

**State Level Science, Mathematics and Environment Exhibition for
Children and Gyan Mela, 2019, Assam
A Report**

**Venue : Sreemanta Sankaradeva Kalakshetra, Panjabari, Guwahati
Date : 11 – 13th March, 2019**

Organized by: State Council of Education Research and Training, Assam in
collaboration with Samagra Shiksha, Assam

Opening of the Camp

Registration of the participating students and guide teachers from different districts arrived for participation in the 30th State Level Science, Mathematics and Environment Exhibition (SLSMEE), and Gyan Mela, 2019 started on the evening of 10th March, 2019. The camp of the exhibition was opened by Dr. Nirada Devi, the Director, SCERT, Assam on that evening.

DAY – I (11-03-2019) (Monday)

The three day 30th State Level Science, Mathematics and Environment Exhibition (SLSMEE), and Gyan Mela, 2019 was organized in collaboration with Samagra Shiksha, Assam at Sreemanta Sankaradeva Kalakshetra, Panjabari, Guwahati-22.

Inauguration

Shri Preetom Saikia, IAS, Commissioner and Secretary to the Govt. of Assam, Elementary Education Department, Dispur as Chief Guest, Retired Prof. Satyendra Kumar Choudhury, Samsher Singh, M. D., SSA, Assam as Guest of Honor and Director SCERT, Assam Dr. Nirada Devi were present in the inaugural function. On the outset of the inaugural ceremony, the dignitaries were felicitated with Phulam Gamosa, Mementos and a bouquet of flowers. The Director, SCERT, Assam welcomed the dignitaries, the participating students and the teachers present in the meeting and said that-

Every year state science exhibition is held along with math's, environment this year's theme was selected by NCERT regarding how science can be used in day today problems of life (scientific solutions to the challenges of life). We will select from this state level and send the selected candidates to the national level. Every year Gyan Mela and other science exhibition is organized by Sarbha Shiksha Abhijaan (SSA) Assam at the district levels. This time SCERT and SSA Assam has collaborated to organize the exhibition and in the district level exhibition was held on 28 February, 2019 and from that level the selected participants has participated in this state level science exhibition. The main motto of the exhibition is not only to achieve an award but to utilizing every natural element found in the environment by keeping in accordance with nature to lead a life of content. We need science for a better environment. We need science so that we can use air, environment and nature for our merit without harming the surrounding itself. Therefore, the exhibition is a showcase of the abilities and creative thinking of the participants in itself.

Opening of the Exhibition and Release of Souvenir “Paramanu”.

After lighting the lamp by Shri Preetom Saikia, IAS, Commissioner and Secretary to the Govt. of Assam, Elementary Education Department inaugurated the Exhibition. In his speech the Chief Guests Shri Preetom Saikia, Commissioner and Secretary to the Govt. of Assam,

Elementary Education Department, Dispur said that the students from different districts across the state have participated in the exhibition with varieties of Models. In the exhibition the best model will be selected for participation in the National level Science, Mathematics and Environment Exhibition and he hoped that the students will have glory in the same. He said that the exhibition brings out the creativity in the students to develop scientific solutions through natural elements without harming the environment. As the environment is important to us we should strive to act without causing harm to it. After the speech of Shri Preetom Saikia the opening of the ceremony was done and the stalls were visited by the chief guests and judges. Right after that the souvenir 'Paramanu' was released by the Director SCERT, Assam, Chief Guests and faculty of SCERT.

