



# SEAMO 2023

SOUTHEAST ASIAN  
MATHEMATICAL OLYMPIAD

MAY, 2023



— SEAMO Sri Lanka —

# What is SEAMO?

SEAMO stands for the South-East Asian Mathematical Olympiad. It is an international mathematics competition that aims to foster mathematical excellence among students in the South-East Asian region. SEAMO provides a platform for students to demonstrate their problem-solving skills and creative thinking in mathematics.







The competition is designed to challenge participants with a range of mathematical problems that go beyond the standard curriculum, encouraging them to explore different mathematical concepts and apply them in innovative ways. SEAMO also offers an opportunity for students to compete internationally and gain recognition for their mathematical achievements.



# Advantagous & Benefits for Participants





### **Academic Excellence**

Olympiad competitions provide a platform for students to showcase their academic skills and excel in a specific subject, such as mathematics, science, or literature. By participating and performing well, students demonstrate a high level of proficiency and mastery in the subject area.



### **Skill Development**

Olympiad competitions foster the development of essential skills beyond traditional academics. Participants enhance their critical thinking, problem-solving, logical reasoning, and analytical abilities. These skills are transferable and valuable across various academic disciplines and real-life situations.



### **Challenge and Growth**

Olympiad competitions present challenging and thought-provoking problems that push participants to think outside the box. This encourages them to expand their knowledge, explore advanced concepts, and develop innovative approaches to problem-solving.



### **Recognition and Prestige**

Olympiad competitions offer participants the opportunity to gain recognition and prestige both locally and globally. Achieving a high rank or receiving medals or certificates of distinction brings honor and enhances a participant's academic profile. This recognition can open doors to scholarships, internships, and other academic and career opportunities.





## Networking and Collaboration

Olympiad competitions provide a platform for participants to meet and interact with like-minded students from different schools, regions, and even countries. This fosters networking, collaboration, and the exchange of ideas. Participants can form friendships, share knowledge, and learn from each other's perspectives, fostering a sense of camaraderie and mutual growth.



## Personal Growth and Confidence Building

Participating in Olympiad competitions helps students develop self-confidence, resilience, and a growth mindset. Facing challenging problems and persevering through the competition process builds resilience, determination, and a willingness to take intellectual risks.



## Enriched Educational Experience

Engaging in Olympiad competitions extends the educational experience beyond the classroom. Participants encounter challenging problems that go beyond the standard curriculum, exposing them to advanced concepts and stimulating intellectual curiosity. This enriches their educational journey and broadens their understanding of the subject.



## Scholarly and Career Opportunities

Achieving success in Olympiad competitions can open doors to prestigious scholarships, educational opportunities, and internships. Universities and educational institutions often value Olympiad achievements and consider them in their admissions processes. Olympiad participants may also gain a competitive edge in pursuing future careers in related fields, such as research, academia, or STEM industries.



### **Enhanced Problem-Solving Skills**

Olympiad competitions expose participants to complex and challenging problems that require creative thinking and innovative problem-solving strategies. By tackling these problems, participants develop a deeper understanding of the subject matter and enhance their ability to approach and solve problems effectively.



### **Competitive Edge**

Achieving success in Olympiad competitions sets participants apart from their peers and gives them a competitive edge. It demonstrates a higher level of academic proficiency, dedication, and commitment to excellence, which can be advantageous when applying for scholarships, college admissions, or future career opportunities.



### **Experiential Learning**

Olympiad competitions provide a hands-on, experiential learning opportunity outside the traditional classroom setting. Participants engage in practical application of knowledge, applying theoretical concepts to real-world scenarios. This promotes a deeper understanding of the subject and strengthens their practical skills.



### **International Exposure**

Some Olympiad competitions have an international scope, bringing together participants from various countries. This offers a unique opportunity for participants to gain exposure to different cultures, perspectives, and educational systems. It promotes global awareness and fosters a sense of global citizenship.



### **Mentorship and Guidance**

Olympiad competitions often provide participants with access to experienced mentors, coaches, and experts in the field. These mentors offer guidance, support, and feedback to help participants improve their skills and performance. The mentorship aspect adds value to the overall learning experience.



