



# LIST OF COMPETITIVE EXAMS AT SCHOOL LEVEL (EXAM ENCLYCLOPEDIA)

---

## FOUNDATION BUILDER

---

### **ABC Classes**

Gandhi Gali, Golghar

Gorakhpur, U. P.

Contact No.-7317230000, 731724000

EXAM	ELIGIBILITY	SYLLABUS	EXAM PATTERN
<b>KVPY</b>	Students enrolled in the Std XI & have secured a min of 80% marks in PCMB	Anything up to standard level both cbse and icse board	80 objective questions
<b>NTSE</b>	Students studying in X	Syllabus of class X along with advance level	MAT 50 Q, SAT 100 Q & Language Test 50 Q
<b>NSEJS</b>	Students born after 01-01-1999 are eligible	CBSE up to 10 PCMB roughly equal weightage	CBSE up to 10 PCMB roughly equal weightage
<b>INJSO</b> (NSEJS L2)	Students selected from Stage I examination (NSEJS)*	CBSE up to 10 PCMB roughly equal weightage	Time : 3 hrs.
<b>RMO</b>	Class IX-XII	Up to class XII	3-hours written test 6 to 7 problems
<b>IMO</b>	Class 1-12	Syllabus mentioned on the Science Olympiad Foundation website	50Q in 1hr divided into 3 sections
<b>NSO</b>	Class 1-12	Syllabus mentioned on the Science Olympiad Foundation website	50Q in 1hr divided into 3 sections
<b>MTSE</b> (Maths)	Class 3-9	As per syllabus of CBSE and ICSE of respective classes	50Q-90Minute+2M for correct and -0.5 for wrong
<b>NSTSE</b>	Class 2-12	Based on the CBSE syllabus	100Q-100M-90minutes, M-25, P25, C-20, B-20, General-10
<b>NIUS</b>			
<b>Science Olympiad</b>			
<b>Maths Olympiad</b>			

# EXAM ENCYCLOPEDIA

## Preface

Preparing for competitive exams helps identify scholastic talent in students. Identifying their skill level earlier is not the same as putting pressure on a student to suddenly turn into a prodigy. Aptitude needs learning and practice to reach its full potential. Preparing for competitive exams is about helping your child be the best he can. The classroom environment gives ambition and motivation to work hard in a competitive environment.

The list of competitive exams in different classes is as follows:

Class VII	Class VIII	Class IX	Class X
IPM	IMP	NSEJS	NTSE
NSTSE	NSTSE	NSTSE	NSTSE
NSO	NSO	NSO & IMO	NSO & IMO
IMO	IMO	RMO	RMO
MTSE	MTSE	IJSO	IJSO
		MTSE	NSEJS

The focus of competitive exams is to impart factual knowledge and develop the required intellectual skills to apply that knowledge. The curriculum of these exams aims to concretize what was already learnt and takes the students to the next level. This develop the ability for independent work, and objective thinking in students. Appearing in these competitive exams also brings a discipline for most students.

Most competitive exams follow a combination of an Aptitude component and a subject knowledge component. The aptitude component is based on raw problem solving skills, analytical ability, not directly related to school curriculum. The question format also tests logical thinking. The subject knowledge component focuses on advanced extension of regular math's and science school curriculum that can be mastered only by regular practice.

# NTSE

## National Talent Search Examination

---

National Talent Search Examination is a flagship activity of the NCERT started in the year 1963. The purpose of the scheme was to identify talented students and nurture their talent. Talent refers to the potentiality that manifests itself in a high level of performance in one or more specialized areas. The scheme, therefore, covers areas like Sciences, Social Sciences, Engineering, Medicine, Management and Law. It honors and helps talented students by providing financial assistance in the form of a monthly scholarship. For the courses in Basic Sciences, Social Sciences and Commerce, this assistance is provided up to Ph.D. level. For professional courses like Engineering, Medicine, Management and Law this assistance is given only up to Post Graduation. The NCERT conducts the National Talent Search Examination for students studying in Class VIII only.

### **SCHOLARSHIPS:**

On the basis of the examination conducted, 1000 scholarships will be awarded for each group of students appearing for Class VIII examinations. The amount of scholarship will be Rs.500/- per month as per NTS rules.