Speech of Retired Prof. Dr. Satyendra Kumar Choudhury (Former Principal Cotton College, Former Director of ASTEC)

Respected Sir started his speech with a congratulatory message to the students as they are the selected students of the districts across the state. He wishes luck to the students who will be selected for the Nationals in Delhi. The significance of this science exhibition in the lives of students strives to improve it for a better future of theirs. Only through education a person can become a good citizen. The pragmatic view of education has to be given importance. To maintain the curiosity and enthusiasm and guide the students towards the right path the teachers has a very crucial role to play. Development of social skills of the students can be developed when they work in for a project with the teacher in a group they will learn the view points of others and learn through sharing experiences and also developing leadership qualities. The development of knowledge through this science exhibition is very important. Science exhibition also explores the creative talents of students. This develops the scientific spirit, attitude in students too. Science exhibition imparts in the mind of the students to develop scientific attitude towards the problem and solution of life. The students get hands on practical knowledge of the theory learnt in the classrooms about science through these exhibitions too. Participating in the exhibition helps students in developing public speaking skills also. The practice of public speaking starts from the exhibition itself and for that you need to know about the subject matter of your project.

He quoted APJ Abdul Kalam and said that he advised everyone to Dream, and to fulfill the dream with confidence while moving forward by keeping a scientific mind in focus.

He ended his speech by praising the Director SCERT for her dedicated work and wished that the students enjoy the 3 day exhibition and take our society forward with the innovations.

Speech of Samsher Singh, MD RMSA & Samagra Shiksha, Assam

This is the time of science. A time was there when the whole nation had a spiritual influence but now science has touched every sphere of human existence. In this age the youth starts their day with a smart phone. The mind of the children of this generation can easily handle any scientific machinery as this age is of scientific inventions. Scientific tools are used now in any and every field of life. Earlier communication was possible through a landline phone but now there are smartphones in everyone's hand. The education department has thought to contact the Assam Science Society to create a Science Cell in every school. A teacher would be the head of the cell. In the cell discussions related to science must be there from time to time with the students of all streams of subject so that all of them are attracted towards Science. Simultaneously the villagers residing near the school would also be aware about science through the students so that they know the difference between superstitions and reality. With our united efforts we can develop Assam into a scientifically progressive state.

Vote of Thanks by Lakshmi Kanta Das, Joint Director, SCERT, Assam

Vote of thanks to Dr. Satyendra Kumar Chaudhury key note speaker of the inaugural program, to Dr. Nirada Devi Director SCERT, Assam. Thanks to also the Education Minister of Assam even though he couldn't be present due to political reasons. Thanking Director of Elementary Education, Assam. Thanking Samagra Shiksha Mission Director Samsher Singh, IAS. Thanking the media persons who have helped in publicity for the last one month, the Sankardeb Kalakhetra Society and also the people who have helped in the decorations of the exhibition. Vote of thanks also to the persons of the Department of Disaster Management present in the exhibition.

Extempore Speech:

In the afternoon an Extempore Speech competition was organized among the students on the topics related to the exhibition. Three best participants were selected for award.

Quiz Competition

In the afternoon a Quiz competition was conducted among the students. A good number of students took part in the competition. The entire competition was led by Sri Raktim Baishya, Biswajit Sarma as the Quiz Master.

The theme for SLSMEE 2019 and also for the Gyan Mela with parity with the theme for Jawaharlal Nehru National Science, Mathematics and Environment Exhibition for children 2019 would be “Scientific solution for challenges in life” pertaining sub-theme such as:

- Agriculture and organic farming
- Health and cleanliness
- Resource management
- Waste management
- Transport and communication
- Mathematical modeling

Participation

The schools from 11 districts and 83 students with 53 guide teacher took participation in the exhibition. Altogether 93 models were exhibited in the exhibition. The list of the names of the students, schools, models, districts etc. are enclosed at the end of the report.

