# Shiksha

# Sanskar

# Swavalamban



# Shiksha Sopan

# An Initiative of IIT Community for social upliftment

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

Newsletter July 2021

We hope you and your family are healthy and safe from this pandemic. It is a sign of relief as COVID cases are declining daily but yet it is not over. Shiksha Sopan wishes you and your loved ones a safe and healthy life. We need to protect ourselves from the upcoming third wave therefore, please follow the safety guidelines, wear masks, wash your hands regularly and follow social distancing in gathering. In June, several activities were planned and performed. We would like to share our experiences and work details with you.

# Einstein Nobel Prize Centenary Year Celebration (ENOPCYC 2021) Basic (Std 6-8) Teachers Workshop, Kanpur, Blocks

Shiksha Sopan and SGM-IAPT Anveshika organized ENOPCYC sessions especially for Basic Teachers of Kanpur. We talked to Dr. Pawan Kumar Tiwari, Basic Shiksha Adhikari (BSA) Kanpur and Mr. Devendra Patel, Khand Shiksha Adhikari, Chaubepur block for conducting online sessions for their teachers. They agreed and planned for five-day workshops in each of the 10 blocks. These sessions were conducted on digital platform of ZOOM from 11 June to 15 June 2021 from 10.30 AM to 11.30 AM. In each session around 300 teachers participated. We thank to Dr. Govind Lakhotiya, Director, Bajaj Science Center, Wardha who provided us the Zoom link and technical support during the workshop.

The workshop was inaugurated on 11th June and hosted by Mr. Amit Kumar Bajpai. Dr. Pawan Kumar Tiwari gave an overwhelming welcome speech. While speaking Dr. Tiwari discussed the work done by Dr. Verma Sir for the society. We were accompanied by Mr. Devendra Patel Ji and Mr. Umakant Ji in the session. In this 11<sup>th</sup> June session, Dr. H. C. Verma was the main speaker. He spoke about Albert Einstein with the help of a short video created by Mr. Abhishek Dass Ji. He also explained about electroscope, photoelectric effect, etc. without using any equations and formulas. Many other sessions were also organized for other blocks.

#### **Basic Teachers and Students Workshop for Orai, Jalaun**

We conducted a three-day workshop for the teachers and students of Orai, Jalaun from 22nd to 24th June 2021. On the first day the session was conducted by Mr. Yogesh K Jha. He demonstrated a variety of experiments like electrostatic charging through balloon and small pieces of papers, dancing straws, electroscope, induction, and photoelectric effect using UVC light to the students. In this session students from class 6th, 7th, and 8th participated. While experiments were being performed, students were very happy and were enjoying the sessions. We also conducted a small Q&A session for the students. Mr. Yogesh K Jha and Mr. Amit K Bajpai were giving their answers to the questions. Mrs. Archana Tripathi, Retd. Principal, and very active member of the team gave thanks to Yogesh ji and the whole team.

The next day on 23rd June 2021, the session was arranged for the teachers. This session was lead by Dr. H. C. Verma Sir. Mr. Bhagwat Patel, District Inspector of School (DIOS) Orai, Jalaun district welcomed Dr. H C Verma and his team. Dr. Verma's session was a wonderful and motivational session where he discussed many experiments and cleared the doubts of teachers. The third-day session was headed by Mr. Sanjay Kumar Singh, PGT teacher at ETAWA who was closely related to the First Sunday Club activity of SGM-IAPT Anveshika. He discussed Photoelectric Effect and explained it beautifully. This session was arranged for Class 9th to 12th students. Total 187 students and teachers were participated in three days or workshop.

#### State level two-days workshop

Regional Council - 4 (RC-4) U.P. of Indian Association of Physics Teachers (IAPT) in association with Shiksha Sopan conducted a two-day workshop on 7th and 8th June. Mr. Amit Kumar Bajpai, Secretary, Shiksha Sopan coordinated the workshop along with Dr. Rajesh K Dwivedi, President, RC-4. We published one poster for the workshop on social media, and we got approx 4800 registrations from the teachers and students. The first session of Dr. H. C. Verma was most awaited for registered people. They are very eager to listen Prof Verma. Due to some technical problems we could accommodate only 600 participants in the session. Dr. Rajesh Kumar Dwivedi gave the inaugural speech and welcomed Dr. H. C. Verma Sir for the session, Dr. Verma led the session where he discussed the Photoelectric effect. He explained the theory of electroscope, experiments of Milikan and Photon theory of Albert Einstein. The duration of the session was 1.5 hr, but the teachers extended it as they wanted more time to interact with Dr. Verma.