### **RESERVATION:**

15% scholarships will be reserved for students belonging to the SC category, 7.5% scholarships for students belonging to the ST category and 3% for Physically Challenged Group of Students.

### **SELECTION:**

There will be two-stage selection process for award of scholarship. For Stage-I, selection will be done by States/UTs through a written examination. Students who qualify Stage I will be eligible to appear for Stage II examination conducted by NCERT.

The States/UTs will also conduct the selection test for National Means-cum-Merit Scholarship Scheme along with the Stage-I written examination for NTS.

### **ELIGIBILITY:**

Students of Class X studying in recognized schools are eligible to appear for the respective Class X Stage-I examination conducted by the States/UTs in which the schools are located. There will be no domicile restriction.

### **EXAMINATION:**

The pattern of written examination for Class X will be as follows:

**Stage I** Examination at the State/UT level will comprise of two parts, namely (a) Mental Ability Test (MAT) and (b) Scholastic Ability Test (SAT) covering social sciences, sciences, Mathematics and Language comprehensive test

**Stage II** Examination at the National level will comprise of (a) Mental Ability Test (MAT), (b) Scholastic Ability Test (SAT) covering Social Sciences, Sciences, Mathematics and Language comprehensive test.

**SYLLABUS:**

First Level NTSE conducted by the State / UT. Most questions will be from the State Syllabus of Std. 8 while fewer questions shall also come from CBSE and ICSE Syllabus. The Class X MAT and SAT will consist of 150 questions each and Language comprehensive test consist of 50 question..

Second Level NTSE conducted at the National Level. This will include most questions as those that are taken at the CBSE and ICSE, prescribing the NCERT Syllabus.

**FOR MORE INFORMATION:**

For National Level Examination Enquiry:

Phone No : 011-26560464 (Timing 2.30 pm to 4.30 pm only)

E-mail : [ntse.ncert@yahoo.in](mailto:ntse.ncert@yahoo.in)

For State Level Examination Enquiry : Contact the Liaison Officer of your State

For Scholarship Inquiry:

Phone No : 011-26562704 (Timings 2.30 PM to 4.30 PM only)

E-mail : [ntse2@yahoo.co.in](mailto:ntse2@yahoo.co.in)

# KVPY

## Kishore Vaigyanik Protsahan Yojana

The "Kishore Vaigyanik Protsahan Yojana" (KVPY) is a program started in 1999 by the Department of Science and Technology, Government of India to encourage students of Basic Sciences, Engineering and Medicine to take up research careers in these areas. The aim of the program is to identify and encourage talented students with aptitude for research.

The program is administered by the Indian Institute of Science (IISc, Bangalore). The selection of students from those studying in +1, +2, any U.G. Program in Science / Medicine and also Engineering students having aptitude for scientific research, are carried out by IISc (Bangalore), IIT-Bombay (Mumbai), and ICMR (New Delhi), respectively, in association with two Zonal Centers one at Kolkata (Indian Institute of Science Education & Research, Kolkata) and another at Mumbai (HBCSE, TIFR). There are special groups or committees set up at IISc, which screen the applications, conduct interviews at various centers, make the final selection.

### **ELIGIBILITY:**

Students enrolled in the XI Standard (Science Subjects) during the academic year 2013-2014 and have secured a minimum of 80% (70% for SC/SPWD) marks in aggregate in MATHEMATICS and SCIENCE subjects in the X Standard Board Examination. [Students promoted through both the Summative Assessments-II conducted by the school and conducted by the Board are eligible to apply, if they satisfy eligibility criteria].

(If the candidates have obtained a letter grade in the qualified examination, they are requested to convert it into an appropriate % and fill-up the application form)

### **SYLLABUS:**

Anything covered up to standard level from both CBSE and ICSE board.

### **EXAM PATTERN:**

Questions divided equally among PCMB. There were different patterns followed in different years. Year 2013  $120 Q = 80Q * 1M + 40Q * 2M$

### **TENTATIVE EXAM DATE**

Usually, Last week of October to first week of November.

### **FELLOWSHIPS**

#### **BASIC SCIENCES**

#### **SA and SP**

(After X Class)

#### **Monthly Fellowship**

Rs. 4000

#### **Annual Contingency Grant**

Rs. 16000

**Continuation of fellowship**

Annual renewal of fellowships will depend on maintaining a good academic performance (1st Class or 60% marks in aggregate) in each academic year in the chosen stream and satisfactory performance in the Summer Programs.