DAY – II (12-03-2019) (Tuesday)

Speech of Dr. Rabin Dutta, Professor Tezpur University

The topic of his speech was ‘Water Management’. Arsenic and Fluoride is found in many areas of Assam. In Tezpur University’s Department of Chemical Sciences laboratory two very less costly methods were developed to remove arsenic and fluoride from water. On these two methods two patents were also achieved, viz., Arsiron Nilogon (Patent No. 280737), Feb, 2017 and Flouride Nilogon. The main property present in water is found in earth only and not in any other planet. In water hydrogen and oxygen forms a chemical bond. And there’s also a weak bond between the hydrogen and oxygen which is called the hydrogen bond. Because of this bond and the constituent of the water and molecule there are some special properties of water. Water droplets are circle in shape because of the surface tension. Water can dissolve most of the objects which makes it more special among all the other liquid elements of earth. $\frac{2}{3}$ rd of Earth’s surface is covered by water. 4 billion years ago the life of beings came into existence through Water. We are dependent on water on a daily basis, if the

equilibrium of water gets disturbed there's a huge chance of the destruction of earth. Almost 70% of all the water present on earth is oceanic water, 27% is under the earth which is not usable too. Only some areas like Assam, U. P, Bangladesh the water under the earth can be consumed. Nowadays, some methods are created like R. O. (Reverse Osmosis) that takes out the saltiness of the water along with its minerals. The water of Assam has very less minerals. The TDS (Total Dissolved Solid) present in water should be 200-300 milligrams per litre. But in Assam's water it's less than that, so when R. O. is done the TDS comes under 50. If the TDS comes under 100 milligrams per litre it's not good for consumption. The R.O in households removes the TDS from 100 and kept in 40 TDS. Because of this children's growth and health can deteriorate. Aged people can also have cardiovascular problems. Only 2%-3% of freshwater is there that is found in the ice sheets of Antarctica, Siberia, Greenland, Everest, and Northern Canada and the TDS present there is Zero. To have the water from there is impossible for us. The water that we can consume is from river, rain water and of lakes and ponds. The water present here is only 1% of the total on earth. Every person is responsible to save the earth. The most dangerous assumption of human kind is the thought that somebody else is there to save the earth. But everyone individually is responsible to save the earth.

People can produce food and energy through many ways but water cannot be produced by any means. As water is very limited, we have to use it judiciously, re-use, take out the pollution and waste from the water and make it usable again. We can use ground water through wells and ponds. Deep tube well water has arsenic and fluoride. Hojai, Karbi Anglong (East& West) has fluoride in their water. In most of the places of these areas when deep tube well is constructed fluoride is found. Because of fluoride the teeth deteriorates and bones becomes deformed. Out of all the districts in Assam except Tinsukia and the already mentioned districts Arsenic can be found. Guwahati's water has fluoride (200-350m) in it. The Fluoride should be less than 1.5 milligram per litre but its more and has no arsenic in it. the amount of fluoride in water hasn't adversely affected the health of people yet the reason being that the food consumed by people in the city are nutritious enough to tackle the fluoride consumed through water. But slowly this water can affect too. The south-east part of Guwahati's ground water should be used carefully and if fluoride is found then should be filtered and used. Using river water is also advisable. Simple sand cement filter can be used in Assam. If iron is found in heavy quantity in the water then while making tea the colour becomes blue. The reason of the blue tea is that it contains polyphenolic organic compounds

which react with the iron present in the water and thus the color blue appears. The arsenic present in water contains more capacity than tobacco to cause cancer.

From 1975 till now in the village of the Professor there have been 30 deaths due to cancer. In a village in Nalbari called Balitara there in 3 years 25 people has died due to cancer. in Assam the government has taken a good initiative by increasing the number of medical colleges and also implementing 19 cancer hospitals in collaboration with TATA Trust. A much better way to cure cancer was by finding the reason of cancer itself. Selling tobacco, alcohol can be stopped completely. In Karbi Anglong's Ranganthir and Theroni fluoride removal work (Fluoride Nilogon) is in progress. An NGO 'Art of Living' has themselves used the method in Karbi Anglong's 6000 families and 50 schools to remove fluoride. Arsenic removal techniques have been made in Majuli through the Chief Minister's fund. 400 filters were established there. The Department of Science & Technology, Central Government has a crore rupees fund under which they have bought many instruments that detect arsenic.

