

# NATIONAL STANDARD EXAMINATION 2024

THE FIRST STAGE OF  
NATIONAL OLYMPIAD PROGRAMME OF SCIENCE IN INDIA  
IN  
ASTRONOMY, BIOLOGY, CHEMISTRY, JUNIOR SCIENCE  
AND  
PHYSICS

*Leading to participation in International Olympiads*



**Prof B P Tyagi**  
Chief Coordinator (Examination)

## INDIAN ASSOCIATION OF PHYSICS TEACHERS

IAPT Examination office: #15, Block II, Rispana Road  
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<https://www.iapt.org.in>

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Registered office: 206, Adarsh Complex Avas Vikas 1, Keshavpuram, Kalyanpur Kanpur-208017

a call for

## Enrolment for NSEA / NSEB / NSEC / NSEJS and NSEP - 2024

To enjoy Science with fun at school level

A challenge for in-depth learning

A major Olympiad programme in Sciences in India to achieve excellence through the  
*National Standard Examination*

*Leading to*

*International Olympiad in Astronomy, Biology, Chemistry, Junior Science and Physics*

**MAKE INDIA PROUD OF ITS YOUNG SCIENTISTS**

**INTRODUCTION:** The International Olympiads aim to bring the most talented school (Pre-University) students of the world together in a friendly competition of the highest level. They provide a stimulus to begin a career in Science and an opportunity to undertake a life long journey into the realms of exciting intellectual challenges. The Olympiads are not merely competitions rather they are the means to meet bright young minds and to build new friendships that cater future scientific collaborations all across the world. Similar to the Olympics in sports, the Science Olympiads leave a long-lasting impression on young minds. Such events are the opportunities of celebrations in school life and provide intellectual stimulus to a student to prove his/her worth on a global platform and allow us to teach and to learn science in unique unconventional ways.

The Scientific community in India recognized the need of a National Olympiad Program in basic Sciences and formulated the Indian National Olympiad in Physics (INPhO), Chemistry (INChO), Biology (INBO), Astronomy (INAO) and Junior Science (INJSO). The Nodal agency for all these examinations is Homi Bhabha Centre for Science Education – a national center of Tata Institute of Fundamental Research Mumbai. All the INOs are conducted by HBCSE in the first week of February every year. The nodal officer is Prof Anwesh Mazumdar, National Coordinator of Science Olympiads in India ([nc\\_olympiad@hbcse.tifr.res.in](mailto:nc_olympiad@hbcse.tifr.res.in)).

NATIONAL STANDARD EXAMINATION – 2024 to be conducted by **Indian Association of Physics Teachers** along with Association of Chemistry Teachers (ACT) and Association of Teachers in Biological Sciences (ATBS) in Nov 2024 are the **pre-requisites** of Indian National Olympiads & that of the International Olympiads in respective subjects.

This booklet tells you all about the National Standard Examination and the process of enrolment

**PARTICIPATION IN INTERNATIONAL OLYMPIADS:** Indian team has been participating in International Physics Olympiad (IPhO) since 1998. In the past 26 years, Indian students have excelled at International Olympiad in every subject. More than 99% of the contestants from India have won medals and laurels in International competitions. The International Physics Olympiad – 2019 was conducted at Tel Aviv in **Israel** from July 7 to 15, 2019. Indian team fetched two Gold and three silver Medals. The International Physics Olympiad – 2020 and 2021 was cancelled due to Covid 19 and in IPhO – 2022 conducted online in Switzerland from July 10 to 17, 2022 Indian Team fetched one Gold and four Silver Medals.