### **Motivation and Goal Setting**

Olympiad competitions serve as a motivating factor for participants to set goals, work towards them, and strive for continuous improvement. The competitive nature of the competition and the desire to excel drive participants to dedicate time and effort to their studies, fostering a strong work ethic and self-discipline.



### **Personal Fulfillment**

Participating in Olympiad competitions allows students to pursue their passion for a specific subject and engage in intellectual pursuits. The satisfaction derived from solving challenging problems, achieving personal milestones, and realizing one's potential contributes to a sense of personal fulfillment and a love for lifelong learning.



### **Access to Resources**

Olympiad competitions often provide participants with access to a wide range of resources, including study materials, practice tests, and reference materials. These resources can aid participants in their preparation and serve as valuable learning tools beyond the competition.



# Paper Categories



# Paper Categories

1

## PAPER K

Kindergarten | Grade 1 & 2  
Age 6 - 7

2

## PAPER A

Primary I | Grade 3 & 4  
Age 8 - 9

3

## PAPER B

Middle Primary I | Grade 5 & 6  
Age 10 - 11

3

## PAPER C

Primary I | Grade 7 & 8  
Age 12 - 13

4

## PAPER D

Junior I | Grade 9 & 10  
Age 14 - 15

5

## PAPER E

Intermediate I | Grade 11 & 12  
Age 16 - 17

6

## PAPER F

Senior I | Grade 13 +  
Age 18 - 19



# Competition Format





# Competition Types



## SEAMO

Local Competition

SEAMO local competition is specifically designed to cater to the talents and potential of local students in the region.



## SEAMO X

Global competition

SEAMO X global competition is an exclusive opportunity specifically designed for the esteemed medal winners of the SEAMO competition.



# Ranking & Results

Candidates will be ranked by Grade Level within their country.

## Results displayed

- Award
- Local Rank
- Local Percentile

Global Rank and Global Percentile applies to SEAMO X Candidates only.

In statistics, percentile indicates a candidate's performance with respect to the performance of other candidates. The highest score correlates to the 100.00th percentile while the average score correlates to the 50.00th percentile.

# Marks Allocation

	Section A		Section B
	Multiple Choice		Free Response
<i>Question</i>	1 to 10	11 to 20	21 to 25
<i>Marks</i>	3	4	5
<i>Instructions</i>	Choose the best answer for the five possible options. On your answer sheet fill in the oval that matches your answer		On the answer sheet fill in the answer within the box provided.



# FRAMEWORK

- Build students competence and confidence to excel in a competitive setting.
- Challenge students to face increasingly complex cross-topic and non-routine problems to develop Critical Thinking in their Problems-Solving skills.
- Expose students to problem-solving strategies and tools that enable them to solve problems sums with speed and accuracy.



# Curriculum & Syllabuses



### Paper K

For participants in Kindergarten



- 01 Algebra
- 02 Arithmetic
- 03 Analysis
- 04 Combinatorics
- 05 Geometry
- 06 Logic
- 07 Word Problems
- 08 Number Patterns
- 09 Geometric Patterns
- 10 Number Puzzles

### Paper A

For participants aged 7 to 8 years



- 01 Time
- 02 Addition and Subtraction
- 03 Multiplication
- 04 Number Pattern
- 05 Counting
- 06 Shortest Path
- 07 Queuing Problem
- 08 Pigeonhole Principle
- 09 IQ
- 10 Logic
- 11 Odd and Even Numbers
- 12 Sum of a Number Sequence
- 13 Working Backwards
- 14 Simple Speed

### Paper B

For participants aged 9 to 10 years



- 01 Time
- 02 Addition and Subtraction
- 03 Multiplication
- 04 Division
- 05 Remainder Problem
- 06 Number Pattern
- 07 Number Puzzle
- 08 Counting
- 09 Shortest Path
- 10 Queuing Problem
- 11 Pigeonhole Principle
- 12 IQ
- 13 Logic
- 14 Odd and Even Numbers
- 15 Sum of a Number Sequence
- 16 Working Backwards
- 17 Speed
- 18 Values of Ones Digit