The two methods Arsiron Nilogon & Fluoride Nilogon if the water is deep tube well then the arsenic and fluoride are very high. Only a minimum cost of a filter Rs. 300/350 will be spent while making it to remove arsenic. Three chemicals are used for the treatment- cooking soda, potassium carbonate, and iron solution. The container used should be plastic or earthen and two taps are required. Within 1or 2 hours the sedimentation occurs and in it the arsenic goes to the bottom. Then the surface water can be filtered through any means. To remove fluoride the expenditure is a bit more because the container is bigger. The drum is filled with crushed limestone and it's filled with water and in it a bit of phosphoric acid is given. The phosphate dissolves in the water. The cost to make the filter is Rs. 600. The students can learn this type of techniques where the arsenic and fluoride is found. From Dhubri to Jonai there is Arsenic except Dibrugarh and Tinsukia. Awareness of purifying the water is really important for the people of Assam.

Cultural function:

In the evening, a cultural program was arranged. Students performed dances, sang songs, etc. The staffs of SCERT, Assam also joined in the function. Photographs of few moments have been given at the end.

DAY – III (13-03-2019) (Wednesday)

The day's activity started as per the scheduled time.

Art Competition:

In the morning an Art competition was conducted among the students. A good number of students took part in the competition Ananta Gogoi Senior Lecturer Art Education, DIET Titabor Assam, Horojyoti Sarma, Artist were the judge of the competition. Out of the participant students, 3 best students were selected for conferring the prizes.

Valediction Ceremony

In the valedictory function Dr. Nirada Devi, Director, SCERT, Assam, Dr. A. K. Srivastava, Head, Department of Education Research and Policy Perspectives (DERPP), NCERT; Dr. Ratul Rajkhowa, Professor, Department of Zoology, Cotton College (Retd.); Dr. Pannalal Goswami Professor, Department of Chemistry, Cotton College (Retd.); Dr. Chandra Rekha Mahanta, Associate Professor, Department of Mathematics, Guwahati University; Dr. Shantanu Baishya Associate Professor, Department of Physics, Cotton University, Sri Joydeep Barua, Head I/C, Environment Division, ASTEC, Dr. Sushmita Sutradhar Das, Deputy Director, SCERT, Assam SCERT, Assam jury members for selection of the model were present. The Director, SCERT, Assam appreciated all the teachers and students for making the exhibition a successful one. She said that-

A person doesn't become a scientist only by applying science but appropriate usage of science creates a scientific mind. The students with a scientific mind should move forward for the development of the society. An advice to the rising scientists is to use natural organic manure like earthworms in their village cultivation. The mind set with which the students have moved forward to save the environment, the same should be applied in their own village. Like the problem of Arsenic and Fluoride in water of our region has been removed by a scientist from Assam itself; there are many other issues in the villages which should be researched and can be tackled by the creativity of the students.

Speech of Sri A. K. Srivastava, Head, Department of Education Research and Policy Perspectives (DERPP), NCERT:

The presentation given by such little children is commendable. At such a small age the children are able to speak with such courage and enthusiasm that elder's lack. The children's have crossed different stages and reached the state level which is a great achievement in itself. The most difficult work is the declaration of results. But the models which won't get

selected will not mean that they were bad, important are the efforts and the continuation of it. The efforts shouldn't be based on one science exhibition or the next they should be always on the theme of it. If there are some new projects done by the school, those can be sent to the NCERT to publish in their journal "School Science" so that everyone may know of the achievements. The teacher should act as a facilitator only, they shouldn't make the models, the students should do it themselves and understand it. These children will make a new future so they should be nurtured by supporting their ideas. It's the responsibility of the teachers to show them the path of greater achievements. All the students that participated in the exhibition are winners and the passion with which they made the models that passion should always be ignited in their minds with which they can make the world a better place.

