don't have to do it through your school or our institute. For more details, visit [MTA \(I\) – MATHEMATICS TEACHERS' ASSOCIATION \(INDIA\)](#).

What are the application deadlines for RMO 2021-22?

Answer: The dates are not yet announced for 2021-22. Keep checking for the updates [MTA \(I\) – MATHEMATICS TEACHERS' ASSOCIATION \(INDIA\)](#).

FACULTY PROFILE



Dr. S Muralidharan obtained his Ph D in Mathematics from TIFR. Dr S Muralidharan has had the distinction of not only being at the helm of technology with his work in the private sector but has also pursued his passion for academia. He has written more than 70 articles on Mathematics in various journals. He has published 4 books, the latest one titled Combinatorics for Mathematical Olympiads was released in January 2019. He is the Chief Examination Coordinator for PRMO conducted by MTA(I). He is actively involved with the Mathematics Olympiad program of AMTI for several years.

At TCS he worked on Algorithms and Data Science and headed the Decision Sciences and Algorithms Lab and retired on 30th Oct 2019. He has published four books

1. Triangles - Construction and Inequalities
2. Gems from the Mathematics Teacher
3. Recursion Sequences
4. Combinatorics for Mathematical Olympiads

Several of his solutions have appeared in the Canadian problem journal *Crux Mathematicorum*.

His article 'The Fifteen Puzzle - A New Approach' appeared in the journal *The Mathematics Magazine* published by the Mathematical Association of America.

His only hobby and passion is Mathematics!

FACULTY PROFILE



Shriprasad Tambe did his MSc in Mathematics from IIT Bombay in 1992. He has been in the field of Mathematics education since his early days. He teaches students from middle school up to postgraduate students. Many of his students have gone ahead and pursued a career in pure and applied Mathematics. Mr Tambe is a well sought out after faculty at the National level for Olympiads, Madhava competition for undergraduate students

(<http://www.madhavacompetition.com/>), for IIT JAM and is a resource person for Raising a Mathematician Training Program (a week-long program for high school students passionate about Mathematics).

Apart from Mathematics, Shriprasad loves to read, trek, and listen to classical music. He writes poems and articles in Marathi magazines and has written docudramas on mathematicians for radio. He is part of the writing team for the Kutuhal column in the popular Marathi newspaper Lok Satta in 2021.

FACULTY PROFILE



Bhas Bhamre is the founder of Bhas Bhamre Academy in Nasik where he works with middle and high school students to build strong foundations of Mathematics especially areas pertaining to Olympiads. He is a Geometer and has transferred the love for geometry and other areas onto many of his students. He too is a sought out faculty for Olympiads at the National level. He is an Executive Council member of Raising a Mathematician Foundation and a life member of the Association of Mathematics Teachers of India and Mathematics Teachers Association (India). He is part of Maharashtra Ganit Adhyapak Mandal in Nasik where they conduct two examinations for middle school students - Pradnya and Pravinya.

Apart from Mathematics, he loves to travel and trek. He is an avid lover of music and used to be a professional tabla player. He is well known in his circles for his wit and the loud whistle he blows in the class.