### Paper C

For participants aged 11 to 12 years



- 01 The Four Operations
- 02 Whole Numbers
- 03 Fractions
- 04 Permutation
- 05 Combination
- 06 Pigeonhole Principle
- 07 Number Sequence
- 08 Logic
- 09 Average
- 10 Square Number
- 11 Prime Numbers
- 12 Prime Factorization
- 13 Defining New Operations
- 14 Working Backwards
- 15 Speed
- 16 Ratio and Percentage
- 17 Area of Circle
- 18 Angles and Triangles
- 19 Probability
- 20 Charts

### Paper D

For participants aged 13 to 14 years



- 01 Simple Equations
- 02 Rational Numbers
- 03 Indices
- 04 System of Equations
- 05 Multiplication of Polynomials
- 06 Divisibility
- 07 Prime and Composite Numbers
- 08 Square Numbers
- 09 Even and Odd Numbers
- 10 GCD and LCM
- 11 Permutations and Combinations
- 12 Probability
- 13 Pythagorean Theorem
- 14 Pigeonhole Principle
- 15 Problem on Journey
- 16 Profit and Loss
- 17 Circles
- 18 Geometry

### Paper E

For participants aged 15 to 16 years



- 01 Simple Equations
- 02 Rational Numbers
- 03 Indices
- 04 System of Equations
- 05 Multiplication of Polynomials
- 06 Divisibility
- 07 Prime and Composite Numbers
- 08 Square Numbers
- 09 Even and Odd Numbers
- 10 GCD and LCM
- 11 Permutations and Combinations
- 12 Probability
- 13 Pythagorean Theorem
- 14 Pigeonhole Principle
- 15 Journey Problems
- 16 Profit and Loss
- 17 Circles
- 18 Geometry

### Paper F

For participants aged 17 to 18 years



- 01 Quadratics Equations
- 02 Relations and Functions
- 03 Rational Numbers
- 04 Indices
- 05 Logarithms
- 06 Binomial Theorem
- 07 Trigonometric Identities
- 08 Arithmetic and Geometric Progression
- 09 Number Theory
- 10 System of Equations
- 11 Multiplication of Polynomials
- 12 Divisibility
- 13 Prime and Composite Numbers
- 14 Square Numbers
- 15 Even and Odd Numbers
- 16 GCD and LCM
- 17 Graphical Solutions to Equations
- 18 Probability
- 19 Pythagorean Theorem
- 20 Combinatorics

# Rewards



# Awards

AWARD	PERCENTILE	DESCRIPTION	PRIZES
Gold	92 <sup>nd</sup> and above	Candidates who scored the same as or higher than 92% of participants.	Medal and Printed Certificate
Silver	Less than 92 <sup>nd</sup> but greater or equal to 80 <sup>th</sup>	Candidates who scored less than 92% but the same as or higher than 80% of participants.	Medal and Printed Certificate
Bronze	Less than 80 <sup>th</sup> but greater or equal to 60 <sup>th</sup>	Candidates who scored less than 80% but the same as or higher than 60% of participants.	Medal and Printed Certificate
Participation	Below 60 <sup>th</sup>	Candidates who scored lower than 60% of participants.	Electronic Certificate of Participation



# Certificates





# Medals



# Registration





# Competition Dates



## SEAMO 2023

23rd September 2023

Closing date: 15th Sep 2023



## SEAMO X 2024

19th - 22nd January 2024 in  
Singapore

# Competition Registration Process

1

Registration is done online at <https://seamo.lk/>

2

It can be done as a candidate, a parent or a teacher

3

If the candidate has participated before, enter the same Candidate Number (CAN) as the previous years

4

After registering, make payments as per invoice instructions

5

Take the exam on SEAMO's Online Exam Portal or in Physical Exam Center

6

Results will be released on early November at <https://seamo.lk/results/>

7

Registration for SEAMO-X starts

8

SEAMO 2023 awards will be delivered in mid December 2023

# Support & Resources





# Supportive Resources



SEAMO Sri Lanka website  
<https://seamo.lk>



SEAMO Singapore website  
<https://seamo-official.org>



SEAMO Sri Lanka LMS portal  
<https://learn.seamo.lk>



Resources  
<https://learn.seamo.lk/shop/>



Student Login / Register  
<https://seamo-official.org/home/login>



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# Contact Us

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**THANK  
YOU**