EXAM	NSEP	NSEC	NSEB	NSEA	NSEJS
Day & Date	Sunday (24th November 2019)	Sunday (24th November 2019)	Sunday (24th November 2019)	Sunday (24th November 2019)	Sunday (17th November 2019)
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	KV or JNV nearest to your NSE centre or some other designated centre.
Eligibility (i.e) who can appear for	1. Must be eligible to hold an Indian passport. 2. Date of birth between July 1, 2000 and June 30, 2005, both days inclusive. 3. Must be residing and studying in India since 30 November 2017 or earlier. OR Must be studying in an Indian school system since 30 November 2017 or earlier. 4. Must not have passed (or scheduled to complete) class XII board examination or equivalent earlier than November 30, 2019. 5. Must not have commenced (or planning to commence) studies in a university or equivalent institution by June 1, 2020. 6. Must not be appearing for NSEJS 2019.	1. Must be eligible to hold an Indian passport. 2. Date of birth between July 1, 2000 and June 30, 2005, both days inclusive. 3. Must be residing and studying in India since 30 November 2017or earlier. OR Must be studying in an Indian school system since 30 November 2017or earlier. 4. Must not have passed (or scheduled to complete) class XII board examination or equivalent earlier than November 30, 2019. 5. Must not have commenced (or planning to commence) studies in a university or equivalent institution by June 1, 2020. 6. Must not be appearing for NSEJS 2019.	1. Must be eligible to hold an Indian passport. 2. Date of birth between July 1, 2000 and June 30, 2005, both days inclusive. 3. Must be residing and studying in India since 30 November 2017 or earlier. OR Must be studying in an Indian school system since 30 November 2017 or earlier. 4. Must not have passed (or scheduled to complete) class XII board examination or equivalent earlier than November 30, 2019. 5. Must not have commenced (or planning to commence) studies in a university or equivalent institution by June 1, 2020. 6. Must not be appearing for NSEJS 2019.	1. Must be eligible to hold an Indian passport. 2. Date of birth between July 1, 2000 And June 30, 2005, both days inclusive. 3. Must be residing and studying in India since 30 November 2017 or earlier. OR Must be studying in an Indian school system since Nov. 30, 2017 or earlier. 4. Must not have passed (or scheduled to complete) class XII board examination or equivalent earlier than November 30, 2019. 5. Must not have commenced (or planning to commence) studies in a university or equivalent institution by June 1, 2020. 6. Must not be appearing for NSEJS 2019.	1. Must be eligible to hold an Indian passport. 2. Date of birth between January 1, 2005 and December 31, 2006, both days inclusive. 3. Must be residing and studying in India since November 30, 2017 or earlier. OR Must be studying in an Indian school system since November 30, 2017 or earlier. 4. Must not have passed (or scheduled to complete) class X board examination or equivalent earlier than November 30, 2019. 5. Must not be appearing for any of NSEA, NSEB, NSEC or NSEP 2019.
Level of Question Paper	Is based on the syllabus upto Class XII of CBSE India.	Is based on the syllabus upto Class XII of CBSE India.	Is based on the syllabus upto Class XII of CBSE India.	Is based on the syllabus upto Class XII of CBSE India. There will be greater emphasis on Physics, Mathematics and Elementary Astronomy.	Is based on the syllabus upto Class X of CBSE India. 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 enrolment)	Question paper will be in English & Hindi (option during enrolment)	Question paper will be in English & Hindi (option during enrolment)	Question paper will be in English & Hindi (option during enrolment)	Question paper will be in English & Hindi (option during enrolment)
Question Paper Pattern	A) 60 multiple choice questions with one alternative correct. +3 marks credit for correct choice. -1 mark penalty for incorrect choice. B) 10 multiple choice questions with one or more than one correct alternatives. 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 No calculator is allowed
Total Marks	240	240	240	240	240

Please Note:
1. The eligibility criteria are laid down by authorities (not by IAPT)
2. 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.
3. Legal matters (If Any) pertaining to all these examinations will be subject to the jurisdiction of Dehradun District Court only (the location of central examination office and the office of chief coordinator of IAPT examinations) and no other court in India.

