TRIPURA MATHEMATICAL SOCIETY

In collaboration with

Tripura State Council For Science & Technology

APPLICATION FORM For Junior Mathematical Olympiad - 2024

(for the students studying in Class - VIII)

1. Name of the candidate (in BLOCK letters) SRI/SMT ....

    ....

2. a) Name of the Father**:**...

    b) Name of the Mother**:**..

3. Residential Address**.**...

    .... Ph. No...........................

4. Name of the School/Institution with Address ....

    ....

5. Class-VIII   6. Date of Birth **.....................................**

7. Sex : M/F   8. Medium : Bengali / English

Counter Signature of the Head of the
School / Institution with seal
candidate

Full Signature of the

JMO Roll....................................... No...............................

For office only

<u>A D M I T</u>

Roll.......................... No. ....

Sri/Smt. ....

* (Name of the candidate)

of**.**..

* (Name of the institution)

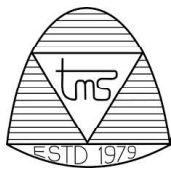at the **Junior Mathematical Olympiad 2024 to** be held **on 10th November, 2024 from 12 Noon to 2 PM.**

Name of the Sub-Division	Centre : Name of the School / Institution

Date_____

General Secretary (TMS) / Centre-in-charge,
Sub-Division/Nagar Panchayats,
JUNIOR MATHEMATICAL OLYMPIAD -2024

* To be filled in by the Candidate

TRIPURA MATHEMATICAL SOCIETY

In collaboration with

TRIPURA STATE COUNCIL FOR SCIENCE & TECHNOLOGY

Website : www.tmsagartala.in

e-mail : tms.agartala@gmail.com

INFORMATION BROCHURE
for JUNIOR MATHEMATICAL OLYMPIAD (JMO-2024)
(for the students studying in Class - VIII)

1. SYLLABUS: **TOTAL MARKS: 60**

A. ARITHMETIC: (1) Rational Numbers : Natural numbers, Prime numbers, Whole numbers, Integers, Rational numbers, Factors of integers, Fraction and Decimals, HCF, LCM of integers and fractions, Simple applications.
(2) Squares and Square roots - application to simple problems.
(3) Cubes and Cube roots.
(4) Comparing Quantities: Ratio & Percentage, Profit & Loss, Cost price, Selling price, VAT, Simple and Compound Interest-Simple applications.
(5) Direct & Inverse proportions.
(6) Playing with numbers: Test of divisibility (3, 5, 7, 8, 9, 10, 11, 13).

B. ALGEBRA : (1) Linear Equation in One Variables: Formation & their solution.
(2) Algebraic Expression and Identities: Use of formulas of the form: $(a+b)^2$, $(a-b)^2$, a^2-b^2, $(a+b+c)^2$, Simple applications.
(3) Exponents and Powers: Laws and applications.
(4) Factorization: Factors of a quardratic expression/$(x+a)(x+b)$, Factorization using identities in (2), Division of algebraic expressions.
(5) Graphs: Bar graph, Pie-chart, Line graph, Histogram and their applications.
(6) Data-handling: Organizing data, Frequency, Tally Mark. Frequency distribution, Class interval. Class mark, Class boundaries.

C. GEOMETRY : (1) Quadrilaterals: Lines and Angles, Classification of Triangles and Quardrilaterals, Trapezium, Kite, Parallelograms, Rectangles, Squares, Rhombus, Regular and irregular Polygons; their properties and applications.
(2) Practical geometry: Applications of the theorems on triangles, Quadrilaterals, Polygons, etc. Construction of triangles, Quardrilaterals with given measures. Construction of angles with a given measure.
(3) Solid Shapes: Cube, Cuboid, Cone, Cylinder, Convex and regular polyhedrons, Prism and Pyramid.
(4) Mensuration -Area, Surface area, Volume of different shapes.
There shall be 27 questions divided into three groups A, B, C.

2. INSTRUCTION : **Group A** shall consist of 12 questions of multiple choice (four) with only one correct answer and carrying two marks each. 1/2 mark will be deducted for incorrect answer.
Group B shall consist of 12 questions carrying 2 marks each and the candidates have to write the answers only.
Group C shall consist of 3 problems carrying 4 marks each. A candidate has to solve the problems in details.

3. EXAMINATION SCHEDULE

    a. Date of the Examination : 10th November, 2024
    b. Duration of the Examination : 2 (two) hours (Time : 12 Noon to 2 PM)
    c. Last date of submission of filled in form : 25th October, 2024
    d. Date of publication of result (all Sub-divisions) : 9th December, 2024

4. AWARDS : First 10 successful candidates of each sub-division will be awarded prizes and certificates at respective Sub-Divisions. First 30 position holders at the State Level will be awarded prizes and certificates of merit at Agartala.

5. SUBMISSION OF FORMS : Every sub-division will have one examination centre and filled in forms of the candidates will be submitted to the officer of the Centre -in-charge of JMO of each sub-division/Gen. Secretary, TMS (in Sadar Sub-division area).

6. The candidates may take the Geometry box in the Examination Hall but not the calculator.

Contact No.
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