

For Students



**INDIAN ASSOCIATION
OF
PHYSICS TEACHERS**

**National Standard
Examinations in**

PHYSICS - NSEP

CHEMISTRY - NSEC

BIOLOGY - NSEB

ASTRONOMY - NSEA

JUNIOR SCIENCE - NSEJS

EXAM.	NSEP	NSEC	NSEB	NSEA	NSEJS
Day and Date	Sunday 22nd November 2015	Sunday 22nd November 2015	Sunday 22nd November 2015	Sunday 22nd November 2015	Sunday 22nd November 2015
Time of Exam	0930 to 1130 Hrs	1230 to 1430 Hrs	1500 to 1700 Hrs	1500 to 1700 Hrs	1500 to 1700 Hrs
Eligibility (i.e.) who can appear for	Indian Students born on or after 1st July 1996 and studying in std XII or lower as on 30th Nov. 2015	Indian Students born on or after 1st July 1996 and studying in std XII or lower as on 30th Nov. 2015	Indian Students born on or after 1st July 1996 and studying in std XII or lower as on 30th Nov. 2015	Indian Students born on or after 1st July 1996 and studying in std XII or lower as on 30th Nov. 2015	Indian Students born on or after 1st January 2001 and studying in std X or class IX as on 30th Nov. 2015
Level of Question Paper	CBSE Std. XII	CBSE Std. XII	CBSE Std. XII	CBSE Std. XII	CBSE Std. X
Language of Question Paper	English Question paper can also be available in Hindi, Bangla or Gujarati.	Question Paper will be in English only	Question Paper will be in English only	Question Paper will be in English only	Question Paper will be in English only
Details of Question Paper	Multiple Choice Questions Part A1 : Questions with only one correct alternative, each for 3 marks (-1 mark for each incorrect answer) Part A2 : Some questions (each for 6 marks) with any number of alternatives (1, 2, 3 or all 4) correct. All the correct alternatives must be marked to get the credit; no negative marking.	80 Multiple Choice questions, each for 3 marks Negative mark (-1) for each incorrect answer	80 Multiple Choice questions, each for 3 marks Negative mark (-1) for each incorrect answer	80 Multiple Choice questions, each for 3 marks Negative mark (-1) for each incorrect answer These questions will be mostly in Physics, Maths and about 20% in Basic Astronomy	80 Multiple Choice questions, each for 3 marks in Physics, Chemistry, Biology & Mathematics Negative mark (-1) for each incorrect answer
Total Marks	240	240	240	240	240
	<p>Please Note :</p> <p>1) The eligibility criteria are laid down by authorities(not by IAPT).</p> <p>2) It is your (the student's) responsibility to ensure that you satisfy the eligibility norms. If at some later stage it is found that you do not satisfy the norms you will be immediately disqualified without any refund of fees.</p>				

For all queries regarding these exams, students should contact the local person

**2015 - 2016
Examinations**

What is IAPT?

IAPT (Indian Association of Physics Teachers) is an association of Physics Teachers spread throughout the country. It was started by Late Dr. D. P. Khandelwal in 1984 and today it has 6500 life members. All the work of this (our) organization is voluntary in character-thus NOBODY is paid any Honorarium or remuneration for ANY WORK of IAPT.

What is NSEP? NSEC? NSEB? NSEA? or NSEJS ?

National Standard Examinations (NSEP in Physics, NSEC in Chemistry, NSEB in Biology, NSEA in Astronomy and NSEJS in Junior Science) are nationwide examinations organized by IAPT. We have been conducting NSEP for last 29 years by now. NSEP,NSEC,NSEB and NSEA are at CBSE class XII level while NSEJS is at CBSE class X level. These NSEs are the FIRST and THE ONLY SCREENING TESTS leading towards International Olympiads in the respective subjects.

What are Science Olympiads?

Olympiads are internationally recognized competitions in various fields of knowledge. They are the highest level examinations and are hosted by different countries every year. Participation in any of the Olympiads has worldwide recognition and is considered as a great achievement. International Olympiads are held every year in Mathematics, Physics, Chemistry, Biology, Astronomy and Junior Science.

How do I go to (or participate in) the Physics(or Chemistry or Biology or Astronomy or Jr. Science) Olympiad ?

You will have to appear for NSEP (or NSEC / NSEB / NSEA/ NSEJS) and then through the Indian National Physics Olympiad (INPhO or INChO or INBO or INAO or INJSO) you may be selected for the further stages of the respective International Olympiad Programme.

Is there any other way to go to International Olympiads in these subjects?