**INDIAN ASSOCIATION OF PHYSICS TEACHERS:** IAPT is a national organisation of Physics Teachers and Professionals having interest in teaching and learning of Physics. Founded by Late Prof. D.P. Khandelwal in 1984, today IAPT has more than 9000 life members working dedicatedly for furthering interest in Physics, throughout the country. The academic work of this organisation is all voluntary and thus NOBODY is paid any honorarium or remuneration for any work of IAPT. The organisation has an elected National Executive Committee as an apex body along with 22 regional councils at state level working in the country. It undertakes a number of academic programmes for students and teachers. The conduct of NATIONAL STANDARD EXAMINATION leading to International Olympiads is one of its many responsibilities. Members of IAPT have been conducting NSEP since 1987.

## Details of NATIONAL STANDARD EXAMINATION – 2024

| First stage Examination   | Day, Date, Time and Venue (Centre)  | Question Paper Pattern  | Language   | Syllabus  |
|---|---|---|--|---|
| <b>NATIONAL STANDARD EXAMINATION IN PHYSICS (NSEP – 2024) XII - Level</b>       | <b>SUNDAY<br/>NOVEMBER 24, 2024<br/>8.30 AM TO 10.30 AM</b><br><br>RESPECTIVE REGISTERED NSE CENTRE<br>[For a school to be centre enrolled students $\geq 30$ in at least one subject]. | Part A) 48 questions each of 3 marks with one correct option out of four options with negative marking [+3 marks for correct choice and – 1 for wrong Answer]<br>Part B) 12 questions each of 6 marks with any number of correct options say 4, 3, 2 or 1. No negative marking. Credit is given only when all correct options are marked. | English, Hindi, Gujarati, Bangla, Tamil & Telugu<br><br><b>Must be at least 300 students for any language</b><br><br>Option at the time of Enrolment | Is broadly equivalent to Senior Secondary School level (up to and including class XII of CBSE India Board Physics)  |
| <b>NATIONAL STANDARD EXAMINATION IN CHEMISTRY (NSEC – 2024) XII - Level</b>     | <b>SUNDAY<br/>NOVEMBER 24, 2024<br/>11.30 AM TO 1.30 PM</b><br><br>RESPECTIVE REGISTERED NSE CENTRE<br>[For a school to be centre enrolled students $\geq 30$ in at least one subject]  | Part A) 48 questions each of 3 marks with one correct option out of four options with negative marking [+3 marks for correct choice and – 1 for wrong Answer]<br>Part B) 12 questions each of 6 marks with any number of correct options say 4, 3, 2 or 1. No negative marking. Credit is given only when all correct options are marked. | English & Hindi<br><br><b>Must be at least 300 students for any language</b><br><br>Option at the time of Enrolment                                  | Is broadly equivalent to Senior Secondary School level (up to and including class XII of CBSE India Board Chemistry)  |
| <b>NATIONAL STANDARD EXAMINATION IN BIOLOGY (NSEB – 2024) XII - Level</b>       | <b>SUNDAY<br/>NOVEMBER 24, 2024<br/>2.30 PM TO 4.30 PM</b><br><br>RESPECTIVE REGISTERED NSE CENTRE<br>[For a school to be centre enrolled students $\geq 30$ in at least one subject]   | Part A) 48 questions each of 3 marks with one correct option out of four options with negative marking [+3 marks for correct choice and – 1 for wrong Answer]<br>Part B) 12 questions each of 6 marks with any number of correct options say 4, 3, 2 or 1. No negative marking. Credit is given only when all correct options are marked. | English & Hindi<br><br><b>Must be at least 300 students for any language</b><br><br>Option at the time of Enrolment                                  | Is broadly equivalent to Senior Secondary School level (up to and including class XII of CBSE India Board Biology)  |
| <b>NATIONAL STANDARD EXAMINATION IN JUNIOR SCIENCE (NSEJS – 2024) X - Level</b> | <b>SUNDAY<br/>NOVEMBER 24, 2024<br/>2.30 PM TO 4.30 PM</b><br><br>RESPECTIVE REGISTERED NSE CENTRE<br>[For a school to be centre enrolled students $\geq 30$ in at least one subject]   | Part A) 48 questions each of 3 marks with one correct option out of four options with negative marking [+3 marks for correct choice and – 1 for wrong Answer]<br>Part B) 12 questions each of 6 marks with any number of correct options say 4, 3, 2 or 1. No negative marking. Credit is given only when all correct options are marked. | English & Hindi<br><br><b>Must be at least 300 students for any language</b><br><br>Option at the time of Enrolment                                  | Is broadly equivalent to Secondary School Level (up to and including class X of CBSE India Board Science)   |
| <b>NATIONAL STANDARD EXAMINATION IN ASTRONOMY (NSEA – 2024) XII - Level</b>     | <b>SATURDAY<br/>NOVEMBER 23, 2024<br/>2.30 PM TO 4.30 PM</b><br><br>RESPECTIVE REGISTERED NSE CENTRE<br>[For a school to be centre enrolled students $\geq 30$ in at least one subject] | Part A) 48 questions each of 3 marks with one correct option out of four options with negative marking [+3 marks for correct choice and – 1 for wrong Answer]<br>Part B) 12 questions each of 6 marks with any number of correct options say 4, 3, 2 or 1. No negative marking. Credit is given only when all correct options are marked. | English & Hindi<br><br><b>Must be at least 300 students for any language</b><br><br>Option at the time of Enrolment                                  | Is broadly equivalent to Senior Secondary School level (up to and including class XII of CBSE India Board Phys & Math) Greater emphasis on Physics and Mathematics Only elementary Astronomy and night viewing of sky |

