MTRP
INTEGRATION
ISI KOLKATA

Integration presented by students of ISI Kolkata

MTRP

Mathematics Talent Reward Programme

Information Brochure-2026

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A. Important Dates

Event	Date
Registration Open	November 1, 2025
Transaction Deadline	March 10, 2026 (23:59:59)
Admit Cards	First Week of March
Examination Day	March 14, 2026
Alternate Examination Day	March 22, 2026
Answer Key release	After the Examination
Provisional Scores	To be Announced
Challenge Window	2 days from the announcement of Provisional Results
Final Results	To be announced
Spring Camp	**March 28-29, 2026**

B. Sections

Section	Eligible Students
Sub-junior	Class V, VI, VII
Junior	Class VIII, IX, X
Senior	Class XI, XII

Chapter 1- Introduction

1.1 About Indian Statistical Institute (ISI))

Established in 1931 by the eminent Professor Prasanta Chandra Mahalanobis, the Indian Statistical Institute (ISI), Kolkata, is one of India's most distinguished public institutions for research. Declared an Institute of National Importance in 1959, ISI holds a profound legacy in pioneering the nation's statistical systems and shaping economic policy. It is celebrated for producing generations of leading statisticians, mathematicians, and scientists, and continues to be recognized as a premier global center for the quantitative sciences.

1.2 About Integration

Integration is the flagship cultural and intellectual festival of the Indian Statistical Institute, Kolkata. This cherished annual tradition unites thousands of students from across India, transforming the campus into a vibrant arena where future scientists and analysts showcase their multifaceted talents, celebrate creativity, and forge connections that transcend their academic world.

1.3 About Mathematical Talent Reward Program(MTRP)

The Mathematics Talent Reward Programme (MTRP) is a premier pan-India Olympiad-level contest designed to discover and nurture the nation's brightest young mathematical minds. The programme seeks to encourage, guide, and recognize exceptional talent among teenage prodigies. With numerous IMO medalists, INMO awardees, IMC medalists and winners of other prestigious Olympiads among its alumni, MTRP has played a pivotal role in shaping the future of Olympiad mathematics in India. Organized by the students of the Indian Statistical Institute, Kolkata, MTRP stands as a symbol of elegance, brilliance, and excellence. Divided into three age groups, it serves as a guiding light for school students venturing into the mysterious world of mathematics.

Chapter 2- Examination Scheme

2.1 Mode of Examination

The examination will be conducted in two modes: on-site and online. Separate merit lists will be prepared for each mode to ensure fairness and transparency.

2.2 Date Of Examination

The MTRP will be held on **March 14, 2026**, for both on-site and online modes. However, ICSE and ISC examinees may opt for an **alternate online examination** on **March 22, 2026**. Please note that **no separate on-site examination** will be arranged for them.

Eligibility for the alternate date requires submission of **proof, such as an official document showing that the student is appearing for ICSE/ISC examinations on March 14.**

2.3 Structure Of Examination

(i) On-site Examination:

The on-site exam will be a **3-hour pen-and-paper test**, consisting of **objective and subjective sections.**

- For the objective section, answers must be written in designated spaces, with a short justification for each answer.
- The objective section serves as a screening stage, and only the top 20% of performers will have their subjective sections evaluated.
- Answers to subjective questions must be written in the same answer booklet.
- Any malpractice will result in cancellation. Invigilators reserve the right to disqualify any candidate at their discretion.

(ii) Online Examination:

The online exam will also be a **3-hour proctored pen-and-paper test** with objective and subjective components.

- Students should use a white or ruled answer booklet.
- Objective answers, along with brief justifications, must be written on separate pages.
- The top 20% of performers in the objective section will have their subjective sections evaluated.
- Any malpractice will result in cancellation. Invigilators reserve the right to cancel registrations.

2.4 Choice Of Medium Of Question Paper

Students can opt to receive the question paper in English or Bengali.

