

Shiksha

Sanskar

Swavalamban



Shiksha Sopan

An Initiative of IIT Community for social upliftment

Reg. Office: 391, Nankari, IIT, Kanpur 208016, PAN : **AAFTS9743R**

Newsletter November 2022

Dear Readers, Greeting from the Shiksha Sopan family. In the month of October we celebrated World Students' Day in collaboration with Amar Ujala, conducted science visits, monthly events like First Sunday Club at Sopan Ashram and SOORMA at Noida. Our morning and evening learning centers are doing well, the brief reports of the October month are here for you.

Central programs

World Student's Day

Shiksha Sopan in collaboration with Amar-Ujala Kanpur unit celebrated World Student's Day at Sopan Ashram, Nankari on 15th October, 2022. In this event students from 10 schools of Kanpur were invited to Sopan Ashram for scientific excursion and direct conversation with HC Verma sir. A total of 200 students and their mentor teachers attended the event. The program started with lighting the lamp in front of Maa Saraswati. On this occasion Dr. Verma presented Saraswati Vandana "Jay Jay Hey Bhagwati..." and Dholak instrument played by Mr. Amit K Bajpai (If you want to listen Saraswati Vandana please use this YouTube link-<https://youtu.be/Xic93xTMKdI>). The chief guest of the program, Sameer Khandekar Sir with his words increased the morale of the students and showed them the path of development.



With HC Verma sir, the children talked about the problems they were facing in their studies as well as in their lives. Dr. Verma and Sopan Science Cell team showed attractive experiments related to electromagnetism to the students.

Amar Ujala's editor, Unit Head and other guests were present in the program. Mr Atul and Mr. Yogesh Jha presented mementos to the guests from Amar Ujala. We used hand made drawing which were made by the children of evening centers as gifts from Shiksha Sopan. After this all the children, school wise were given a tour of the entire Sopan Ashram. We planned to show 14 locations of Sopan Ashram like guest house, India map, all the labs, solar panels etc. to the students. Each school were mentored by one of our volunteers. Our volunteers helped us during visits, those were Mr. Anubhav Awasthi, Mr. Ranjit Kumar, Mr. Ajay Kamal, Ms Swati Singh, Ms. Anjali Savita, Ms. Neha Katiyar, Mr. Yogesh K. Jha, Mr. Atul Kumar, Ms. Anjali, Ms. Shreya and Mr. Sanjeev Kumar. Mr. Amit K. Bajpai anchored and coordinated the whole event.

First time kids visited Sopan Ashram

On October 16, a group of students came for scientific tour to Sopan Ashram. Children from class one to tenth were involved in this tour. It was really a great challenge for Science team to handle junior students of std 1 to 5. First time we did science show for these kids. Our team took this task and performed experiments for these kids and those who could not understand the technical names properly. We showed varieties of simple experiments in activity mode and they played with us too. We found that they were more energetic and took participation in all activities with full enthusiasm.

They also enjoyed our outdoor experiments like coupled pendulum, in this experiment one of students oscillates one pendulum but after few seconds the other attached pendulum starts oscillating and the first one was stops. They were very amazed to see the behaviour of coupled pendulums. They also visited our farming, they took the green grass and put in-front of cows, they also enjoyed learning basic vegetable farming. This visit planned by Mr. Bhuwan Bhatiya and her sister Ms. Nancy Bhatia. Both persons were happy to see the interaction level of the kids with Sopan Team members.

Mr. Amit Kumar Bajpai, Mr. Ranjit Kumar, Mr. Yogesh Kumar Jha, and Mr. Vinay Kumar Mishra managed and coordinated the program. We felt our energy levels getting matched with the kids.



Sopan Outreach: Majlish (SOORMA)

Two sessions were conducted in month of October 2022. One session was online and another one was offline. The brief report of the both sessions are given below-

First Online Session was on 2nd October, 2022,

Time : 4:30 pm to 5: 30 pm, **Resource person:** Ms. Smita Fangaria

Topic: Calculation of air pressure at Kedarnath from home

Number of participants: 15

The session involved finding the pressure difference of the air on the floor and on the ceiling of a room on the basis of the weight of the air in the room. The participants were first made to guess the weight of the air in the room and they guessed it to be between few hundred grams and 2 kg. Everyone realised their mistake when the weight of the air was calculated using the density of air and the volume of the room which came to be nearly 100 kg-wt. The difference in the reaction from the ground and the reaction from the ceiling which supported this weight of air in the room was used to find the pressure difference per metre of altitude. This value was used to find the air pressure at the altitude of Kedarnath. When the values obtained were matched with the value given on the internet, it was found that there was a discrepancy. This was on account of the density difference in the air with altitude. The pressure difference was also related to the density difference in the air.

Iteration method was then used to find the value of the air pressure at Kedarnath taking into account the density difference of air. The results obtained were within 5% of the actual values. It was an eye-opening session for everyone

Second session conducted offline on 16th October, 2022

Resource person: Ms. Smita Fangaria, **Timings:** 10:30 am to 1:00 pm

Topic: Weight , **Attendees:** 8

The session involved discussions based on some demo experiments in mechanics. These experiments included putting three ring magnets on a stand such that they repelled each other. The forces on the magnets were discussed in details.