**Note:** The fee for all of these examination is ₹ 300.00 per student per subject. To be paid at the centre during enrolment. There must be minimum 30 examinees for a school to be centre. Else a student can directly enrol ONLINE on IAPT website <http://www.iapt.org.in>



**FIVE STAGES OF INDIAN NATIONAL OLYMPIAD PROGRAMME IN PHYSICS:** To be a part of Indian team for International Physics Olympiad (IPhO), a student has to go through 5 stages. The National Standard examination being the first stage. Various stages for IPhO - 2025 are

1. **National Standard Examination in Physics (NSEP – 2024)**

NSEP – 2024 on SUNDAY 24.11.2024 at **8.30 AM to 10.30 AM** for students of class XII or lower, born between 1.7.2005 and 30.6.2010 (both days inclusive) This examination is conducted at about 1000 centres in India nearly 49,500 students enrolled in NSEP-2023. A student may enrol in his/her school or any nearby school which is a registered centre in the city. The list of registered centres can be seen on [www.iapt.org.in](http://www.iapt.org.in) on August 21, 2024. An individual student can also enrol himself/herself online on web after 21.8.2024 but before 14.9.2024.

2. Indian National Physics Olympiad (INPhO – 2025) in Jan/Feb 2025 by HBCSE Mumbai at 18 centres in the country for the students shortlisted on the basis of NSEP – 2024 to be held on 24.11.24.
3. Orientation Cum Selection Camp (OCSC) for about 35 students shortlisted from INPhO – 2025. For details visit website: [olympiads.hbcse.tifr.res.in](http://olympiads.hbcse.tifr.res.in)
4. Predeparture Camp for **Five** students. The selected students shall undergo a rigorous training in theory and experiment for a week in July – 2025 at HBCSE Mumbai prior to going to **France** for International Olympiad:
5. 55th International Olympiad (IPhO – 2025) **in France** for competition in Theory and Experiment in July 2025

**A Similar Schedule** is observed for Chemistry, Biology, Astronomy and Junior Science.

**NSE** - the national level examination are designed to assess the conceptual understanding, logical reasoning, laboratory skills and above all, ability to apply problem solving skills to novel situations.