Speech of Dr. Pannalal Goswami Professor, Department of Chemistry, Cotton College (Retd.):

The students should always strive to make the projects themselves. Whenever students try to make something fruitful they should always try to put their own mind set for the success of the project. If the models presented are copied directly from what's written in the book then there won't be any credit of the ones who made it. If a simple project is also made out of the students own creativity then that is also commendable. Congratulations to all the students present in the exhibition who presented the projects with such vigor. Students should try to have a scientific mind and lessen the effects of superstition in the villages.

Selection of Models displayed by Students:

The models of the exhibition were observed by the jury comprised of six (6) no. of judges for selection. They are Dr. Ratul Rajkhowa, Professor, Department of Zoology, Cotton College (Retd.); Dr. Pannalal Goswami Professor, Department of Chemistry, Cotton College (Retd.); Dr. Chandra Rekha Mahanta, Associate Professor, Department of Mathematics, Guwahati University; Dr. Shantanu Baishya Associate Professor, Department of Physics, Cotton University, Sri Joydeep Barua, Head I/C, Environment Division, ASTEC, Dr. Sushmita Sutradhar Das, Deputy Director, SCERT, Assam jury members for selection of the model were present.

Three models from each sub theme were selected for sending to NCERT, New Delhi for selection in the Jawaharlal Nehru National Science, Mathematics and Environment Exhibition to be organized by National Council of Educational Research and Training, New Delhi. The sub theme wise selected models and names of students are as follows –

Sub-theme	Position	Name of students	Class	School name	District
Waste management	First	Anup Chetry	VIII	Balijan Borjan ME school	Tinsukia
		Manash Pratim Dutta	VII		
	Second	Chitralkha Sonowal	VI	Arunodoi Janajati ME School	Dhemaji
		Muhima Sonowal	VIII		
	Third	Rohit Konwar	VIII	Pub Sadiya ME school	Tinsukia
Jyotiraj Gogoi		VIII			
Resource management	First	Fajlul Bari	IX	Adarsha Vidyalaya, Barkhetri	Nalbari
		Murshidul Alam Sarkar	VIII		
	Second	Jishu Saikia	XI	Kherajkhat Sr, Secondary school	Lakhimpur
		Jadumoni Neog	XI		
	Third	Md. Ubadulla Tapadar	XI	Pandit Deendayal Upadhyaya Adarsh Mahavidyalaya	Karimganj
		Monjurul Hasan	XI		
	Encouragement	Rahul Ali	VII	Samaguria Rajamoidam ME school	Sibsagar
Midusmoy Gogoi		VII			
Agriculture and organic farming	First	Barsha Nath	VII	Dudhpatil MV school	Cachar
		Deepshikha Nath	VII		
	Second	Khursida Begum	VIII	Dolgaon Girls' M E school	Darrang
		Alkija Begum	VIII		
	Third	Jagriti Gogoi	VII	Konwaupur Boys' MV school	Sibsagar
		Priya Buragohain	VII		
Health and cleanliness	First	Pintu Dey	X	North Lakhimpur Town High school	Lakhimpur
		Rekibuddin Haque	X		
	Second	Bishaljyoti Borah	VI	Progoti ME school	Jorhat
		Debashuish Borah	VII		
	Third	Rimjim Bora	VIII	PG Hariteron High School	Nagaon
		Limpimoni Thakuria	VIII		
Transport and communication	First	Rajdeep Sarkar	VIII	Aurobindo Bidya Niketan High School	Sonitpur
		Sumit Sen	VIII		
	Second	Ritom Borah	VIII	Janaki chamahiya Ati Model HS school	Majuli
		Bikash Pegu	VIII		
	Third	Mangala Biswas	VIII	Dikhlem ME school	West Karbi-Anglong
		Sukla Biawas	VIII		
Mathematical Modelling	First	Begum Shahin Ahmed	VIII	Nagabandha Girls' ME School	Morigaon
		Begum Farhana Ahmed	VIII		
	Second	Abdul Wazid	VI	Tezpur Govt. HS school	Sonitpur
		Dhritishman Das	VI		
	Third	Masud Alom Khandakar	VIII	Panchagaon High School, Boitamari	Bongaigaon
		Yasin Sheikh	VII		

In addition to this, the students who were selected in Quiz, Art, Ex-tempore Speech competition were also conferred trophy.

