

Dear Student,

Greetings from DPS Greater Noida!

To identify and encourage students who have the capacity for original and creative thinking, willingness to attempt unfamiliar and non-routine problems, exhibiting a general mathematical ability appropriate to their level, The AMTI(The Association for Mathematics Teachers of India), is conducting National Mathematics Talent Contest(NMTC).

Students can participate as the following categories:

Primary	Gauss Contest	V and VI Standard
Sub Junior	Kaprekar Contest	VII and VIII Standard
Junior	Bhaskara Contest	IX and X Standards
Inter	Ramanujan Contest	XI and XII Standards

Details of the Contest:

<i>Sr. No</i>	<i>Parameters</i>	<i>Dates/Schedule</i>
1	Exam Date	Stage 1: Preliminary Test on October 15, 2022 Stage 2: Final Test on January 7, 2023 Note: Only top 10% students from stage 1 will qualify for stage 2.
2	Declaration of Result	Stage 1: November 25, 2022 Stage 2: By the end of April 2023.
3	Mode of conduct	Offline
4	Type of Exam	<ul style="list-style-type: none">❖ Preliminary test will be a two hours exam of objective type comprising of multiple choice, fill in the blanks etc. <hr/> <ul style="list-style-type: none">• 20% of the questions that are of moderate level , 80% of questions with <u>higher level of difficulty, somewhat similar to Olympiad.</u>

		❖ Final Test will be of 3 hours duration of subjective type reflecting the syllabi of PRMO, RMO, INMO and IMO.
5	Enrollment Fee per Subject	Rs 150/-
6	Last Date of Registration	12 th September 2022, Monday.
7	Syllabus	<p><u>Primary Level:</u></p> <p>i) ARITHMETIC: Fractions, percentages, profit and loss, tests of divisibility, LCM, HCF, Ratio and proportion, Calendar</p> <p>ii) MENSURATION: Triangles, Quadrilaterals, Circles.</p> <p>iii) ALGEBRA: Algebra as literal Arithmetic, Addition, subtraction, multiplication and division of simple Arithmetic expressions.</p> <p>iv) GEOMETRY: Straight lines, parallel lines, Angle properties of triangles, quadrilaterals and polygons.</p> <hr/> <p><u>SUB JUNIOR:</u></p> <p>i) All the topics for primary and,</p> <p>ii) ARITHMETIC: Square roots and cube roots, Allegation, average, time and work, time and distance, Races, Games of skill, Travelling around a circle.</p> <p>iii) MENSURATION: Three Dimensional: cubes, cuboids, sphere, cone, cylinder, pyramids. ALGEBRA: Algebraic equations of degree 1 and degree 2. Algebraic identities, factorization of algebraic expressions, laws of indices, basics of surds.</p> <p>iv) GEOMETRY: Triangle inequalities, parallelograms, trapezoids, Pythagoras theorem. NUMBER THEORY: Prime and composite numbers, divisibility. [Note: Apart from these, the children shall practise to solve logical questions in basic mathematics].</p>

		<p>JUNIOR:</p> <hr/> <ul style="list-style-type: none"> i) All the topics for Primary, Sub junior and the following: ii) ALGEBRA: Quadratic and Higher degree Algebraic equations, Remainder theorem, Logarithms, Sequences and series, Scales of notations, Mathematical Induction, Basic inequalities. iii) GEOMETRY: Circle theorems, Chords, Arcs, Angles in segments, Cyclic Quadrilaterals, Tangents, Alternate Segment theorem, intersecting chord theorem, Apollonius theorem, and Stewart's theorem. iv) NUMBER THEORY: Modular arithmetic, Greatest Integer function, least integer functions. COMBINATORICS: Fundamental principle of counting, Basics of permutations and combinations, Principle of inclusion and exclusion, Pigeon hole principle. <hr/> <p>INTER:</p> <hr/> <ul style="list-style-type: none"> i) All the topics for Primary, Sub Junior, Junior and the following: ii) ALGEBRA: Polynomials, inequalities, (C-S inequality), Functional equations. iii) GEOMETRY: Trigonometric, vector, Coordinate Geometric and Complex number methods may be used. iv) NUMBER THEORY: Fermat and Wilson theorem, Diophantine equations. COMBINATORI <hr/>
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Wishing you "All the Best" for all your endeavors.

If interested kindly collect the consent form your respective Mathematics Teacher latest by September 5, 2022.