*These examination as such do not require any special coaching. However a sincere effort towards your class room teaching must be effective.*

All the Principals/Vice Principals and centres in-charges of Schools / Colleges are requested to register their Institution as a centre for NATIONAL STANDARD EXAMINATION, Schools/Colleges recognised by Government and associated / affiliated to a Board or University can only be the registered centre. **Coaching Centres/ Coaching Classes or any private premises cannot be registered as a centre for National Standard Examination.**

Online Registration of Centres begins **from August 1, and lasts on August 20, 2024**

Enrolment of students (through centre in-charge or individually by him/her) **from Aug 21, to Sept 14, 2024.**

*[Read brochure for students as well as the one for teachers]*

**Important: During Examination:**

- The fee for all of these examination is Rs 300.00 per student per subject.
- Observers/IAPT representative will be sent to all centres to observe and report the smooth conduct of examination.
- All centre in-charges are requested to **make a video with mobile with the timer on** of opening of the question paper envelope in the presence of students, 20 minutes before the commencement of the examination and send the same to the Chief Coordinator (Examination) at the same time on 9632221945 or [iapt.nse@gmail.com](mailto:iapt.nse@gmail.com) **with your centre number**. Question paper envelope must be signed by two examinees and one invigilator. This envelope must be sent back to examination office Dehradun with the Answer books (OMR Sheets) positively on 25.11.24.
- Any Examination Centre found **guilty of using unfair means / unfair practice** shall be cancelled. Decision of the Chief Coordinator (Examination) shall be final and binding to all.
- Certificates shall be awarded to students who will be
  1. Centre Top 10%
  2. State Top 1%
  3. National Top 1% (certificate with book prize)
  4. All shortlisted 300 students for Indian National Olympiad in all the subjects.
  5. Students attending the OCSC (at HBCSE Mumbai or Bangalore) will get merit certificate and a Gold Medal.

**Legal matter (if any) shall be the jurisdiction of Dehradun District Court and no other court**



# Indian Association of Physics Teachers National Standard Examination 2024

in

Physics (NSEP), Chemistry (NSEC), Biology (NSEB) & Junior Science (NSEJS)

Day & Date of Examination: Sunday November 24, 2024

**Astronomy (NSEA) - 2024 will be held on November 23, 2024 at 2.30 PM to 4.30 PM at designated centres.**

*General Instructions cum guide-lines for the use of School Principal/Vice Principal/ centre in-charge.* Here-in-after the word “School” will imply college/ Jr College/ Sr. Sec. School/ Hr. Sec. School/ High School or any other similar Govt approved & recognized institution AFFILIATED to A Board/University. Only such schools/colleges can be NSE centres. **Coaching Centres/Coaching Classes/any private premises cannot be registered as a centre for NSE**

## Read the students' brochure first

All aspirants of International Science Olympiads must read the Students' Brochure. Any student appearing for NSEJS cannot appear for NSEP, NSEC, NSEB and NSEA and vice versa.

## Work of IAPT and therefore of these examinations is VOLUNTARY

### ONLINE REGISTRATION OF CENTRES

Online centre registration will start w.e.f **August 1, 2024 on the website: <https://www.iapt.org.in>** The centre registration includes the details of centre and centre in-charge later the enrolment list and the fee of the students are to be deposited on the portal. For guidelines visit the above website. All the centres in-charge are requested to cooperate to improve the process and make the system more efficient. A centre number shall be allotted to every registered centre which will remain same for years to come. Ensure that proper address with PINCODE, email address and at least two phone numbers are provided for your center.