**PRIVILEGES:**

KVPY Fellows spend one or two weeks in scientific institutions listening to lectures by experts in different fields of science, engineering or medicine, see things in a research environment, science in action, watch scientists at work, interact with scientists, visit nearby scientific research laboratories and institutions, and exchange views with other research students.

The Summer Program for KVPY Fellows in the basic science stream is arranged either of the one places: Bangalore, Kolkata, Allahabad, Mumbai, Pune, Mohali and Trivandrum for One / Two weeks.

**OTHER PRIVILEGES:**

Each KVPY Fellow will be issued with an Identity Card so as to have access to renowned National laboratories/ Universities who have agreed to extend special privileges like library, laboratory facilities to KVPY Fellows on production of the ID card.

**KVPY 2013 CONTACT DETAILS:**

**Address**        The Convener  
 Kishore        Vaigyanik Protsahan Yojana (KVPY)  
                   Indian Institute of Science  
                   Bangalore - 560 012

**Phone**        (080) 2360 1008, 2293 2975 / 76

**Email**        scholarship@kvpv.org.in, application@kvpv.org.in, support@kvpv.org.in

**Website**     <http://www.kvpv.org.in>

# IJSO

## International Junior Science Olympiad

---

There are five stage process leading to International Junior Science Olympiad (IJSO)

Stage I National Standard Examination in Junior Science (NSEJS)

Stage II Indian National Junior Science Olympiad (INJSO)

Stage III Orientation cum Selection Camp (OCSC) in Junior Science

Stage IV Pre Departure Training Camp (PDT) for IJSO

Stage V Participation in International Junior Science Olympiad (IJSO)

The detailed information about eligibility and structure of the stages are given below:

---

## NSEJS

### National Standard Examination in Junior Science

---

NSEJS is the first stage of selection of students in the Junior Science Olympiad Programme. NSEJS is organised by the Indian Association of Physics Teachers (IAPT). Every student aspiring to go through successive stages of the programme must enroll for NSEJS. NSEJS is held at a large number of centres in the country.

#### **TENTATIVE DATE**

November 2014

#### **ELIGIBILITY:**

All Indian students who are born on or after January 1, 2000 and, in addition, are in Class X or lower as of November, 2014, are eligible to appear in NSEJS 2014–2015. If they qualify in the NSEJS, they will be eligible for subsequent stages leading to participation in International Junior Science Olympiad.

It is the student's responsibility to ensure that the eligibility criteria are satisfied. In case at any stage of the program it is found that the student does not satisfy the eligibility criteria, he/she may be disqualified from the program.

#### **SYLLABUS:**

The syllabus for NSEJS is broadly equivalent to the secondary school level (upto Class X) of CBSE. The different basic subjects of science (physics, chemistry, biology and mathematics) will have roughly equal emphasis. This is only a broad guideline, and there is no detailed syllabus given for NSEJS.



**QUALIFYING FOR THE SECOND STAGE:**

Based on performance in NSEJS, the top 300 students in order of merit qualify to appear for the Second Stage of the Olympiad programme INJSO. In case there is a tie at the last position, all students with the same marks at this last position qualify for INJSO. All students who qualify to appear for INJSO get a certificate of merit from IAPT.

---

# INJSO

## Indian National Junior Science Olympiad

---

INJSO is organized by HBCSE at about 15 centres in the country.

**ELIGIBILITY:**

Students selected from Stage I examination (NSEJS) are eligible to appear for INJSO. In addition those students who have been exempted as described in the Enrolment page are also eligible to appear for INJSO. Besides these two ways, there is no other way by which a student becomes eligible to appear for INJSO.

**TENTATIVE DATE:**

January end to February 2015 (3 hours)

**SYLLABUS:**

The syllabus for INJSO is broadly similar to NSEJS. The syllabus is, however, only a broad guideline. Questions and problems in National Olympiads are usually non-conventional and of high difficulty level, comparable to International Olympiads. On the basis of performance in INJSO, the top 36 students in the merit list are selected for Stage III: Orientation Cum Selection Camp (OCSC) in Junior Science. In the event, there is a tie at the last position; all students with the same marks at this last position will qualify for OCSC in Junior Science. There is no other criterion or provision for selection to OCSC.

