

# Olympiad programs at HBCSE

Physics

Chemistry

Biology

Mathematics

Astronomy

# Aims and Objectives of The Olympiads

- ◆ Build awareness of the subject among young minds
- ◆ Encourage students with good foundations in these subjects
- ◆ Pursue interest for further studies in the subjects
- ◆ Search for talent
- ◆ Develop interest for research careers

# Stages of examinations and selection Process

- ◆ Stage 1:
  - National Standards Examinations
  - regional examination (Math)
- ◆ Stage 2: Indian National Olympiads
- ◆ Stage 3: Training Camps
- ◆ Stage 4: Pre-departure training
- ◆ Stage 5: International Olympiads

# Pattern of examination in the selection Process

- ◆ Stage 1: Multiple choice questions
  - Part 1 and part 2
- ◆ Stage 2: part 1 + part 2
  - (practical or subjective)
- ◆ Stage 3: Training Camps
  - 5 tests + practical
- ◆ Pre-departure training of selected students
- ◆ International Olympiads

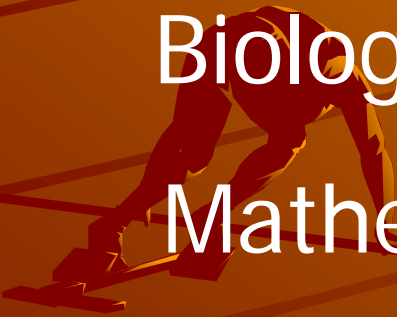
# Eligibility

◆ Age : from 14 to 18 years

Physics: }  
Chemistry: } From 9<sup>th</sup> Std. to 12<sup>th</sup> Std.  
Biology: }

Mathematics: From 8<sup>th</sup> Std. to 12<sup>th</sup> Std.

Astronomy: From 8<sup>th</sup> Std. to 11<sup>th</sup> Std.



# Syllabus

- ◆ No pre-designed textbooks
- ◆ Based on 12<sup>th</sup> standard CBSE textbooks
- ◆ Problem solving
- ◆ lab-experiment component (basic sciences)
- ◆ Observational practical component
- ◆ Analysis of data (Astronomy)

# You are tested for:

- ◆ Understanding of basic concepts in science
- ◆ Use of mathematics as a tool
- ◆ How you visualize problems
- ◆ Approach of solving problems
- ◆ Rationality in handling problems
- ◆ Clarity of thought
- ◆ Use of instruments

# What you directly get ?

- ✦ Medals and awards at each national level + international
- ✦ Award from Infosys
- ✦ KVPY
- ✦ NIUS
- ✦ Nurture camps and projects with scientists, in India and abroad.
- ✦ Direct enrollment to BARC recruitment training program after graduation



# What you get indirectly ?

- ◆ Confidence
- ◆ Freedom of thought
- ◆ Freedom from textbook
- ◆ Rational approach towards career choices
- ◆ Your place in national level
- ◆ International acclaim
- ◆ Friends at national/international level
- ◆ Opportunity to work with scientists/institutions
- ◆ Know what is happening at the frontiers of science and technology

# Whom to approach for Olympiads?

## ✦ [www.hbcse.tifr.res.in/olympiads](http://www.hbcse.tifr.res.in/olympiads)

- Dr. R. M. Dharkar (coordinator, IAPT) for enrollment to NSEP, NSEC, NSEB, NSEA.
- Dr. Arvind Kumar, Centre Director HBCSE for regional mathematics Olympiad

## ✦ **National coordinators:**

- For Physics, Chemistry, Biology:  
Prof. V. Singh (HBCSE)
- For Astronomy: Prof. M. N. Vahia (HBCSE, TIFR)
- For Mathematics: Prof. R. B. Bapat,  
(Indian Statistical Institute, New Delhi)

## ✦ **For more Information: HBCSE**

- Shri Anand Ghaisas (Astronomy)
- Shri Mangesh Mastakar (Basic sciences and Mathematics)