## Address should be given with PINCODE

Students of class XII, XI or lower are advised to enrol for NSE – 2024 in their own school/college but may be his/ her school/college is not opting to be a centre. The centre incharge is thereby urged to enrol all such desirous students at his/her centre and oblige. A minimum enrolment of total 30 students is essential for any institute desiring to be a centre of NSEs. Kindly enrol students by collecting fees yourself. Student enrolment forms may be downloaded from the website **[www.iapt.org.in](http://www.iapt.org.in)** and **issued to students for their enrolment.** Issue the receipt for the fees collected. **The fee is ₹ 300/-** (Rupees Three Hundred only) **per student per subject.** Please note that a student can opt for any number of subjects. **Last date of Enrolment is September 14, 2024. Accept fees till this date. (NOT BEYOND THAT)** Kindly collect appropriate fees (as indicated above). Keep ₹ 60/- from every ₹ 300/- collected by you, for the expenses for examination at your centre. Transfer the remaining amount ₹ 240/- per student per subject to IAPT through **Pay fees section under student** management by using centre Login on the web. This facility will allow you to make payment online using debit/credit card/ NEFT/ Net banking/ UPI/E-Wallet etc. The last date for remittance of fee by the centre in-charge will be September 16, 2024. If the fee is not deposited by this date Enrolment will not be accepted. For the guidelines for online payment one may visit the website.

## Payment of fees will be online only

The expenses at the centre include stationery items needed, photo state charges, the postage, printing hall tickets & hospitality to the staff working for examination voluntarily etc. The balance amount left at the end of the entire examination work is at your disposal to be utilized for any other similar academic activity. No Need to submit any account of this amount to IAPT.

*Just to repeat, you keep 20% for your expenses and transfer online 80% of the amount you collect to IAPT.*

During online registration, IAPT will allot a Centre Number to each centre. This centre number is to be mentioned in all future correspondence and will be used for enrolment of students and payment of fees on the said portal on the website. The centre number will remain same for future years as well. The receipt for the payment received by IAPT will be sent to you by email. The receipt also indicates the details of the enrolment at your centre. Ensure that there is no discrepancy. Question Paper packets for your centre are prepared according to this information written on the fee receipt. Kindly provide separate enrollment sheet for Junior Science (NSEJS). Visit the web.

Two weeks before the exam, the list of students enrolled in your centre with roll number and hall tickets will be sent to you by your registered email. The hall tickets have to be printed and attested by the Principal/centre in-charge with the school seal. Hall tickets must be given to students and they must be made mandatory to produce the same during the examination along with a proof of identity. Open every letter, packet or any other communication (email) received from IAPT IMMEDIATELY on its receipt [Except the question Paper Packet] LOOK FOR A LETTER OF INSTRUCTIONS and act accordingly.

### IMPORTANT: Dispatch of Examination Parcels

Examination material will reach the centre well in time before the examination, by speed post/courier/messenger. In some cases the centre in-charge may be requested to collect the material from local coordinator. To keep a safe custody of the same is your sole responsibility & academic obligation. IAPT observer will come on the day of examination. In case the examination material does not reach you **by 15.11.24** immediately contact **Help Line No. 8533993332 or 9632221945** between 9.00 am to 6.00 pm.

### Conducting the examination: The Question Paper envelopes are NOT to be opened till the time of that examination (open only 20 minutes before)

The Roll number of students will be assigned by IAPT Exam office Dehradun. Kindly display appropriate list of names indicating the students' roll number one week before the exam. Along with this; kindly display the details of the examination such as subject, date, time and above all the place of examination classroom (s), seating arrangement etc. Adhere to the given time schedule strictly. Be extra vigilant and careful. These NSEs are very prestigious examination. Prestige depends on YOU. Each NSE must be conducted in the premises of your school/college, under the control of the centre in-charge. Ensure that no malpractice occurs. Any malpractice detected will summarily disqualify the entire centre. In the past, few centres were disqualified on account of improper conduct of examinations.

### IAPT's decision in any matter shall be final

IAPT provides envelopes for sending the answered OMR sheets. Seal the used OMR in proper envelope (according to subject) immediately at the close of an examination. After the entire examination all the sealed envelopes be put in one and dispatch it to Dehradun positively on 25.11.24. Please read the instructions carefully and follow them. It is our experience that delays and inconveniences are caused by not adhering to these instructions

### Important Note

For the convenience of registration of centres and enrolment of students, a tutorial video is given as a link in the website, please go through this video before registering, which gives a clear demo of the procedure