---

# OCSC

## Orientation cum Selection Camp

---

OCSC in Junior Science is organized by HBCSE sometime in April to June 2015 for 2-3 weeks.

**ELIGIBILITY FOR OCSC:**

Only the students selected from the merit list of Stage II (INJSO 2014) will be eligible for OCSC in Junior Science.

There will be no other criterion or provision.

The camp will include several theoretical and experimental tests. Orientation will be provided to students especially in experiments. The camp will conclude with a valedictory function where distinguished scientists will be invited to speak to the students.

The merit list of OCSC in Junior Science is prepared on the basis of the combined theoretical and experimental score aggregated over all the tests in the camp, with 60% weightage for theory and 40% weightage for experiment. Performance in previous stages (NSEJS and INJSO) is not considered for the merit list and awards of the OCSC.

The top 6 in the OCSC Junior Science merit list are declared to be special merit awardees. These special merit awardees are given Rs. 5,000 each in the form of books and cash. In addition, there are special prizes to recognize meritorious performance in theory and experiments.

The 6 special merit awardees in Junior Science selected at the end of the OCSC constitute the 6 member student team for the International Junior Science Olympiad (IJSO), provided they satisfy required criteria such as age limit, holding valid Indian passport, medical fitness, parental consent, etc.

---

## PDT

### Pre-departure Training Camp for IJSO

---

The selected 6 member student team undergoes a rigorous training programme at HBCSE in theory and experiment. Special laboratories are being developed at HBCSE for the purpose of experimental training. Resource persons from HBCSE and different institutions across the country will train the students.

---

## IJSO

### International Junior Science Olympiad (IJSO)

---

The 6 member student team and 3 teacher leaders constitute the delegation to represent India at the International Junior Science Olympiad (IJSO) 2015.

**For further details logon to:**

<http://olympiads.hbcse.tifr.res.in/subjects/junior-science/stages>

# NSTSE

## National Level Science Talent Search Examination

National Level Science Talent Search Examination shall be a comprehensive, independent examination that delivers challenging and high quality educational experience through a broad array of applied learning settings.

The NSTSE question papers are scientifically designed to test concepts underlying the curriculum in an interesting way. National Level Science Talent Search Examination aimed at providing valuable and detailed diagnostic reports for specific improvement and further development of school students.

While NSTSE encourages students to reason critically and solve problems, it also helps to boost confidence and enable students to realize their optimum potential.

### **NSTSE ADVANTAGES:**

NSTSE Stands for National Level Science Talent Search Examination. It is a scientifically designed, skill based assessment developed in India for Indian schools, after a detailed study of the syllabi of different central and state boards. Rather than testing rote learning, it focuses on measuring how well SKILLS and CONCEPTS underlying the school syllabus have been learnt by the student. The test provides information on the strengths and weaknesses of individual students and also entire classes.

#### **Feature**

Provides benchmark  
Provides detailed analysis and feedback

#### **Advantage**

Skill-based Provides feedback on real learning and Relevant-actually tests what is being taught?  
Allows student to know where he/she stands  
Pinpoints areas of strengths and weaknesses

### **CERTIFICATE OF MERIT:**

Participation certificate will be issued to all the students taking the NSTSE 2013.

### **SYLLABUS:**

NSTSE was developed after a study of NCERT books (CBSE) as well as ICSE-recommended books to ensure that the content is appropriate for students all over India.

### **TENTATIVE DATE :**

December First week (Sunday)

### **PATTERN:**

No. of Questions	–	100
Marks	–	100
Time Allowed	–	1.5 Hrs

**REWARDS:**

- NSTSE topper will be awarded with Rs. 2,00,000 cash prize. The student who achieves the highest percentage of marks among all the classes is declared as NSTSE Topper.
- The top 3 rankers of NSTSE 2012 will be awarded with a notebook Tablet P.C + Memento + Medal.
- The next 7 rankers in each class (Ranks 4-10) of classes II-XII will be awarded with a cash prize of Rs 1000/-
- The students who secured the next 15 ranks in each class (Ranks 11-25) of classes II-XII will be awarded with a cash prize of Rs. 500/-
- Rankers 26-100 of each class will be awarded with BMA's Talent & Olympiad Exams Resource Book from M/s. Brain Mapping Academy.