Extempore Speech

Position	Name of the Students	Name of the School
First (1 st)	Tomzida Begum	Kasturba Gandhi Balika Vidyalaya, Darrang District
Second (2 nd)	Niharika Goswami	Dergaon Girls' H.S. School, Golaghat District
Third (3 rd)	Prasenjit Nunisa	Diyungbra High School, Dima Hasao

Art Competition

Subject : Preventing Soil Erosion

Position	Name of the Students	Name of the School
First (1 st)	Kuwali Das	Rajkadamtal Balika Vidyapith High School, Nalbari District
Second (2 nd)	Nabajit Saha	Abhayeswari H.S. & M.P. School, Bongaigaon District
Third (3 rd)	Dhritishman Das	Tezpur Govt. H.S. School, Sonitpur District

Quiz Competition

Position	Name of the Students	Name of the School
First (1 st)	Sanskriti Pathak	Dergaon Girls' HS School, Golaghat District
Second (2 nd)	Ritom Bora	Jonaki Chamahia Ati Adarsha HS School
	Namrata Hazarika	Ratanpur Balika Madhya Engraji Vidyalaya, Majuli

Vote of thanks:

The exhibition was winded up after delivering a valuable and encouraging speech with vote of thanks offered by L.K. Das, Joint Director, SCERT, Assam.

Few moments of the exhibition:



29th State Level Science, Mathematics and Environment Exhibition, 2019



Shri Preetom Saikia, IAS, Commissioner and Secretary to the Govt. of Assam, Elementary Education Department, Dispur lighting the lamp of the exhibition



Shri Preetom Saikia, IAS, Commissioner and Secretary to the Govt. of Assam, Elementary Education Department, Dispur delivering his inaugural speech



Dr. Nirada Devi, Director, SCERT, Assam delivering welcome address



Dr. Nirada Devi, Director, SCERT, Assam, releasing the souvenir "Paramanu" in presence of the dignitaries



Speech of Dr. Satyendra Kumar Choudhury (Former Principal Cotton College, Former Director of ASTEC)



Opening of the stalls



Speech of Samsher Singh, MD RMSA & Samagra Shiksha, Assam



Shri Preetom Saikia, IAS, Commissioner and Secretary to the Govt. of Assam, Elementary Education Department, visiting the stalls



Speech of Prof. Robin Dutta on 'Water Management', Department of Chemical Sciences, Tezpur University



Judges visiting the stalls



Sri A. K. Srivastava, NCERT, Delhi, visting the stalls



Speech of Sri A. K. Srivastava, NCERT, Delhi



Model Exhibited by Students



Model Exhibited by Students



Model Exhibited by Students



Model Exhibited by Students



Model Exhibited by Students



Art competition of the participants



Art competition of the participants



Cultural programme



Quiz competition



Cultural programme



Extempore speech



Director, SCERT, Assam distributing the prize among the students



Prize distribution by A. K. Srivastava, Head DERPP, NCERT Delhi

List of Sub-Theme wise names of Participants, Name of the School, Model they exhibited and Districts

Sub-theme wise list of the participants in the 30th State Level Science, Mathematics and Environment Exhibition, 2019