**Prof. B P Tyagi** (9837123716)  
**Chief Coordinator (Examination)**  
**Examination Coordinators:**  
Dr Anand Singh Rana (9412954316) Dehradun  
Dr D Uthra (8610886474) Chennai

**IAPT Examination Office:**  
# 15, Block II, Rispana Road,  
DBS (PG) College Chowk Dehradun – 248001  
Helpline No.9632221945, 8533993332, 8310281694  
e-mail: [iapt.nse@gmail.com](mailto:iapt.nse@gmail.com)  
Website: <http://www.iapt.org.in>

**Note: Legal matter (if any) pertaining to NSE shall be subject to the jurisdiction of Dehradun district court only & nowhere else**



FIRST STEP TOWARDS

# INTERNATIONAL SCIENCE OLYMPIADS

NATIONAL STANDARD EXAMINATION IN PHYSICS : NSEP 2024 - 25

NATIONAL STANDARD EXAMINATION IN CHEMISTRY : NSEC 2024 - 25

NATIONAL STANDARD EXAMINATION IN BIOLOGY : NSEB 2024 - 25

NATIONAL STANDARD EXAMINATION IN ASTRONOMY : NSEA 2024 - 25

NATIONAL STANDARD EXAMINATION IN JUNIOR SCIENCE : NSEJS 2024 - 25

These are the only examinations that lead to participation of Indian students in the National and International Science Olympiads. No other examination is recognized for this purpose.

Organized by



## INDIAN ASSOCIATION OF PHYSICS TEACHERS (IAPT)

206, Adarsh Complex, Awasth Vikas - I, Keshavpuram, Kalyanpur, Kanpur-208017

In co-ordination with

ASSOCIATION OF CHEMISTRY TEACHERS (ACT) &  
ASSOCIATION OF TEACHERS IN BIOLOGICAL SCIENCES (ATBS)

**Step II** Toppers from these NSEP, NSEC, NSEB, NSEA & NSEJS from each State/Union Territory will be eligible for II stage i.e Indian National Olympiads (INOs) 2025 in respective subjects. For details see the website: [www.iapt.org.in](http://www.iapt.org.in) and the student's brochure.

**Step III** About 35 toppers in each of INPhO, INChO, INBO, INAO and INJSO will qualify for the Orientation Cum Selection Camp (OCSC) in respective subjects for two weeks at Homi Bhabha Centre for Science Education (HBCSE), Mumbai or Bangalore Indian teams to participate in International Olympiads – 2025 will be selected on the basis of performance of students in respective OCSC.

In addition, about 8 toppers from INPhO may get an opportunity to participate in **Asian Physics Olympiad (APHO)**. The APHO will be held in May 2025.

**Language:** Question Papers are in English, Hindi, Gujarati, Bangla, Tamil and Telugu or any Indian Language provided 300 students **OPT** for it

**Awards:** Students attending OCSC will be awarded Gold medals and a merit certificate in all subjects. Certificates shall be awarded to Toppers (National & State) of National Standard Examination.

**Syllabus:** NSEP, NSEC, NSEB: Upto CBSE class XII; NSEA: Physics & Mathematics upto CBSE class XII along with basic Astronomy; NSEJS: Physics, Chemistry & Biology upto CBSE class X.

### Programme:

**Centre registration:** Aug 1 to Aug 20, 2024.

**Student enrolment:** Aug 21 to Sep 14, 2024

- Enrollment at Centre:** Pay fee to Centre In-charge.
- Direct Online Enrolment:** A student can enroll directly online at [www.iapt.org.in](http://www.iapt.org.in); He/She will pay fee by online payment.