All the above rankers from class II-VI will be offered a discount coupon of 50% (Rs. 900) on Unified Knowledge Box Activity kit. All the above rankers will be offered a discount coupon of 50% (Rs. 750) on Ambition IIT/AIEEE material. All the rankers (1-100) will be awarded with a Britannica Encyclopedia – edition CD pack worth Rs. 995/- and a certificate of appreciation. Participation certificates for all the students who appeared for the examination will be given.

**PRIZES FOR STATE TOPPERS:**

Top 3 rankers in each state (minimum of 10,000 students in a particular state) will be awarded with a special award as a token of encouragement. He/she will be awarded with a Britannica Concise Encyclopedia edition CD worth Rs 995 & certificate of appreciation.

**Note:** State wise ranks are declared after excluding the top 100 ranks across the country.

**CONSOLATION PRIZES:**

Top ranker in each class from selected cities will be awarded with a Britannica Concise Encyclopedia - edition CD worth Rs.995/-. Top ranker in a city from each class (II – VI) will be offered a discount coupon of 25% (Rs.450) on Unified Knowledge Box Activity kit and those from each class (VII – IX) will be offered a discount coupon of 25% (Rs.375) on Ambition IIT/AIEEE material.

**Note:** City wise topper is declared after the 100 ranks across the country and state toppers.

City Rank (for every Class) will be declared for the classes having a minimum of 500 students in a particular city.

**NSTSE TOPPER:**

A student of any class who achieves 100% marks will be awarded with prize money of Rs. 2 Lac. If none of the students achieves the same, then the student who achieves the highest percentage of marks among all the classes will be awarded with Rs. 1 Lakh.

**For further information logon to [http://www.unifiedcouncil.com/what\\_is\\_nstse.aspx#](http://www.unifiedcouncil.com/what_is_nstse.aspx#)**

#16-11-16/1/B, Saleem Nagar, Malakpet, Hyderabad - 500036

Phone: 040-24557708, 24545862, 66139917

E-Mail : [exam@unifiedcouncil.com](mailto:exam@unifiedcouncil.com)

# NSO

## National Science Olympiad

Participants of NSO are ranked on the basis of marks obtained. Hence, after taking the first level of the test, students can judge themselves academically at four different levels - within the school, at city and state level and above all at International level.

### ELIGIBILITY:

Students of classes 1st to 12th are eligible to appear for the NSO. For **level 1**, the first level of the test is organized in the respective schools of the participants during the school hours. There are separate question papers for each class. The medium of the test is English. CBSE, ICSE/ISC and State Board syllabus is followed for setting the test papers. For **level 2**, top 5% of candidates class wise who appear for 1st level of exam.

### EXAM DATE:

Mid Nov 2013

### EXAM PATTERN:

The participant has to answer 50 objective questions in 60 minutes.

Section I : Mental Ability (15 questions)

Section II : Science (35 questions)

There will be separate question paper for each class. For class 11 and 12, students can opt for Mathematics or Biology. There will be separate papers for each group.

### EXAM SYLLABUS:

The syllabus of the NSO is the Science and Mathematics syllabus as is prescribed by the CBSE, ICSE or various state boards. If you sit for the second level and have moved onto the next class, the syllabus will remain the same (i.e. of the previous class).

### REWARDS:

Participation Certificate will be given to every student. Merit Certificate for students appearing in second level. School Topper Medal to the class topper in each participating school.

### CASH PRIZES:

INTERNATIONAL AWARDS FOR STUDENTS	
CLASS 1 TO 12	
RANK	AWARDS
1 <sup>st</sup>	Rs. 50,000 each + Gold Medal* + Gifts Worth Rs. 1,000/-
2 <sup>nd</sup>	Rs. 25,000 each + Silver Medal* + Gifts Worth Rs. 1,000/-
3 <sup>rd</sup>	Rs. 10,000 each + Bronze Medal* + Gifts Worth Rs 1,000/-

# IMO

## International Mathematics Olympiad

The IMO (International Mathematics Olympiad) is a means to identify and encourage the mathematical creativity of children in schools across India and abroad.

### ELIGIBILITY:

Students of classes 1st to 12th are eligible to appear for the IMO. There is no other eligibility criterion like minimum marks.

