

## Contestants and Officials

### 1. Contestants

- The contestants of the Olympiad are grade V, VI students, less than 13 years old by 31 December 2016.
- Each country is entitled to send 12 students, 6 students for each subject.

### 2. Officials

Each country is entitled to send 3 officials consists of 1 team leader and 2 tutors/trainers.

- Requirements for team leader should have the ability to communicate in English.
- Requirements for tutors should be master the substance of primary school Mathematics and Science and have the ability to communicate in English.

Tutors will work the jury in moderating on students paper and determining winners.

12 student contestants. Participants arriving before or departing after the official schedule are responsible for their own expenses and accommodation.

- Other expenses, such as local transports from the participants' home to the airport, procurement of passport and visa, as well as airport tax will be done by the participants.
- Each additional contestant, official and accompanying person will be charged US\$ 650 for the expenses in point (2) above.

## Insurance (Medical care)

In case of minor emergency, the organizing committee will provide medical care to the delegations including the additional participants, and the cover expenses. Nevertheless, team leaders should ascertain that all members of their delegation are fully insured before coming to Indonesia lest major emergencies occurred during the Olympiad.

## Letters of Participation and Registration forms

Interested countries should confirm their participation by sending a letter of participation to the secretariat of IMSO 2016 before 30 July 2016. Registration form containing the names of contestants, tutors/trainers, and team leader, as well as travel details must be submitted to the organizing committee not later than the end of 31 August 2016 to address below:

**Ir. R Ridwan Hasan Saputra, M.Si**  
President Director



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## Juries

The juries are appointed by the organizing committees:

- IMSO executive board.
- The central committee of Indonesia experts.

## Medals and Trophies

- Approximately two - thirds of contestants will be awarded Gold, Silver, Bronze and Merit in the ratio 1 : 2 : 3 : 4.
- Contestants who has the highest score of the competition will receive theoretical and partial trophy.
- Every contestants who attended the event will receive a certificate of participation.

## Expenses

- Each participating country is responsible for its travelling expenses to and from Tangerang city, Banten - Indonesia.
- The organizers of the IMSO 2016 will provide free hotel accommodation including meals and local transportation within the duration of the contest schedule for 1 team leader, 2 tutors/trainers and



**09-13 November 2016**  
**Tangerang City, Banten, Indonesia**

Organized by:



## Rationale

It has been generally acknowledged that education determines the quality of human resources. Primary schools, as a part of basic education, provide students with skills of reading, writing, arithmetic, and basic science. A program which could stimulate creativity, develop critical and analytical thinking is important to be provided to students at the primary school level as they are in the "golden period of education".

To implement this program, Mathematics Education Clinic is organizing the 13<sup>th</sup> International Mathematics and Science Olympiad for primary school (IMSO 2016). Participation in 13<sup>th</sup> IMSO 2016 is by invitation.

## Theme

"Developing Smart, Skilled and Creative Children through Competition for Excellence"

## Objectives

The general objectives of the Olympiad are to improve the competencies of the elementary school students in Mathematics and Science and foster relationship among primary school students.

The specific objectives of this Olympiad are:

- To develop elementary school students' talent and interest in Mathematics and Science; and
- To motivate the elementary school students in developing their intellectual capacity and skills in Mathematics and Science.

## Guidelines and Regulations

### A. Schedule

- The 13th IMSO 2016 will be held in the Tangerang city, Banten-Indonesia on 09 November 2016
- Contestants and officials must arrive in Tangerang city, Banten-Indonesia on 09 November 2016.
- Tutors/Trainers will moderate on the marking of students on 10, 11 November 2016
- Tests will be held on 10 and 11 November 2016.

### B. Itinerary

No.	Date	Itinerary	
		Students	Tutors
1.	Wed, 09 Nov 2016	Arrival in Soekarno-Hatta Airport	
		Transfer hotel	
2.	Thu, 10 Nov 2016	Registration	
		Technical meeting	
3.	Fri, 11 Nov 2016	Opening ceremony IMSO 2016	
		Theoretical examination 1	Sightseeing
4.	Sat, 12 Nov 2016	1. Theoretical examination 2 2. Science experiments 3. Exploration with maths	1. Moderation on marking of theoretical exam 1 2. Sightseeing 3. Moderation on marking of theoretical exam 2
		Sightseeing	1. Moderation on Marking of Exploration with Math/Science experiments 2. Free time
5.	Sun, 13 Nov 2016	Farewell dinner and cultural presentation night Announcement of winners and closing ceremonies IMSO 2016	
		Home sweet Home	

## Types of Problems and Test Regulations

- IMSO 2016 is an individual competition. The Problems consists of two (2) parts for each subject.
  - Theoretical and exploration problems for Mathematics
  - Theoretical and experimental problems for Science.
- The problems are constructed based on Mathematics and Science elementary school curricula, reference books and other relevant sources which intellectual reasoning and creativity.

### 3. Syllabus

#### a) Math

- Arithmetic: integers, rational numbers and their representations (fraction, decimal and percentage), factoring numbers, greatest common divisor, least common multiples, number ordering and ratio&proportion.
- Geometry: angle and its measure, area and perimeter, triangle, quadrangle, parallelogram, trapezoid, circles, cube, parallelepiped nets, symmetry, reflection&rotation and similarity&proportion.
- Data and measurement: data representation, mean (average), median and modus.

#### b) Science

- Science skill and methodology, general health (nutrition, common disease and how to prevent it).
  - General environmental issue (deforestation, managing natural resources, pollution, water and carbon cycle, etc).
  - Basic ecology (habitat, interaction, food chain&food web, population, ecosystem, life cycle, etc).
  - Physiology (photosynthesis and respiration).
  - Current technology development such as (GMO, biotech, biofuel, satellite, etc).
  - Human anatomy and function (skeleton&movement, olfactory, system, auditory system, mouth, eyes, circulatory, digestive system, skin, respiratory system) and its disease and problems.
  - Classifying organism based on their food, anatomy, systematics, reproduction system and its habitat.
  - Very common or endangered species names.
  - Mechanics (motion of objects, static fluid and gas).
  - Solar system (member of solar system, rotation of earth and moon, earth&moon eclipses).
  - The earth planet (structure, surface, process of earth formation, water cycle, renewable resources, climate, seasons, gravitation, wind).
  - Electric and magnetic (application, models).
  - Matter (properties, phase transformation (solid/liquid/gas), physical, chemical and biological transformation).
  - Thermal properties (temperature, thermometer, energy, conduction, convection, radiation).
  - Light (property, vision, color).
  - Force (change shape of material, magnetic, gravitation, frictional forces).
  - Energy and energy change (kinetic, potential, heat, sound, renewable, energy conversion).
- Participating countries are welcomed to send 2 sets of proposed problems for each subject to the organizing committee, that is, five (5) problems for theoretical questions and five (5) problems for exploratory and/or experimental questions. Proposed problems must be e-mail before 24 August 2016.
  - Instructions and problems will be in English. Theoretical questions must also be answered in English; however the contestants are allowed to use an English dictionary.
  - Contestants are not allowed to bring books, scientific dictionary, calculators and other electronic devices except English dictionary to the competition hall.