### DATE AND TIME OF EXAMINATION: SUNDAY 24.11.24

NSEP : 8:30 AM to 10:30 AM

NSEC : 11:30 AM to 1:30 PM

NSEB : 2:30 PM to 4:30 PM

NSEJS : 2:30 PM to 4:30 PM

**SATURDAY 23.11.2024**

NSEA : 2:30 PM to 4:30 PM

**Fee**  
**Rs. 300.00**  
**per student**  
**per subject**

PREVIOUS 10 YEARS QUESTION PAPERS BOOKLET WITH ANSWERS IN EACH SUBJECT IS AVAILABLE FOR Rs. 150/- EACH FROM IAPT OFFICE KANPUR ([iaptknp@rediffmail.com](mailto:iaptknp@rediffmail.com))

### Prof. BP Tyagi

**Chief Coordinator (Examination)**

23 Adarsh Vihar, Raipur Road,  
Dehradun - 248001

Ph: 9837123716, E-mail: [bptyagi@gmail.com](mailto:bptyagi@gmail.com)  
Visit Website: [www.iapt.org.in](http://www.iapt.org.in)

Dr. Anand Singh Rana (9412954316) Coordinator NSE  
Dr D Uthra (8610886474) Coordinator NSEJS

**IAPT Examination Office:**

15, Block II, Rispana Road, DBS College Chowk, Dehradun-248001  
Email: [iapt.nse@gmail.com](mailto:iapt.nse@gmail.com)

**Helpline:** 9632221945, 8310281694, 8533993332

For all queries regarding the examination: Student may contact local centre in-charge else the Helpline.







For centre registration, fill this form for **NSE-2024** using CAPITAL letters and mail it to **iapt.nse@gmail.com**  
Please do not forget to mention PIN CODE.

From: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Date: \_\_\_\_\_



Centre number (if known) 

|  |  |  |  |  |
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|  |  |  |  |  |
|--|--|--|--|--|

To,  
**Prof. BP Tyagi**  
Chief Coordinator (Examination)  
Indian Association of Physics Teachers  
**15, Block II, Rispana Road**  
**Dehradun-248001 (Uttarakhand)**

Email: \_\_\_\_\_

Sir,  
Our School/ College/ Jr College / Institution named as \_\_\_\_\_  
\_\_\_\_\_ may kindly be registered as a centre for

### **National Standard Examination - 2024**

School UDISE Code is \_\_\_\_\_

Mr/Ms \_\_\_\_\_ is appointed as the **Centre In-charge** of this Voluntary Academic Activity for the year 2024 - 2025. *This school/Institution will provide the necessary facilities for the conduct of examination free of charge. Being the Head of the institution, I undertake the responsibility of the fair conduct of examination and its secrecy & sanctity.*

Maximum number of students that can be accommodated in one session is \_\_\_\_\_

You are hereafter requested to communicate to the Centre - In charge in connection with this examination

Yours faithfully,



\_\_\_\_\_  
PRINCIPAL

(NAME \_\_\_\_\_)

Phone (Off.)(Code \_\_\_\_\_)

Mobile: \_\_\_\_\_

Centre In-charge : Mr/Ms \_\_\_\_\_

Address (Off.) : \_\_\_\_\_

Pin: \_\_\_\_\_

Phone (Off.) : ( \_\_\_\_\_ ) \_\_\_\_\_  
code

Address (Res.) : \_\_\_\_\_

Pin: \_\_\_\_\_

Phone (Res.) : ( \_\_\_\_\_ ) \_\_\_\_\_  
code

Email id: \_\_\_\_\_

(Please ✓ address for all further correspondence)

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

National Standard Examination (NSEP in Physics, NSEC in Chemistry, NSEB in Biology, NSEA in Astronomy and NSEJS in Junior Science) are nationwide examinations conducted by IAPT. We have been conducting NSEP for last 36 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 Science Olympiads in the respective subjects.

### What are Science Olympiads?

Science Olympiads are internationally recognized competitions in various fields of knowledge. These are the highest level examinations hosted by a different country 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, Chemistry, Biology, 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 Science Olympiad Program in India.

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

No! There is none.