### PATTERN: Class wise different

The participant has to answer 50 questions in 60 minutes.

Section I : Logical and Analytical Reasoning (20 questions)

Section II : Mathematical reasoning (20 questions)

Section III : Everyday mathematics (10 questions)

### EXAM DATE:

13th & 20th December 2012

### SYLLABUS:

Syllabus of respective class covered in CBSE and ISEC.

### AWARDS & RECOGNITION:

Participation Certificate to every student, Merit Certificate for students appearing in second level, School Math Genius Medal to the class topper (with minimum 10 enrolments in the class concerned) in each participating school.

### CASH PRIZE:

INTERNATIONAL AWARDS FOR STUDENTS	
CLASS 1 TO 12	
RANK	AWARDS
1 <sup>st</sup>	Rs. 50,000 each + Gold Medal* + Gifts Worth Rs. 1,000/-
2 <sup>nd</sup>	Rs. 25,000 each + Silver Medal* + Gifts Worth Rs. 1,000/-
3 <sup>rd</sup>	Rs. 10,000 each + Bronze Medal* + Gifts Worth Rs 1,000/-

For further information logon to <http://www.sofworld.org/imo>

# MTSE

## Maths Talent Search Examination

Maths Talent Search Examination (MTSE) is a competitive examination conducted at various levels by the India Institute for Studies in Mathematics (IISMA). The focus of this exam is on mathematical reasoning, mental ability, novel approach, concepts, accuracy and speed.

### **ELIGIBILITY:**

MTSE is an open exam. Any student studying in Class III, IV, V, VI, VII, VIII, IX with ICSE, CBSE, IB or any State Board is eligible to appear for MTSE. A student can appear only for the class in which he/she is studying during the academic year.

### **TENTATIVE EXAM DATE:**

February first Week

### **NATURE OF EXAM:**

The paper will consist of 50 objective question i.e. each question will have 4 alternatives. These questions are to be answered in 90 minutes, on an OMR (Optical Mark Recognition) answer sheet. The correct answer is awarded with 2 marks, whereas the wrong one carries a penalty of 0.5 marks, except for Class III and IV.

### **SYLLABUS:**

Syllabus of respective class covered in CBSE and ICSE.

### **AWARDS:**

Student scoring above 30 or the Benchmark score, whichever is higher, are declared as successful. Mementoes are awarded to the top 5 rank holders of each class. The top 200 successful students from each class are awarded a Certificate of Merit and Cash prizes more than Rs. 4 laths as under. A Certificate of Participation is awarded to all other students writing the examination.

### **CASH PRIZES:**

Rank 1 <sup>st</sup>	Rs. 2500	Rank 11th to 20th	Rs. 400 each
Rank 2 <sup>nd</sup>	Rs. 2000	Rank 21st to 35th	Rs. 300 each
Rank 3 <sup>rd</sup>	Rs. 1500	Rank 36th to 55th	Rs. 250 each
Rank 4 <sup>th</sup>	Rs. 1250	Rank 56th to 80th	Rs. 225 each
Rank 5 <sup>th</sup>	Rs. 1009	Rank 81st to 110th	Rs. 200 each
Rank 6 <sup>th</sup> to 10 <sup>th</sup>	Rs. 750 each	Rank 111 <sup>th</sup> to 150 <sup>th</sup>	Rs. 175 each
Rank 151 <sup>st</sup> to 200 <sup>th</sup>	Rs. 150 each	Rank 151 <sup>th</sup> to 200 <sup>th</sup>	Rs. 150 each

For Further information logon to <http://www.iisma.com/mtse.html>

## About Mathematics Olympiad

---

Mathematics Olympiad activity on a national level has been one of the NBHM's (National Board of Higher Mathematics) major initiatives since 1986. One of the main purpose of this activity is to spot mathematical talent among high school children. NBHM has also taken on the responsibility for selecting and training the India team for participating in the international Mathematics Olympiad (IMO) every year.

For the purpose of administering Olympiad contest, the country has been divided in 16 regions. The Olympiad Programme leading to India's participation in the International Mathematical Olympiad (IMO) consists of the following stages.

