

*For Students*



**INDIAN ASSOCIATION  
OF  
PHYSICS TEACHERS**

**National Standard  
Examinations in**

**Physics** – **NSEP**  
**Chemistry** – **NSEC**  
**Biology** – **NSEB**  
**Astronomy** – **NSEA**  
**Junior Science** – **NSEJS**

**2018-19  
Examinations**

EXAM	NSEP	NSEC	NSEB	NSEA	NSEJS
Day & Date	Sunday 25 <sup>th</sup> November 2018	Sunday 25 <sup>th</sup> November 2018	Sunday 25 <sup>th</sup> November 2018	Sunday 25 <sup>th</sup> November 2018	Sunday 18 <sup>th</sup> November 2018
Time of Exam	08.30 am to 10.30 am	11.00 am to 1.00 pm	02.00 pm to 4.00 pm	02.00 pm to 4.00 pm	10.00 am to 12.00 Noon
Venue	Respective NSE centre	Respective NSE centre	Respective NSE centre	Respective NSE centre	<b>KV or JNV nearest to your NSE centre or some other designated centre.</b>
Eligibility (i.e) who can appear for	<ol style="list-style-type: none"> <li>Must be eligible to hold an Indian passport.</li> <li>Date of birth between 1 July 1999 and 30 June 2004, both days inclusive.</li> <li>Must be residing and studying in India since 30 November 2016 or earlier. <b>OR</b> Must be studying in an Indian school system since 30 November 2016 or earlier.</li> <li>Must not have completed (or scheduled to complete) class 12 board examination earlier than 30 November 2018.</li> <li>Must not have commenced (or planning to commence) studies in a university or equivalent institution by 1 June, 2019.</li> <li>Must not be appearing in NSEJS 2018.</li> </ol>	<ol style="list-style-type: none"> <li>Must be eligible to hold an Indian passport.</li> <li>Date of birth between 1 July 1999 and 30 June 2004, both days inclusive.</li> <li>Must be residing and studying in India since 30 November 2016 or earlier. <b>OR</b> Must be studying in an Indian school system since 30 November 2016 or earlier.</li> <li>Must not have completed (or scheduled to complete) class 12 board examination earlier than 30 November 2018.</li> <li>Must not have commenced (or planning to commence) studies in a university or equivalent institution by 1 June, 2019.</li> <li>Must not be appearing in NSEJS 2018.</li> </ol>	<ol style="list-style-type: none"> <li>Must be eligible to hold an Indian passport.</li> <li>Date of birth between 1 July 1999 and 30 June 2004, both days inclusive.</li> <li>Must be residing and studying in India since 30 November 2016 or earlier. <b>OR</b> Must be studying in an Indian school system since 30 November 2016 or earlier.</li> <li>Must not have completed (or scheduled to complete) class 12 board examination earlier than 30 November 2018.</li> <li>Must not have commenced (or planning to commence) studies in a university or equivalent institution by 1 June, 2019.</li> <li>Must not be appearing in NSEJS 2018.</li> </ol>	<ol style="list-style-type: none"> <li>Must be eligible to hold an Indian passport.</li> <li>Date of birth between 1 July 1999 and 30 June 2004, both days inclusive.</li> <li>Must be residing and studying in India since 30 November 2016 or earlier. <b>OR</b> Must be studying in an Indian school system since 30 November 2016 or earlier.</li> <li>Must not have completed (or scheduled to complete) class 12 board examination earlier than 30 November 2018.</li> <li>Must not have commenced (or planning to commence) studies in a university or equivalent institution by 1 June, 2019.</li> <li>Must not be appearing in NSEJS 2018.</li> </ol>	<ol style="list-style-type: none"> <li>Must be eligible to hold an Indian passport.</li> <li>Date of birth between 1 January 2004 and 31 December 2005, both days inclusive.</li> <li>Must be residing and studying in India since 30 November 2016 or earlier. <b>OR</b> Must be studying in an Indian school system since 30 November 2016 or earlier.</li> <li>Must not have completed (or scheduled to complete) class 10 board examination earlier than 30 November 2018.</li> <li>Must not be appearing in any of NSEA, NSEB, NSEC or NSEP 2018.</li> </ol>
Level of Question Paper	Is broadly equivalent to senior secondary level (up to and including Class XII) of CBSE	Is broadly equivalent to senior secondary level (up to and including Class XII) of CBSE	Is broadly equivalent to senior secondary level (up to and including Class XII) of CBSE	Is broadly equivalent to senior secondary level (up to and including Class XII) of CBSE. There will be greater emphasis on Physics, Mathematics and Elementary Astronomy.	Is broadly equivalent to secondary school level (up to and including Class X) of CBSE. All the basic subjects of science (Biology, Chemistry and Physics) and Mathematics may have roughly equal emphasis.
Language of Question Paper	Question paper will be in English, Hindi, Gujarati, Bangla (option during registration)	Question paper will be in English & Hindi (option during registration)	Question paper will be in English & Hindi (option during registration)	Question paper will be in English & Hindi (option during registration)	Question paper will be in English & Hindi (option during registration)
Question Paper Pattern	A) 3-mark questions, each with only one of four options correct. B) 6-mark questions, each with one or more than one option correct. To get credit, all the correct option(s) and no incorrect option(s) should be marked.	80 multiple choice questions with negative marking.	80 multiple choice questions with negative marking.	80 multiple choice questions with negative marking.	80 multiple choice questions with negative marking.
Total Marks	240	240	240	240	240