### How do I enrol myself for any of these?

You may enroll your self through 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, you can refer to IAPT website <http://www.iapt.org.in> else email to [iapt.nse@gmail.com](mailto:iapt.nse@gmail.com). The list of registered centres will be available on the website by August 21, 2024. The name of contact person at the respective centres can also be seen there. A student can enroll through centre incharge or individually on [www.iapt.org.in](http://www.iapt.org.in)

### What is the fee?

Fee is ₹ 300/- per student per subject (per examination) to be paid in cash to the centre in charge. The exam fee is not refundable. For online enrolment and payment of fee please visit [web www.iapt.org.in](http://www.iapt.org.in)

### 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 examinations, i.e., Indian National Physics Olympiad (INPhO) and others the following scheme is adopted.

**Eligibility Clause:** To be eligible for the II Stage INO exam leading to the International Olympiad, a candidate must secure a score equal to or greater than the 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.

(a) **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 the 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 NSE of that subject will automatically qualify for INO stage II.

(b) **Proportional Representation Clause:** Students from all States and UTs in India need to be encouraged to appear for the first stage examination so as to achieve nation wide presentation for INO the Stage II. The quota for each State/UT used in National Talent Search Examination (NTSE) 2013-14, a nationwide competitive examination will be used as the base line for calculating the number of students qualifying for INO the Stage II 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 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 never the less 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. (<http://www.iapt.org.in>; <http://olympiads.hbcse.tifr.res.in>)

(c) **Minimum Representation Clause:** Not with standing 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. This criterion is being 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.

(d) **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.

(e) **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 2025:

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

1. The eligibility criterion for NSEA has been given in the students brochure.
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, 2024.
  - (ii) Group B: Students who are in Class XI or lower as of November 30, 2024.
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 2024 and INAO 2025 will be identical for the two groups.

### Similar groups A+B may be for Physics, Chemistry and Biology also from this year

There will be no other criterion or provision for selection to the Indian National Olympiad Examination (INOs) Individual mails 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 HBCSE-TIFR, Mumbai. Indian team to participate in International Olympiad is selected from the students attending OCSC in respective subject.

For more details visit [www.hbcse.tifr.res.in/Olympiads](http://www.hbcse.tifr.res.in/Olympiads) and [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 for NSE.

What is the time schedule? Online centre registration will begin on 1.8.2024

**Enrolment begins** on 21.8.2024 both at centre and even online on [www.iapt.org.in](http://www.iapt.org.in)

**LAST DATE OF ENROLMENT:** Sept. 14, 2024.

**Examination schedule:** Kindly see the table

|                                       |                               |
|---------------------------------------|-------------------------------|
| NSEA                                  | : Saturday, November 23, 2024 |
| NSEP, NSEC, NSEB & NSEJS              | : Sunday, November 24, 2024   |
| Expected date of results of 1st Stage | : December 25, 2024           |
| Probable dates of INOs                | : First week of February 2025 |

Yes. Set of previous ten years question papers with solutions /answers, in Physics, Chemistry, Biology, Astronomy and Junior Science is available at a cost of ₹ 150/- For past year papers Deposit the amount as per details below and send mail with your request to [iaptknp@rediffmail.com](mailto:iaptknp@rediffmail.com). Do write your postal address with pincode and your phone number. You will receive the booklet by registered post.

Account No. : 20768203191

Bank Name: Indian Bank, IFSC Code: IDIB000K521

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.

### Prof. B.P. Tyagi

Chief Coordinator (Examination)

### NSE Coordinators:

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# International Physics Olympiad

(IPhO – 2023)

held on

Tokyo University Japan

[July 11 to 17, 2023]



## Left to Right

Dr. Leena Joshi (Scientific Observer), Prof Anwesh Mazumdar (Scientific Observer),  
Raghav Goyal (SILVER), Rhythm Kedia (SILVER), Mehul Borad (GOLD),  
Dhruv Shah (GOLD), Aditya (GOLD), Dr. Shirish Pathare (Leader)  
Prof Arun V Kukarni (Leader)