### **Stage-1 : Regional Mathematics Olympiad (RMO):**

RMO is held in each region normally on the first Sunday of December of each year in different regions in the country. All high school students upto class XIIth are eligible to appear for RMO. RMO is a 3 hour written test containing about 6-7 problems. On the basis of the performance in RMO a certain number of students from each regional are selected to appear for the second stage.

### **Stage-2 : Indian National Mathematics Olympiad (INMO):**

INMO is held on the first Sunday of February each year at various centres in different regions. Only students selected on the basis of RMO from different regions are eligible to appear for INMO. INMO is a 4-hour written tests, the question paper is sent centrally and is common throughout the country. The top 30-35 performers in INMO receive a certificate of Merit.

**Stage-3 : International Mathematics Olympiad Training Camp (IMOTC):** The INMO certificates awardees are invited to a month long training camp in May/June each year, in addition INMO awardees of the previous year, who have satisfactorily gone through postal tuition throughout the year are invited again to a second round of the training. On the basis of a number of selection tests through the camp, a team of the best six students is selected from the combined pool of junior and senior batch participants to represent Indian in the IMO.

### **Stage-4 : International Mathematics Olympiad (IMO):**

The six member selected at the end of the camp represent India at the IMO that is normally held in July in a foreign country. IMO consists of two 4 hour written tests held on two days with a gap of at least one day. Students of the Indian team who receive gold, silver and bronze at IMO receive from NBHM a cash Prize of Rs. 5000/-, Rs. 4000/- and Rs. 3000/- respectively during the following year at a formal ceremony at the end of the training camp of next batch.



Contact address for inquiries about Mathematical Olympiad Programme

Prof. Jayashree Ramadas

Centre Director

Homi Bhabha Centre for Science Education

Near Anushaktinagar Bus Depot

V.N. Purav Marg. Mankhurd

Mumbai-400088.

Ph. : (022) 25562132, 25567711

(022) 25555242, 25580036

Fax : (022) 25585660, 25566803

e-mail : [director@hbcse.tifr.res.in](mailto:director@hbcse.tifr.res.in)

[hbcpro@hbcse.tifr.res.in](mailto:hbcpro@hbcse.tifr.res.in)

Member Secretary

National Board for Higher Mathematics

Department of Atomic Energy

Anushakti Bhavan, CSM Marg.

Mumbai-400001.

PH. : (022) 22022533 (O)

Fax : (022) 22028972

e-mail : [msnb@dae.gov.in](mailto:msnb@dae.gov.in)

## Information about Science Olympiad

---

It is highlighted here that selection, examination of five levels different Olympiad as mentioned in this section is being conducted all over the world i.e. in all participating countries and in same fashion.

### **About Science and Maths Olympiad:**

A major Olympiad programme in basic science is operational in the country. The programme at promoting excellence in science among pre-university students and selecting teams of students to represent India at the International Olympiad in Physics, Chemistry, Biology and Astronomy. The need for a national Olympiad programme in basic sciences had been recognized by the scientific community in India for a long time. India has started participating in the International Mathematics Olympiad and Physics Olympiad, Chemistry, Biology and Astronomy Olympiad long back.

Olympiad programme is financially supported by Board of Research in Nuclear Sciences (BRNS, DAE), Department of Science & Technology (DST) and Ministry of Human Resources Development (MHRD). The Astronomy Olympiad programme is jointly funded by DAE & Department of Space (DOS, ISRO) HBCSE is the nodal centre for the country for the Science and Astronomy Olympiad.

### **Stage 1 : National Standard Examinations (NSEs)**

National Standard Examinations are the first stage of selection of students in the National Olympiad Programme. Every student aspiring to go through successive stages of the programme must enroll for the NSEs.

### **Eligibility**

Physics, Chemistry, Biology : All student of Class XII or Class XI (science stream) are eligible to appear for NSEs. A student may appear for more than one as per the examination schedule. Students who have passed Class XII are not eligible.

### **Astronomy :**

For the junior level, students should be in Class IX or Class VII.

For the senior level, students should be in Class X or Class XI.

### **Syllabus :**

The syllabus for NSEs is broadly equivalent to the senior secondary level (Class XI and Class XII) of CBSE. For junior level astronomy the syllabus is broadly equivalent to secondary school level (class X) of CBSE. This is only a rough guideline and there is no detailed syllabus given for NSEs.