No! There is none.

How do I enroll myself for any of these?

You must register from your OWN School / College. The Principal (or Physics or Science Teacher) of your College/ Jr. College / High School will enroll you. He will give you all further instructions. In case you have any difficulty then refer to our website www.iapt.org.in. List of all NSE centres of last year (viz 2014- 15) is available on the website. The name of contact person at the respective centre is also indicated. Enrolment at the centers only.

No direct enrolment.

What are the fees?

₹ 100/- per student per subject (per examination) to be paid in cash to the centre in charge. This exam fee cannot be refunded. DO NOT SEND ANY MONEY TO IAPT OFFICE.

What are the details of the entire selection procedure?

The aim of the first stage examination is to have a wide reach, to progressively increase this reach and to attain nationwide representation for Stage II without overly compromising on merit. Hence the selection for the Stage II examinations, i.e., Indian National Olympiad Examinations (INOs) is based on the following scheme.

(a) Eligibility Clause: To be eligible for the Stage II INO exam leading to the International Olympiad, a candidate must secure a score equal to or greater than a Minimum Admissible Score (MAS). The MAS for a given subject will be 50% of the average of the top ten scores in that subject rounded off to the nearest lower integer.

(b) Merit Index Clause: There will be a high score called the Merit Index (MI) associated with each subject in Olympiads. The MI in a subject is defined as 80% of the average of the top ten scores in that subject rounded off to the nearest lower integer. All students with a score equal to or greater than merit index MI for the subject will automatically qualify for INO Stage II examination in that subject. For example, if the average of top ten scores in a certain subject is 92, then 80% of this is 73.6. Then the MI in that subject will be 73. All candidates with a score equal to or above 73 in that subject will automatically qualify for INO stage II.

(c) Proportional Representation Clause: Students from all States and UTs need to be encouraged to appear for the first stage examination and a nationwide representation for INO Stage II is desirable. The quota for each State/UT used in National Talent Search Examination (NTSE) 2013-14, a nationwide competitive examination will be used as the baseline for calculating the number of students qualifying for Stage II INO in every subject from centres in that State or UT. Suppose the NTSE quota is S for a State, and the total for all States and UTs is T, then the total number of students to be selected to INO Stage II from that State would be S/T times 300, rounded off to the nearest higher integer. This number will include those selected on the basis of the Merit Index. In the event of tie at the last position in the list, all students with same marks at this position will qualify to appear for the INO Stage II examination. The selected students must nevertheless satisfy the eligibility clause. The number to be selected from all the centres in each State or UT will be displayed on the IAPT and HBCSE websites.

(www.iapt.org.in; <http://olympiads.hbcse.tifr.res.in>)

(d) Minimum Representation Clause: Notwithstanding the proportional representation clause the number of students selected for INO from each State and UT must be at least one, provided that the eligibility clause is satisfied.

The above criteria are illustrated with the following examples:

- Let the quota on the basis of the Proportional Representation Clause (c) for a State S1 be 20. Suppose the number of students satisfying the Merit Index Clause (b) in a subject is 10. These 10 students will qualify for the second stage INO exam in the given subject and an additional 10 students from the State S1 in the given subject will be selected merit-wise, provided they satisfy the Eligibility Clause (a).
- Let the quota on the basis of the Proportional Representation Clause (c) for a State S1 be 20. Suppose the number of students satisfying the Merit Index Clause (b) in a subject is 30. In this case, all 30 students will qualify for the second stage INO exam in the given subject, and there will be no further selection from the State S1.

(e) Previous International Representation Clause: Candidates who have represented India in the International Olympiad on a previous occasion (IOAA, IBO, IChO, IJSO and IPhO) need not appear for the first stage NSE

examination in the respective subject. Candidates who have represented India in the Asian Physics Olympiad (APhO) and the International Astronomy Olympiad Junior (IAO-Jr) need not appear for the 1st stage NSEP and NSEA Examinations respectively. Those candidates who thus qualify to skip the first stage NSEs may be allowed, on written request, to the respective National Coordinator, to directly appear for the second stage Indian National Olympiad (INO) examination, provided they satisfy other eligibility criteria such as age, pre-college status, etc.

(f) Minimum Total Number Clause: In each subject, after all the above criteria have been applied, it is possible that the target number of 300 students to be selected for INO is not reached (due to non-availability of enough number of students in some states who satisfy Eligibility Clause (a)). In such an event, additional students will be selected purely merit-wise, provided Eligibility Clause (a) is satisfied, till the target number of 300 is reached. Other clauses will not apply for these students. In case of a tie at the last position, all students with the same marks at this position will qualify to appear for the INO Stage II examination.