Next some marbles were put in a plastic container and made to float in water in a beaker. The participants were asked what would happen to the level of water in the beaker if the marbles were put in water. The marbles were then dropped in the container and some were amazed to see the water level go down. Then the amount by which the water level decreased was mathematically proved. Another demo involved glasses having same base area but different heights and shapes. Glasses were filled with equal volume of water. The glasses were then weighed on the pan balance. The reaction by the pan on the glass, the force by the water on the bottom and walls of the glass and the pressure of water on the glass were discussed in details. Those were a number of very lively sessions.



First Sunday Club (FSC)

This is joint monthly event of Shiksha Sopan and SGM-IAPT Anveshika, mostly it conducted at Sopan Ashram, Nankari, Kanpur. This month it was on 9th October 2022.

The session started with the introduction of each members. Dr. H C Verma sir talked about Doppler Effect in this FSC because many teachers requested to sir to teach this topic. Verma sir cleared all the doubts related to the topic by explaining it in the simplest manner.



After question - answer session, Mr. Amit K Bajpai showed one simple experiment related to mechanics. All the teachers enjoyed the experiments and discussed a lot.

Mr. Bajpai used a balloon and cardboard and showed wonderful demonstration including all members. Another attractive demonstration was showed by Mr. Manish Yadav, He came with one special bead which he brought from Goa. He showed the wonderful behaviour of bead in water. He promised that he will demonstrate it fully in future. He is working on it and understanding it's science himself by doing experiments.



Sopan Anaupacharik Shikshan Kendra (SASK)

Celebration of 2nd October

As we know, the 2nd October was when Mahatma Gandhi and Lal Bahadur Shastri were born. Both contributed their lives for the Nation so our country celebrates their birthday every year to remember their deeds and sacrifices. SASK also celebrated their birthday. One day before their birthday, all the children and volunteers did sanitation work at SASK. Mr. Ranjan Upadhyay, Mr. Ajay Agnihotri and Mr. Amit Kumar Bajpai were invited as guests. They inaugurated the program by lighting the lamp. After that, Ms. Seema Verma, coordinator, SASK hosted the program. Krishna and Anshu of classes 1st and 2nd recited a poem named "Kad Chhota par Karm Vishal," Ankit of class 8th gave a speech on Lal Bahadur Shastri. On this occasion, stationery was distributed among the students. Mr. Ranjan Upadhyay and Mr. Amit Bajpai also encouraged the students by their speech at last.



Academic activities

To make the study enjoyable, Ms. Seema Verma conducts various activities regularly. On October, from 12th October to 14th October, Seema Ji showed a variety of activities in which she taught the Respiration system by chart paper model, Skelton system by making the Skelton model through the A4 paper. Children of SASK also made this paper Skelton by their own hands and enjoyed these activities to the fullest with great learning.



Parents Meeting

On 14th October, the academic results of classes 1st to 8th were declared. So on 14th October, a Parents' meeting was conducted where the parents of each class student were called and discussed their academic performance.



15th October celebration

We all know about our Missile man and Bharat Ratna, Dr. A P J Abdul Kalam. He has contributed so much to the field of science and technology. Our country could test nuclear power through his effort, and we also reached space. He also became the president of India. So that SASK celebrated his birthday with full enthusiasm. Ankit of class 8th gave information about his life and Ms. Seema Verma also taught making Missile from A4 Paper.



Extra curricular activities

Every Month, SASK conducts extracurricular activities to make the children creative and innovative. In the last month, coordinator Ms. Seema Verma conducted a Craft Activity. All activities of the month were given below-

- ❖ For classes 1st to 3rd, she taught making colorful candles with paper.
- ❖ For classes 4th to 5th, students learnt from her to make attractive Diya from cardboard and glitter sheets.
- ❖ Students of classes 6th to 8th Learnt to decorate clay lamps.
- ❖ All the candles and Diya, which children made, were gifted to Sapan Family Members on the occasion of DEEPAWALI festival.



Baal Akhbaar

October edition of Baal Akhbaar was prepared by Ajeet Kushwaha of class 8th and Aryan of class 6th. Durgesh of class 5th wrote about Mahatma Gandhi and Lal Bahadur Shastri in Mahapurush Column. In the same column, article about Dr. A P J Abdul Kalam was also mentioned. Gungun of class 6th wrote about International Balika Diwas, Divyanshi of class 7th wrote a poem on Diwali.



Barasirohi Evening Center(BEC)

Celebration of 2nd October

BEC celebrated 2nd October with children and volunteers. We know that on the 2nd October Mahatma Gandhi and Lal Bahadur Shastri were born. They both sacrificed their lives for the country. So that on 2nd October our country celebrated their birthday with full of enthusiasm. BEC celebrated their birthday, where Abhishek Ji told about their respective life stories. After that, a quiz was organized based on their lives.