2.5 Syllabus

(i) Sub-junior Section (Class V-VII):

- **Arithmetic**: Number System (very basic introduction to rationals, irrationals, reals, etc.), Unitary Method, Mixture & Proportion, Percentage, Simple & Compound Interest
- **Algebra**: Like-unlike terms, Operations on algebraic expressions, Polynomials, Factorization, Algebraic Formulae, Equation Building and Solving Word Problems, Arithmetic and Geometric Progression
- **Number Theory**: GCD, Divisibility, Congruency
- **Geometry**: Lines, Angles, Triangles, Circles, Mensuration
- **Counting : B**asic counting, Addition and Multiplication principles, Inclusion and Exclusion principle
- **Puzzles**

(ii) Junior Section (Class VIII-X):

- **Number Theory**: Divisibility and Primes, GCD and Division Algorithm, Bezout's Theorem, Congruence, Base Systems, Fermat and Euler's theorem
- **Combinatorics**: Basic Counting Principles, Permutations and Combinations, Permutations with Repetitions and on Circle, Inclusion Exclusion Principle, Pigeonhole Principle
- **Geometry**: Congruence of Triangles, Ruler and Compass Constructions, Midpoint Theorem, Thales' Theorem and Similarity, Area Ratios and Ceva Menelaus Theorems, Properties of Circles and Tangents, Basic Angle Chasing
- **Algebra and Miscellaneous**: Basic Set Theory and Set Operations, Principle of Mathematical Induction, Simultaneous Linear Equations, Word Problems and Puzzles, Basic Laws of Inequalities, AM-GM-HM inequality, Cauchy-Schwarz inequality, Basic Operations on Polynomials, Polynomial Division and GCD, Remainder and Factor Theorems, Fundamental Theorem of Algebra, Quadratic Polynomials and Equations, Vieta's Relations.

(iii) Senior Section (Class XI-XII):

- **Number Theory**: Divisibility and Primes, GCD and Division Algorithm, Bezout's Theorem, Congruence and Inverses, Base Systems, Fermat and Euler's Theorems, Wilson and Chinese Remainder Theorems
- **Combinatorics**: Basic Counting Principles, Permutations and Combinations, Permutations with Repetitions and on Circle, Inclusion Exclusion Principle, Pigeonhole Principle, Recurrences, Invariance Monovariance and Extremal Principles
- **Geometry and Trigonometry**: Congruence of Triangles, Ruler and Compass Constructions, Midpoint Theorem, Thales' Theorem and Similarity, Area Ratios and Ceva Menelaus Theorems, Properties of Circles and Tangents, Basic Angle Chasing, properties of trigonometric functions
- **Algebra and Miscellaneous**: Basic Set Theory and Set Operations, Principle of Mathematical Induction, Word Problems and Puzzles, Elementary Functional Equations, Basic Laws of Inequalities, AM-GM-HM inequality, Cauchy-Schwarz inequality, Rearrangement and Chebyshev Inequalities, Jensen Inequality, Basic Operations on Polynomials, Polynomial Division and GCD, Remainder and Factor Theorems, Fundamental Theorem of Algebra, Quadratic Polynomials and Equations, Complex Numbers, Vieta's Relations, Integer Polynomials
- **Calculus**: Rationals and Irrationals, Sequence and series, limit of a function, Continuity and Differentiability, Elementary Integration and Antiderivatives

Chapter 3- Registration & Problem Primer

3.1 Registration

Registration can be completed in either *offline* or *online* mode.
· **Offline Registration**: The MTRP Committee will invite selected schools to participate. Students from these schools can collect and submit the forms directly through their institutions.
· **Online Registration**: Forms will be available on the official website (integrationfest.in). Students must fill out their personal details and pay via UPI. Each applicant must provide their transaction ID and proof of payment in the online form.