For Students
(Student's Brochure)
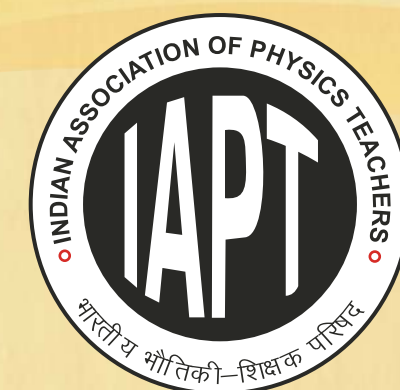
INDIAN ASSOCIATION OF PHYSICS TEACHERS

206, II Floor, Adarsh Complex, OPR-4, Awas Vikas -1, Keshavpuram, Kalyanpur, Kanpur-208 017

National Standard Examination in

Physics	-	**NSEP**
Chemistry	-	**NSEC**
Biology	-	**NSEB**
Astronomy	-	**NSEA**
Junior science	-	**NSEJS**

2019-20 EXAMINATION

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 nearly 8000 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 31 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 in India 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 enroll your self from your OWN School / College. The Principal (or Physics or Science Teacher) of your College / Jr. College / High School will enroll you. He / She will give you all further instructions. In case you have any difficulty then refer to IAPT website https://www.iapt.org.in The list of registered centres will be available on the website by 21st August 2019. 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 can not 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 over all compromising on merit, the selection for the Stage II examination, i.e., Indian National Olympiad Examinations (INO) the following scheme (Points (a) to (f)) is adopted.

(a) **Minimum Admissible Score (MAS) Clause:** To be eligible among 300 students for the Stage II i,e the Indian National Olympaid Examination 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 NSE. 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 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 NSE of that subject will automatically qualify for INO.

(c) **Proportional Representation Clause:** Students from all States and UTs in India need to be encouraged to appear for the first stage examination and a nationwide representation for INO is desirable. The quota for each State/UT used in National Talent Search Examination (NTSE) 2013-14, a nationwide competitive examination is used as the baseline for calculating the number of students qualifying for 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 for INO 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 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. (https://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 five, 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 S, 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 S, 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 S, 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 S,.

(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 National Coordinator Science Olympiads (nc_olympiad@hbcse.eifr.res.in) 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 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 2020
In order to encourage younger students to participate in Astronomy olympiad. The rules are modified as below:
1. The eligibility criterion for NSEA has been given on the sheet above.
2. The student pool of NSEA will be divided into two groups:
   (i). Group A: Students who are in Class XII as of Nov. 30, 2019.
   (ii). Group B: Students who are in Class XI or lower as of November 30, 2019.
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 2019 and INAO 2020 will be identical for the two groups.

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 Olympiad (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 / www.iapt.org.in

Are there any other fees for these INOs or camps?
None! You pay only once at the time of enrolment for NSE.

What is the time schedule?
ONLINE CENTRE REGISTRATION BEGINS: August 1, 2019
LAST DATE OF ENROLMENT: September l5, 2019
Examination schedule: Kindly see the table on the above.

NSEJS	Sunday, November 17, 2019
NSEP, NSEC, NSEB & NSEA	Sunday, November 24, 2019
Expected date of results of 1st Stage	1st Week January 2020
Dates of INOs:	February 1 & 2 2020
Expected date of result of INOs	Last Week February 2020
OCSCs	May-June 2020

Previous Years Question Papers: Yes, separate booklets containing question papers with solution/answers for past five years each in Physics, Chemistry, Biology, Astronomy and Junior Science are available at a cost of ₹ 50/- per booklet.
To obtain the previous year papers of NSE deposit the amount online or by NEFT in the account given below. Send the details with proof along with your address on email: iaptknp@rediffmail.com The booklet will be sent to you by registered post from Kanpur IAPT Registered office.
Account Name: Indian Association of Physics Teachers
Account Number: 20768203191
Bank: Allahabad Bank, **Branch:** Kakadeo Kanpur (UP)
IFSC Code: ALLA0210490
Phone: 0512 2500075, 9935432990

Are there any CERTIFICATES / AWARDS?
Yes, 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 Coordinator IAPT Examinations:
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NSE Coordinators:
DR. Anand Singh Rana (9412954316) Dehradun
DR. Vijay V. Soman (9822107522) NAGPUR
IAPT Central Examination Office:
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Help Line No: 9632221945, 9411530162
Email: iapt.nse@gmail.com, iaptddn@gmail.com
Website: https://www.iapt.org.in

For all queries regarding the examination, students should contact the centre incharge.