Celebration of Dussehra

As we know, October month was full of festivals, and in the same scenario, Dussehra was on 5th October. Dussehra was the festival of victory of good over evil. On this day, Ravan was killed by Lord Rama. BEC celebrated this festival where every child made the effigy of Ravan and lit it to celebrate the victory of God.



Extra curricular activity

Along with the study, extra activity is also important to refresh the children's minds, so a day in a month, BEC conducts additional activities for the children. On 20th October, Ms. Atika Ji and Mr. Abhishek Ji, IIT Kanpur students, came to BEC and made the children refreshed by performing several games and puzzles.

Deepawali celebration

On 22nd October BEC celebrated Deepawali with children, the program inaugurated by Ms. Beena Yadav through lightening the lamp. After the inauguration Ms. Kshma, Coordinator, BEC told every one why we celebrate Deepawali. Several programs were done like reciting poem, story telling etc. Rahul Ji, EC member, Shiksha Sopan explained the time duration between Dussehra and Deepawali in scientific manner. At last Beena Ji gave a motivational speech and thanked BEC for inviting her in the program. Snacks and sweets were distributed among all.



Sopan Ashram Evening Center (SAEC)

Senior Volunteer Amarjeet Ji visited SAEC

On October 13, a former IIT Kanpur student and worker of our center Mr. Amarjeet came to Sopan Ashram to meet the children. He talked to the children that what they all are doing now and how their studies are going. They talked to the children about all these things. Children of the SAEC Alok, Akash, Kushagra, Ayush, and twelfth pass-out students Nishu, Aakriti, etc., were present in this meet. Amarjit Ji gave career-related guidance to the children.



Brief activities of SAEC

This center is progressing under the guidance of Dr. H C Verma. Two slots have been created at the center in which the first slot is to be taken by Dr H C Verma Sir for teaching Physics, Mathematics to the children of classes 9 to 12. In the second slot, Children are taught by IIT Kanpur students.

❖ On the occasion of Deepawali, Mr. Vinay Kumar Mishra, Senior volunteer and Mr. Deepak Sahu, IIT Kanpur Phd student went to the homes of the SAEC children and met their parents. They took information from them related to the education of the children. Parents were happy to saw both people at their homes. They served sweets and snacks to them.

Self written poem by Mr. Vinay Kumar Mishra

खुली नजर से देखो मित्रों खोलो मन के द्वार,
जो है जैसा वैसा क्यों है इस पर करो विचार -2
आसपास की दुनिया किन नियमों पर चलती है,
किसके कहने पर यह पृथ्वी घूमती रहती है।
रहस्यमय अद्भुत भयकारी जो है लगता आज,
हर डर टूटे सब भ्रम छूटे, खुले जब उसका राज।
शोध ज्ञान से सब प्रश्नों के उत्तर हो साकार,
जो है जैसा वैसा क्यों है इस पर करो विचार।



बहता पानी कैसे उड़कर बादल बन जाए,
छोटे बीजों में से कैसे फसलें लहलहाए।
चारा खाकर गोबर बनता गोबर से फिर खाद,
जब मिट्टी में खाद मिले तो खिले फसल का स्वाद।
ऐसे ही जीवन का पहिया घूमे चक्राकार,
जो है जैसा वैसा क्यों है इस पर करो विचार।

सूक्ष्मजीव हो या सागर की महाकाय सी व्हेल
परमाणु हो ब्लैक होल हो या लहरों का खेल
जिज्ञासा की डोर बांधकर जब हम कूद पड़े
प्रज्ञा के ये पंख खोलकर सच की ओर बढ़ें
इस दृष्टि से देखोगे तो, लगे अलग संसार
जो है जैसा वैसा क्यों है इस पर करो विचार।

अंधकार को क्यों धिक्कारें, अच्छा हैं एक दीप जलायें

Web site : For more details please visit www.shiksha-sopan.org

How to donate: [Shiksha Sopan](#)

(b) You can write cheques/draft for donations in the name of "Shiksha Sopan" payable at Kanpur and send to the address given below.

(c) Online transfer can be made in State Bank of India, IITKanpur branch. Account No. **10426002488**, Account name "Shiksha Sopan", IFSC code **SBIN0001161**

(d). People in US can use the link <http://www.iitk.ac.in/dora/donation/PayPal/> and Choose Shiksha Sopan Charitable Contribution to donate through IIT Kanpur foundation using credit cards. All donations are 100% tax deductible in the United States. IIT Kanpur Foundation (Tax ID: 94-3370645) is Tax Exempt under 501(c)(3) classification of IRS.

(e). All donations are Tax free (up to 50%) under section 80/G.

Email Contacts : hcverma@iitk.ac.in, samkhan@iitk.ac.in, sopanbajpai@gmail.com
sopaniitk02@gmail.com

Postal Contact : [Dr. Sameer Khandekar, Dept of Mech. Engg., IIT Kanpur 208016](#)
[Dr H C Verma, Dept of Physics, IIT Kanpur, Kanpur 208016](#)

Phone contacts : [Mr. Amit 9506611484](#), [Mr. Ranjan 9235905046](#)