3.2 MTRP Problem Primer

Students may opt to receive the **MTRP Problem Primer**, a curated collection of elegant and challenging mathematical problems. Requests can be made through both offline and online forms. Note that, the student can opt for only receiving the book, without registering for the examination.

- Students opting for postal delivery will be contacted via email or WhatsApp with further details.
- Delivery will be confirmed only after availability is verified by the Committee.
- Payment should be made only after confirmation.
- The Committee will not be liable for any damage incurred during delivery.

Chapter 4- Conduct of Examination

4.1 Choice of Exam centres

For the On-site examination, MTRP will be organised at three different venues, **Kolkata (North), Kolkata (South)** and **Durgapur**. The student can choose her/his preferences during registration. The MTRP committee will try its best to accommodate every student in her/his first preferred venue, but it can't guarantee to do so.

4.2 Admit Card and Mode Change

Admit cards will be sent via email prior to the examination.
Students who wish to **change their examination mode** from offline to online (due to venue issues) must contact the MTRP Helpdesk at **helpdesk.mtrp@integrationfest.in** or **+91 83350 08308/+91 98300 64115**.
For the online mode, students will be added to a **Google Classroom**.

4.3 Verification

(i) On-site Examination:
Students must bring their admit card and a valid proof of identity. A volunteer will verify these documents before allowing entry. Any discrepancy will result in immediate cancellation of registration.
(ii) Online Examination:
Students must upload a proof of identity before the exam. A volunteer will verify it in advance. Any discrepancy will result in cancellation of registration.

4.4 Examination Structure

(i) **On-site Examination:**

- The on-site exam will be a 3-hour pen-and-paper test, consisting of objective and subjective sections.
- For the objective section, answers must be written in designated spaces, with a short justification for each answer.
- Answers to subjective questions must be written in the same answer booklet.

(ii) **Online Examination**:

- The online exam will also be a 3-hour **proctored** pen-and-paper test with objective and subjective components.
- Students should use a **white** or **ruled** answer booklet to write the brief justifications of the objective answers, and the subjective answers.
- Objective answers, must be written on separate pages.

The **top 20%** of performers in the objective section will have their subjective sections evaluated.
Any **malpractice** will result in **cancellation**. Invigilators reserve the right to cancel registrations.

Chapter 5- Post Examination & Camp

5.1 Grading

All answer scripts will be evaluated by the MTRP Committee. The **official answer key** will be released after the exam, and **tentative scores** (with detailed breakdown) will be emailed to participants prior to final results.

5.2 Challenge Procedure

Students may challenge their tentative grades by paying a refundable deposit of **₹100**. The deposit will be reimbursed only if the challenge is found valid. Only one deposit is required per applicant, regardless of the number of challenges.

5.3 Results and camp selection

After resolving all challenges, final results (with **score breakdowns**) will be released.

- Top performers in the **Junior** and **Senior** Sections will be invited to attend a special **spring camp at ISI Kolkata** on March 28-29, 2026.
- Top performers in the **Sub-Junior** Section will receive exciting prizes.
- Normalization rules for the two examination dates will be announced later.
- Students selected from the **online** mode can attend the camp only in **online** mode.
- Students selected from the on-site mode may request to attend the camp online by contacting the helpdesk.

5.4 Spring Camp

A unique spring camp for the selected performers will be organised in **ISI Kolkata** for the **offline** applicants, and in **online mode** for the **online** applicants.
The camp will feature lectures by eminent mathematicians and statisticians from around the world.
On-site attendees will also enjoy a **guided tour** of the **ISI Kolkata campus**.
The **second level** of the **MTRP** will be held on the second day of the camp, both offline and online.

5.5 Prize Distribution Ceremony

Awardees will be felicitated on **March 29, 2026**.
Junior and Senior section participants will be awarded based on combined scores from both rounds, normalized appropriately.
Apart from the top performer prizes, special prizes such as "**Youngest Attendee**" and "**Most Creative Solution**" will also be presented.

Photo Gallery