**To enroll for NSEs**

Find out whether your school/college is a registered centre from principal and/or the Head of Department (Each registered centre may be an examination centre for all the four subjects. If so enroll your name by paying the required fee. Your school/college will give you all necessary instructions pertaining to NSEs.

If your school/college is not a registered centre, visit their web site : <http://www.hbcse.tifr.res.in/olympiads>. This website displays centres which were registered last year. This may be of help to you in enrolling your name at the centre nearest to you by paying the required fee.

Please note that NSEs are the organizational responsibility of IAPT, with support from IACT in Chemistry and IATBS in Biology. If you have any queries about NSEP, NSEC, NSEB & NSEA or if you have any difficulty in getting enrolled for these examinations, you should contact the following person.

Co-ordinator (NSEP)

IAPT Office, I.I.E. Campus

128/2, J.P. Naik Marg, Kothrud,

Pune – 41138

Tel. : 020 254 20163 (O)

E-mail : [iapt@vsnl.net](mailto:iapt@vsnl.net)

**Stage II : Indian National Olympiad Examinations**

Indian National Olympiads are held in Physics, Chemistry, Biology and Astronomy. They are organized by HBCSE in collaboration with IAPT (Indian Association of Physics Teachers). IACT (Indian Association of Chemistry Teachers). These examinations are held at about 15 centres in the country. The dates and schedule of these examinations are communicated in the first week of January to the eligible students selected from Stage-1 examinations.

**Stage III : Orientation cum Selection Campus (OCSC)****Physics, Chemistry and Biology**

The short-listed groups of about 35 students in each subject are invited to the Orientation cum selection camps at HBCSE. The camps are of 2-3 weeks duration in each subject. The camps include several theoretical and experimental tests.

On basis of their performance in OCSC, the top 5 students in Physics, top 4 in Chemistry and top 4 in Biology are declared to be special merit students and they represent India at the respective International Olympiads. The best 20 students in each subject qualify for merit awarded by HBCSE (TIFR). The merit award will consist of merit certificate and set of complimentary books.

**Stage IV : Training of Indian teams for International Olympiad at HBCSE**

The selected Indian team, undergo a rigorous training programme at HBCSE in theory and experiment. Special laboratories have been developed at HBCSE for the purpose. Resource persons from different institutions across the country are invited to the training camps.

**Stage V : Final participation in International Olympiad**

Selected students represent India in International Olympiad

**Junior Science Olympiad (JSO)**

Student of Class 10 or Lower class can appear 1<sup>st</sup> stage is National Standard Examination in Junior Science (NSEJS) and contact person is Prof. M.I. Oglapurkar.

**NIUS And Nurture Programme****Nurture programme in Science – NIUS (National Initiative on Undergraduate science)**

One of the prestigious programme of the Department of Atomic Energy (DAE) is the National Initiative on Undergraduate Science (NIUS). This programme is intended to improve the quality of undergraduate science education. It does so by providing extended nurturing to undergraduate students and by organizing intensive workshops for college teachers. Under this programme undergraduate students have carried out research leading to over 60 International publications and conference proceedings. A few top IIT students have shifted from engineering to physics after exposure to this programme.

**Nurture Programme in Mathematics**

INMO Scholarship : The INMO awardees successfully completing IMOTC, who pursue B.Sc.. or other courses adjudged by the Board to be on the same footing with mathematics as one of the principal subjects of study, are eligible to receive a scholarship of NBHM, which is at present Rs. 4000/- (Rs. Four thousand only) per month, throughout the period of their undergraduate studies (subject to satisfactory progress). An enhanced scholarship would be available for pursuing master studies in mathematics.

**NURTURE PROGRAMME:**

INMO awardees who pursue undergraduate studies in professional areas like engineering are eligible for a novel Nurture Programme of NBHM. Under this programme students are encouraged and enabled to study advanced mathematics alongside their professional studies through cash awards (annual), setting up contact with a suitable mathematical institution. Opportunity to participate in summer workshops (covering expenses), etc. Students satisfactorily completing the contact programme and summer workshop of the first year will receive a cash award of Rs. 18,500/- and similarly for the subsequent years a cash award of Rs. 20,000/- will be given. Every year the faculty of the IMO- Training Camps selects 15-20 students of Class XII from the Senior Batch for inclusion in this Nurture Programme of NBHM.