



IIT BOMBAY



SOF-TECHFEST, IIT BOMBAY- INNOVATION CHALLENGE 2018-19

Science Olympiad Foundation and Techfest, IIT Bombay are pleased to announce “SOF - Techfest Innovation Challenge” 2018-19. Techfest is the Annual Science and Technology Festival of Indian Institute of Technology Bombay. It is recognized as Asia’s Largest Science and Technology Festival.

With the sole motto of promoting creative and innovative thinking among the Indian students, Techfest is conducting a Pan India **INNOVATION CHALLENGE** in association with Science Olympiad Foundation.

Students studying in class 8th, 9th and 10th can appear in Innovation Challenge provided they have registered for SOF National Science Olympiad 2018-19.

No separate registration fee is to be paid nor separate registration required to participate in the Innovation Challenge

About the Exam

Round One

There will be a Special Question Section on Innovation Challenge in the SOF NSO Examination (in the question papers for classes 8, 9 and 10) to be held on 1st, 15th & 27th of November. Students, who wish to participate in the Innovation Challenge, would be required to upload answer to the question online (techfest.org/innovation challenge) as per following schedule:

For NSO to be held on 1st November – on 8th Nov. Between 12 noon and 8.00PM

For NSO to be held on 15th November – on 23rd Nov. Between 12 noon and 8.00PM

For NSO to be held on 27th November – on 30th Nov. Between 12 noon and 8.00PM

Sample Problem & Answer

Title of proposed problem (in about 20 words): Solution to tackle the shortage of Potable water

Problem Statement (in about 50 words): Two-third of the earth crust is made of water yet, availability of potable water remains a challenge.

Proposed Solution to the problem (in 100-150 words): In tackling this challenge, small wind propellers can be installed at strategic river points in every city or community to pump water from such river to reservoir for storage. Such wind energy can also power purification systems thus bringing portable water to every home and farms. This system can be used by farmers as a water reserve that fills over time. During a drought season the farmer could use the reserve as a buffer to weather the hard times and save their food produce. It is easy and cheap because regions hence more portable water and more food. It is easy and cheap because where there is a river, there is guarantee of wind hence more portable water and more food.

Expectation and Conclusion (in about 50 words) This idea is primarily intended to be used as a source of drinking water for people who do not have easy access to clean water. Therefore, depending on the application, this idea can lessen drinking water shortages and dependency on the non-renewable sources of energy to power the water purification systems.

Students are expected to present new solutions and not copied from internet.

Round Two

Top 20 rank holders will be invited to IIT Bombay with an accompanying adult to participate in the finals on 14th -16th December 2018.

Prizes

1. Each participant will be awarded a Participation Certificate from Techfest IIT Bombay & SOF.
2. Qualifier for Round two will be awarded Merit Certificate from Techfest, IIT Bombay & SOF.
3. Winners will be awarded Trophies, Gifts, and Certificates.
4. Travel reimbursement, boarding, and lodging will be provided by Techfest, IIT Bombay to top 20 students invited to participate in the finals at IIT Bombay and one accompanying adult.
5. Top 10 students will be taken on a guided tour to Vikram Sarabhai Space Centre, Kerala,
6. Other exciting rewards will be announced separately.

Out of the above 20, top 8 students will be selected to attend a Russian Winter Camp in Russia from 3rd Jan to 11th Jan 2019. All expenses pertaining to the Camp, including travel, food, accommodation, sightseeing,etc will be borne by Rosatom. Students will spend time in developing new skills, sports, and sightseeing.

This winter camp is being held by Techfest and SOF through the support of ROSATOM <https://www.facebook.com/RosatomSoutheastAsia>