The 2<sup>nd</sup> day session was an experimental demonstration session conducted by Mr. Amit K Bajpai and his team. Mr. Bajpai introduced and welcomed Mr. Mohit Kumar, Auraiya and Mr. Ramendra Kushawaha to the audience for demonstration. Mr. Mohit showed very simple experiments related to the Electric field. Mr. Ramendra Kushwaha demonstrated experiments related to Magnetism. After the Electricity and Magnetism demonstrations, Mr. Bajpai demonstrated experiments related to Electromagnetism. Dr. Sunder Singh, Secretary, UP RC-4 gave a vote of thanks to the resource persons as well as to the participants. He showed his gratitude towards Verma sir. The demonstration was successfully completed in presence and supervision of Prof Verma.

#### **Workshop for Engineering Students**

One of the renowned Engineering College, Pranveer Singh Institute of Technology, Kanpur (PSIT) conducted a one-day interaction session with their B. Tech students on 21st June between 11.00 AM to 12.30 PM. Prof. H. C. Verma Sir was the chief speaker of the session. Dr. Urvashi Srivastava, Faculty PSIT coordinated the whole event.

Around 300 students attended the session. Mr. Amit Kumar Bajpai and Mr. Ranjit Kumar assisted Dr. Verma Sir during the demonstrations. Dr. Verma demonstrated simple experiments related to Maxwell's equation. He showed wonderful diffraction and interference pattern using a green laser torch on the screen and asked the students about the slit or slits creating the patterns. He asked them the type of slits he is using to show those patterns. Dr. Verma showed his slit and it was his three in one razor blade.

Students were very much surprised to see the slit arrangements. After the demonstration looking at the curiosity among the students, we conducted a short Q&A session between students and Dr. Verma Sir.

# COmmunity Computer Instruction LAb (कोकिला)

Founded with the support of Pragati Foundation, COCILA is established to use technology to make Science, Maths and Engineering teaching more effective. Though almost the entire school/college education is going in online mode, the situation for students of economically weaker students remains tough. Most of them do not have a good smartphone or other computer devices and also internet connectivity and charges are beyond their reach.

Shiksha Sopan has started a course on Mathematics for std 10 of its Sopan Ashram Evening Centre students using COCILA. The course was inaugurated by Dr. Kaustubh Kulkarni, Department of MSE IITK, Dr. Shikhar Jha, Department of MSE IITK, and Dr. H.C Verma on June 25, 2021.

Dr. H. C. Verma Sir prepared class 10<sup>th</sup> videos in hindi for the whole syllabus of class 10<sup>th</sup> Mathematics. Mr Vimal Kumar, a very active Shiksha Sopan volunteer, is heading the project. Students, one on each computer, see the lectures which is uploaded one by one. Vimal Ji remains all the time there to assist in the subject as well as in computer operation if needed. Time table is made for problem solving and asking questions. Regular homework and discussions are part of the course.



# First Sunday Club (FSC)

SGM-IAPT Anveshika conducts a First Sunday Club activity, and you all would have read it in the previous newsletters. On 6th June 2021, we called an FSC activity online on zoom between 10.00 AM to 12.00 noon. As this FSC was conducted digitally, around 44 teachers from different states actively took part in discussions and activities. Excitement was visible on the faces of teachers and this excitement acted as a booster to our motivation and turned it into great enthusiasm and the Sunday club session was conducted very enjoyably with great academic value. Here are some glimpses of the session.

Mr. Amit K Bajpai, Coordinator, SGM-IAPT Anveshika welcomed all the teachers and invited them into a short Q&A session. The session started with the question "Can we see any written object in water with naked eyes, without any support".

A beautiful experiment was conducted using basic items available easily like a bucket full of water, a leaf of a tree, and a pen. We asked the teachers to write something on a leaf, like NANI (National Anveshika Network of India) or whatever they would like. Some of the teachers wrote HCV on the leaf. After that, we asked them to tie the leaf using some weight and sink it into the bucket full of water.

With the leave placed at the bottom, we asked the teachers to put their heads in the water and slowly open their eyes. It was a little tricky but they could do it. Interestingly, they could not identified the letter they themselves had written as everything became totally blurred. The Physics of the phenomena was then discussed.

#### Vigyan Jyoti

Vigyan Jyoti is a scheme of the Department of Science and Technology(India), especially to promote girls and encourage them to do better in the field of Science, Technology, Engineering, and Mathematics (STEM). Vigyan Jyoti in collaboration with Jawahar Navodaya Vidyalaya, Haridwar, Uttrakhand invited Prof H. C. Verma for a one-hour session on 29th June from 4 PM to 5 PM for students of class 11th and 12th. Prof. H. C. Verma Sir interacted with the students online from Sopan Ashram. He demonstrated Ohm's law, Cartesian diver, and some other experiments. A lots of concepts about circular motion were effectively explained using a wall clock whose second hand was smoothly and continuously rotating. Students enjoyed the session and thanked Verma Sir for this session making them understand Physics from daily life.