**Please Note:**

- The eligibility criteria are laid down by authorities (not by IAPT)**
- It is your (the students) 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.**

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

### 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 7500 life members. All the work of this (our) organization is voluntary in character-thus NOBODY is paid any Honorarium or remuneration for ANYWORK 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 30 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 world wide 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](http://www.iapt.org.in). The list of registered centres will be available on the website by 31<sup>st</sup> August 2018. The name of contact person at the respective centre is also indicated. Enrolment at the centres only.

### NO DIRECT ENROLMENT.

### What are the fees?

₹ 150/- 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://www.iapt.org.in); <http://olympiads.hbce.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:

**(i).** 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).

**(ii).** 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 2019:

The rules for selection for Stage II (INAO) will be same as that of previous year.

1. There will be no change in the eligibility for Stage I (NSEA).
2. The student pool of NSEA will be divided into two groups:
  - (i). Group A: Students who are in Class XII as of November 30, 2018.
  - (ii). Group B: Students who are in Class XI or lower as of November 30, 2018.
3. 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.
4. The MI and MAS will be calculated separately for each of these groups.
5. All the clauses ((a) to (f) above) of selection will be applied separately to each group.
6. The question papers of NSEA 2018 and INAO 2019 will be identical for the two groups.
7. The rules of selection for Stage III (OCSC-Astronomy) will be published by HBSCE at a latter date.

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

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

All these INOs 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.hbce.tifr.res.in/olympiads](http://www.hbce.tifr.res.in/olympiads) and / or [www.iapt.org.in](http://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. 2018.  
Examination schedule: Kindly see the table on the backside.

NSEJS Exam:	Sunday, 18th November 2018
NSEP, NSEC, NSEB & NSEA Exams:	Sunday, 25th November 2018
Expected date of results of 1st Stage:	January 1st Week 2019
Probable dates of INOs:	January Last Week 2019
Expected date of results of INOs:	February Last Week 2019
OCSCs:	May - June 2019

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  
Flat No.206, Adarsh Complex, Awasthi Vikas-1,  
Keshavpuram, Kalyanpur, Kanpur (U.P) - 208 017.  
(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,

- i) Report card will be generated to all the candidates above (MAS) and can be downloaded by the enrolled students.
- ii) Certificates are given to 'top 10%' students of every centre.
- iii) Merit Certificates are awarded to 'top 1%' students in each state, in each subject.
- iv) Special Merit Certificates and a prize (book) will be awarded to 'National top 1%' students in Physics, Astronomy & Junior Science.
- v) Gold Medals are awarded to the students selected for OCSC in Physics, Chemistry, Biology, Astronomy & Junior Science.

### Chief Co-ordinator IAPT Exams:

**Prof. G. Venkatesh, Bangalore**

### NSE Co-ordinators:

**Prof. M.K. Raghavendra, Bangalore**

**Prof. Vijay Soman, Nagpur**

**Prof. J.P. Gadre, Pune**

**Prof. P. Nagaraju, Bangalore**

### Central Examination Office:

INDIAN ACADEMY PRE-UNIVERSITY COLLEGE  
Hennur Cross, Hennur Main Road, Bangalore-560 043

**Help Line No : 080-4908 7030**

Email: [iapt.nse@gmail.com](mailto:iapt.nse@gmail.com)

**Website: [www.iapt.org.in](http://www.iapt.org.in)**