There will be no other criterion or provision for selection to the Indian National Olympiad Examinations (INOs).

Eligibility for INAO and OCSC-Astronomy in 2016:

Since India will be hosting the 10th International Olympiad in Astronomy and Astrophysics (IOAA) in Bhubaneswar in 2016, it might be possible to select two teams (one official team and the other guest team) for the competition. To encourage younger students to participate in IOAA 2016, the rules of selection for Stage II (INAO) and Stage III (OCSC-Astronomy) are modified as below:

- There will be no change in the eligibility for Stage I (NSEA).
- The student pool of NSEA will be divided into two groups:
 - Group A: Students who are in Class XII as of November 30, 2015
 - Group B: Students who are in Class XI or lower as of November 30, 2015
- For Stage II (INAO), a target number of 250 students will be selected from each group. Thus, a total of 500 students will be selected.
- The MI and MAS will be calculated separately for each of these groups.
- All the clauses ((a) to (f) above) of selection will be applied separately to each group.
- The question papers of NSEA 2015 and INAO 2016 will be identical for the two groups.
- For Stage III (OCSC-Astronomy), a target number of 25 students will be selected from each group, according to respective order of merit in INAO. Thus a total of 50 students will be selected.
- Selection of official and guest teams to represent India in IOAA will NOT be based on the above groups, but will be done purely on the basis of a combined merit list of all students attending OCSC-Astronomy.

Individual letters will be sent to these students informing that they have to appear for Indian National Olympiads (INOs).

All these INOs are organized by HOMI BHABHA CENTRE for SCIENCE EDUCATION (HBCSE) Mumbai. For the next stage, students are chosen on the basis of their performance at these INOs. These students in each subject attend Orientation cum Selection Camp (OCSC) in respective discipline for about 2 weeks at HOMI BHABHA CENTRE for SCIENCE EDUCATION (HBCSE) Mumbai. Indian team to participate in International Olympiad is selected from the OCSC in respective subject. For more details visit www.hbcse.tifr.res.in/olympiads and /or www.iapt.org.in

Are there any other fees for these INOs or camps?

None! You pay only once at the time of enrolment.

What is the time schedule ?

LAST DATE OF ENROLMENT : 15th SEPT. 2015. Examination schedule : Kindly see the table on the backside.

Note that all the five exams are on the same day	Sunday, 22 nd November 2015
Probable dates of INOs :	January 30 & 31, 2016
Expected date of results of INOs :	1st March 2016
OCSCs :	April – June 2016

Are Old Question Papers Available?

Yes. Set of previous four years question papers with solutions / answers, in Physics, Chemistry, Biology and Astronomy is available, cost ₹ 100. Set of last four years question papers with solutions/ answers in Junior Science is available, cost ₹ 50. Send a DD of ₹ 100 or ₹ 50 in favour of **IAPT, payable at Kanpur to**

**Indian Association of Physics Teachers,
L - 117/302, Naveen Nagar, Kanpur (U.P.) - 208025
(Tel. 0512 - 2500075, 09935432990)**

Write your name and postal address (with PIN) on the back of DD After receiving the DD, the set will be dispatched by Regd. Post or Courier. All queries regarding old question paper sets should be made on above address/ telephone number.

Are there any CERTIFICATES / AWARDS ?

In each subject,

- Certificates are given to 'top 10%' students of every centre.
- Merit Certificates are awarded to 'top 1%' students in each state, in each subject.
- Special Merit Certificates and a prize (book) will be awarded to 'National top 1%' students in each subject.
- Gold Medals are awarded to the students selected for OCSC in Physics, Chemistry & Biology.

Chief Co-ordinator of IAPT Exams :

Prof. M. L. Ogalapurkar, Pune

NSE Co-ordinators :

Prof. G. Venkatesh, Bangalore (Tel.: 09620807314)

Prof. Vijay Soman, Nagpur (Tel.: 09422987884)

Prof. M. K. Raghavendra, Bangalore (Tel.: 09901111008)

Prof. J. P. Gadre, Pune (Tel.: 09422987884)

Central Examination Office :

Indian Association of Physics Teachers

61, Sheela Vihar Colony, 7 - Heramb Co. Op. Hsg. Society, Next to Kimaya Hotel, Karve Road, Kothrud, Pune - 411 038.

Ph. : 020 - 25420163, 020-20252754

E-mail : iaptpune@gmail.com

Website : www.iapt.org.in