### Sopan Anaupacharik Shikshan Kendra (SASK)

#### **World Environment Day**

"Conservation is a state of harmony between men and land". Hence, a healthy environment is very much important for a healthy and happy society. A clean and green environment gives positive vibes to the people. It has a magical aura which is as necessary to breathe. But, for a healthy environment, we need to plant more and more trees in nearby places. 5th June is celebrated as World Environment Day globally. This day every person should plant a tree. SASK also celebrated the same and volunteers of SASK planted trees within SASK premises. Ms. Seema Verma gave a online speech to the students and explained the importance of trees in our life.

#### **UV** sanitizer box

In June, Shiksha Sopan gifted UV sanitizers to some of the volunteers running different centers. Seema Verma also received the same through our mentor Dr. H C Verma. Using this box, one can sanitize his/her currency, mobile phone, etc. by putting it in the box.





### Distribution of stationary to the needy children

SASK volunteers visited house of every child enrolled in SASK. They interacted with the parents and asked them to share their problems regarding the studies. It turned out that inability to purchase basic stationery is creating difficulties for the children in already tough situation. After the visit, SASK planned to distribute the stationery among the students and they did this work very methodically following norms of Covid.

## **International Yoga Day**

"Yoga is a light which when lit will become brighter daily and will lead one to discover him/her leading to oneness within". Therefore, we should practice it daily to stay healthy and balance our life. We need to exercise and practice yoga regularly. To promote Yoga, the whole world celebrates International Yoga day on 21st June every year. SASK also followed the footsteps and celebrated this in their community class keeping all the Covid protocols in line. The coordinator and volunteers of SASK taught the children about different Asanas of Yoga and Pranayama with the importance of Yoga in life.

#### **Baal Akhbaar**

The Next edition of Baal Akhbaar was prepared by Saurabh of class 6th and Ajeet of class 7th. In this edition, Akhbaar included the information on World Environment Day and different Vaccines for kids. Lalit of class 7th wrote a slogan on Maharana Pratap marking his 481 birth anniversary. Shreya of class 5th wrote a story on onion and Shraddha of class narrated a poem on "Daughters".



#### **Barasirohi Evening center(BEC)**

## **World Environment Day**

On 5th June, BEC also celebrated World Environmental Day with full dedication and enthusiasm. Due to the Covid-19 effect, this program was conducted digitally. Volunteers of BEC requested the students to do plantations on barren land in nearby places and also to take care of those plants regularly. Apart from this, volunteers also advised children to spread awareness on a healthy and clean environment and its role in our lives. Pushpendra Ji, active voulanteer of BEC told the children about different plants and their best place for growth and also introduced which plants are more beneficial for human like Neem, Tulsi, Peepal, etc.



#### **Craft Classes**

"The essence of education is an essential element to discover the uniqueness within, but extracurricular skills are the keys to unlock profound human understanding and accomplishment". BEC always focuses on developing and enhancing skills within children. BEC conducted craft classes for the students. Various activities like stone painting, paper cut painting, duck making, etc. were performed.



#### **Educational work done**

In June, BEC focused on various subjects of study. These works were done both digitally and through offline sessions. The subjects which were in focus were Science, English and Current affairs. Although the classes were running online but some students faced difficulties while studying online due to lack of infrastructure(such as mobile or tab, internet connection). Such students were called by Geeta JI at her home for teaching with proper social distancing.

## Sopan Ashram Evening center(SAEC) and Science Cell

In June, SAEC performed many activities for the benefit of the children. On 12th June SAEC conducted a workshop on "Doing Mathematics with a bicycle" The model of bicycle created and setup by Science Cell. This workshop was held in the presence of Dr. H.C. Verma Sir. This session focused on mathematics, in which participants got to learn how to find the radius of a circle using different methods, and many other activities were also performed in this workshop. We are glad to tell you that one of the SAEC children Master Alok Kumar prepared a model with the help of Science cell volunteers based on the Solar system by which anyone can easily explain the solar and lunar eclipse.





Mr. Neeraj, who completed his ITI in electrician trade, joined the science cell of Shiksha Sopan in June. He is very dedicated and efficient in doing the work **Sopan Library** 

Sopan library was running as usual digitally because of this pandemic. Mrs. Pushpa Tripathi conducted all the activities on the Google meet platform. On 5th June, Pushpa JI coordinated a program on World Environment day in which she asked every member present to plant a tree. She also told the benefits of planting trees. An online session on international yoga day was also conducted.

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

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

info@shiksha-sopan.org

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