Sl. No.	Sub theme	Name of Model	Name of the Students	Name of School	Class	Name of District
1.	HEALTH & CLEANLINESS	Smoke and Dust Absorber Machine	Alakesh Kalita Akaash Das	Pakhamara ME School	VIII VIII	Baksa
		ÀõÉ¿M□Ã ±± šÉ Ý Âó¿1©±1 Âó¿126i§îÂ±îÂ â1n,»± Õ±¿ýÃÃù±Ë1 Âó±òĭ ¿Âõq¿XßÁ1í	Namashya Mohan Aaichengpha Boruah	Navajyoti ME School	VIII VIII	Charaideo
		Health and cleanliness ±± šÉ ÛÂõÑ Âó¿1©±1 Âó¿126i§îÂ±	Sushmita Paul Sanchita Basak	Kaldoba High School	VIII VIII	Dhubri
		Section diagram of human heart ÷±òÁýÃÃ1 ýÃ+ðÃûLa1 îãÃðÃò	Aparajita Deb Nath Dibyajyoti Deb Nath	Teli Basti MV School	VII VII	Hojai
		Developed System of Traditional banana ripening	Bishaljyoti Borah Debashish Borah	Progoti ME School	VI VII	Jorhat
		Remedy of Air Pollution	Sania Nasrin Abdul Khalek	Hemanta Baruah Bidyapith ME School, Notboma	VIII VIII	Kamrup (M)
		Air Pollution	Rimjim Bora Limpimoni Thakuria	P.G. Hariteron High School	VIII VIII	Nagaon
		îü±í±1n, áãÃ1 Âó±ËîÂË1 ßÁù ÂóËßÁ±»± ÂóX¿îÂ	Kuwali Das Himashree Das	Rajkadamtal Balika Vidyapith High School	X IX	Nalbari
		Vacuum Cleaner	Pintu Dey Rekibuddin Haque	North Lakhimpur Town High	X X	Lakhimpur

				School			
		à±ðÃÉ Âó1n,»± >¶¿îÂË1±ñ1 üýÃÃæÃ ëÂ×Âó±ûþ ëÂ×¾±»ò	Dolly Chetia Dipshikha Chetia	Nakari School	MV	VIII VIII	Dibrugarh

2.	AGRICULTURE AND ORGANIC FARMING	1±ü±ûþ¿ðßÁ ü±11 Âó¿1ÂðËîÇÂ ÆæÃ¿»ßÁ ü±11 »¶Ëûþ±á	Sudipta Kr. Das	Girish Vidyapith Spl. High School	VIII	Baksa
		Effect of uses of chemical fertilizer and organic fertilizers : a study	Barsha Nath Deepshika Nath	Dudhpatil MV School	VII VII	Cachar
		ýÃÃ±ýÃÃ ßÁÁßÁÁ1± Âó±ùðîÂ ÷±ãÃ1 Âð±ßÁ¿ù1 ÂðÉ»ýÃÃ±1 îÂ±1 ÆæÃ¿»ßÁ ü±1 »¶dîÂ	Murshida Khatun Tomzida Begum	Kasturba Gandhi Balika Vidyalay	IX X	Darrang
		ßÁ÷ êÂ±ý×ÃÃîÂ Õ¿ñßÁ ëÂ×ËÂó±ðÃð ßÔÁ¿ø, ÂóX¿îÂ	Khurshida Begum Alkija Begum	Dalgaon Girls ME School	VIII VIII	Darrang
		Õ±÷±1 îÂîÂó±ú1 þø¿ñ ëÂ×¿¼ðÃü÷ÓýÃÃ	Jitumoni Bharali Rupan Bhuyan	Bishnupur Takjuri High School	XI XI	Dhemaji
		Organic Farm	Abdul Jolil Shohidul Islam	Jamduar Public ME School	VIII VIII	Dhubri
		Advanced Farming Technique	Pushan Das Sudip Chanda	Chandypore ME School	VIII VI	Hailakandi
		îßÁãÃÃü±11 »¶dîÂ »¶í±ùî	Dipankar Saloi Uddipa Das	Malaybari Balika Vidyapith ME School	VIII VIII	Kamrup (M)
		ÂðîæÃ ¿üðãÂ± ûLa	Deepjyoti Kalita Sintu Kalita	Pacharia K.K. High School	VIII VIII	Kamrup (R)
		Animal Husbandary	Ankit Shah Abbas Ali	Navajyoti ME School	VIII VIII	Kokrajhar
		Krishi ebong Joibo Farm (Khamar)	Priya Das Monisha Das	Netaji ME School	VIII VIII	Karimganj
		æÃî»ð1 »¶QÉ±ý3ÃÃ±ð1 ÆÂð:±¿ðßÁ ü÷±ñ±ð	Labanya Ligira Gargi Changmai	Uttar Kathani ME School	VII VI	Lakhimpur
		Bio Fertilise in Agriculture	Afrida Rahman Hina Das	Puranigudam Girls' High School	VIII VIII	Nagaon
		ÆæÃ¿»ßÁ	Vergob Bhattacharyya	Madhab MV School	VII	Nagaon

