Guidelines for Selection of Indian team for
International Junior Science Olympiad (IJSO) 2021

Selection tests at HBCSE

- The students with rank between 1 and 35 (both inclusive) in the IOQJS Part II merit list will be eligible for selection for the Indian team for IJSO 2021, provided they

  (a) are eligible to hold an Indian passport (OCIs are not eligible);

  (b) have maintained at least 80% attendance in the online JSOOC held earlier;

  (c) have not represented India in any other International Olympiad in 2021.

  These students will be invited to HBCSE for the selection tests, named **Junior Science Olympiad Selection Tests (JSOST)** to be held between late afternoon on **Saturday, 23 October** and early afternoon of **Sunday, 24 October, 2021**.

- Only theoretical and experimental tests will be held over two days at HBCSE (of total duration of about 8 hours). There will be no lectures, laboratory training sessions or arbitration sessions.

- JSOST will be conducted only at HBCSE and no alternative venues will be considered. No appeal in this regard will be entertained.

- Only students will be accommodated at HBCSE; no accompanying person may stay at HBCSE. Accommodation will be offered only for the period between 00:00 hrs of Saturday, 23 October and 00:00 hrs of Monday, 25 October. Additional accommodation will be provided only on specific request citing travel constraints. Students may also arrange to stay outside HBCSE at their own expense.

- Students must provide a negative report of RT-PCR test conducted within the last 72 hours of their arrival at HBCSE. This will be mandatory, irrespective of vaccination status. Failure to provide this will result in the disqualification of the student from JSOST.

- All COVID-related norms (including mandatory use of masks all the time, adequate social distancing) must be adhered to by all students during their stay at HBCSE. HBCSE shall arrange for adequate medical care for non-COVID cases, should they arise during the students' brief stay at HBCSE. For COVID cases, prevailing norms of BMC will be adhered to.

- In the event of a deterioration of the pandemic, or for any other reason, HBCSE shall reserve the right to cancel JSOST at a short notice. In that case, IOQJS Part II scores will be applicable for all students to select the team of six students for IJSO. If there is a tie for the last position(s), the scores of IOQJS Part I will be used to break the tie.

Options for students and registration for JSOST

- Students will have the option of not coming to HBCSE, and therefore, not taking JSOST. In that case, their IOQJS Part II (scaled) score will be the sole criteria for their selection in the team (see details below). The same rule will apply for any student who registers for JSOST, but is unable to come due to sudden illness (subject to production of medical certificate) or imposition of lockdown.

- Students will be required to register their option (either only IOQJS, or IOQJS+JSOST) before the commencement of JSOOC. One and only one change of option will be permitted up to 3 days prior to JSOST (up to 20 October). In exceptional cases of proven inability to travel at the last minute due to sudden illness or sudden lockdown, as indicated above, withdrawal from

JSOST will be permitted in the last 3 days prior to JSOST (21-23 October). In case of no show at JSOST without approved withdrawal, zero marks will be assigned for JSOST.

- Students must accept and abide by all the terms and conditions of the selection process during registration. No appeal for any change in the conditions will be entertained.

Selection criteria for IJSO team

- The selection of the team will be based on the scaled scores in the following three components (see below for scaling rule):

    1. IOQJS Part II (Weightage: 40%)
    2. JSOST-Theory component (Weightage: 20%)
    3. JSOST-Experiment component (Weightage: 40%)

- The scores of each of the three components mentioned above (including IOQJS Part II) will be scaled by setting the respective median score (of the top 35 students in IOQJS Part II merit list) to be half of the percentage weightage assigned to that component. That is, if a student obtains M marks in a component which has a weightage of W (20% or 40%), and the median score in that component is A, then the scaled score, S, of the student in that component will be

$$S = M \times \frac{W/2}{A}$$

The scaled scores of the three components calculated in this manner will be added to compute the final score that will be used to prepare the rank list for IJSO selection:

$$\begin{aligned}
S_{\text{total}} =& S_{\text{IOQJS-II}} + S_{\text{JSOST-Theory}} + S_{\text{JSOST-Expt}} \\
=& \frac{\text{Marks in IOQJS Part II} \times 20}{59} \\
& + \frac{\text{Marks in JSOST-Theory} \times 10}{\text{Median marks in JSOST-Theory}} + \frac{\text{Marks in JSOST-Expt} \times 20}{\text{Median marks in JSOST-Expt}}
\end{aligned}$$

(The median score in IOQJS Part II (2021) for the students with ranks 1 to 35 is 59.0)

Note that the weightages in each component have already been taken into account in the calculation of scaled score.

- For students who opt out of JSOST, their IOQJS Part II score will have 100% weightage:

$$S_{\text{total}} = \text{Marks in IOQJS Part II} \times \frac{50}{59}$$

- The team for IJSO will be selected by choosing the top six students in the ranked list prepared as above.

- In case of a tie at the sixth place, the following criteria will be applied to break the tie:

    1. The student with a higher combined total scaled score of JSOST-Theory and JSOST-Expt will be ranked higher. In case the tie involves a student who has opted out of JSOST, that student will be ranked lower.
    2. If the above does not break the tie, the student with the higher scaled score of JSOST-Expt will be ranked higher.
    3. If the above does not break the tie, a different criterion will be applied. This criterion will be decided by the Examination Board of JSOST and will be announced immediately prior to JSOST.
    4. In case the tie involves only students who have opted out of JSOST, the student with higher marks in IOQJS Part II will be ranked higher. If this does not break the tie, then the student with higher total marks in IOQJS (Part I + Part II) will be ranked higher.