		ΒΟΆζ∅, ΆóΧζιΆ	Anamika Hazarika		VI	
		ÎĒÁăĂĂ ü±1	Jyotirmoy Deka	Binapani High School	VIII	Nalbari
			Hirakjyoti Thakuria		VIII	
		Incubator	Jagriti Gogoi	Konwarpur Boys MV School	VII	Sibsagar
			Priya Buragohain		VII	
		Traditional Medicinal Plants of Shakuakhana Assam	Poli Boruah	K.K. High School, Ghilamara	VI	Lakhimpur
			Debajani Saikia		VI	
		Germination of seed using local manure	Borasha Hazarika	Madhabdev Academy	XI	Lakhimpur
			Himashree Saikia		XI	
		Integrated Farming System	Deshbhakta Doley	Sidalsati HS School	X	Bongaigaon
			Parag Ray		X	
3.	RESOURCE MANAGEMENT	Non Conventional Energy Source	Dhritiraj Shivam	Sri Sri Manohar Dev HS	VIII	Barpeta
			Kangkan Barua		VI	
		Renewable Energy Resources (Emergency Manual Generator)	Ujjal Swargiary	Kharadhara Kali Mandir High School	IX	Barpeta
			Hrishikesh Kalita		X	
		Water Level Indicator	Jahanara Azmiri	Sonajan Naba Shakti Girls' MEM	VIII	Barpeta
			Mafida Khatun		VIII	
		Jute Fibre	Susomoy Deb	Chaitanya ME School	VII	Cachar
		Hydraulic Robotic Arm	Jatinga Basumatary	Bhiranggaon High School	VIII	Chirang
			Manek Basumatary		X	
		Power Based Automatic Spinning Machine	Mridu Deka	Burha Lokapriya Bordoloi High School	IX	Darrang
		Automatic Street Light	Rasidul Hussain	Adarsha Vidyalaya	VIII	Goalpara
			Tanuj Singha		VI	
		Âõ1∅,Áí1 Âó±òĩ üÑ1ŽÁí Ö±1n, ý×ĂĂûþ±1 ÂõÉ»ýĂĂ±1	Nizamuddin Laskar	Bamungaon MEM	VIII	Hojai
			Samsuddin		VIII	
		Barokhunar Pani Hongrokhon Kori Stithi Shaktik Goti Shaktiloi Paribartan	Prasurjya Pratim Gogoi	Pub Nakachari High School	VIII	Jorhat
			Amlanjyoti Gogoi		VIII	
		Rain water	Laily Parbin	Kasturba	VIII	Kamrup

	harvesting and organic farming	Ahmed	Gandhi Balika		(R)
		Amina Begum	Vidyalaya, Goroimari	VIII	
	»¶±βÔÁ¿îÂßÁ ü¥óðÃ1 ÂõÉ» š±Âóò±	Chayasri Lahkar	Dhopatari Silbharal High School	VIII	Kamrup (R)
		Bishal Lahkar		IX	
	Hydraulic Pressure	Mintu Chutia	P.B. Daulpukhuripar High School	VIII	Kamrup (R)
		Mridul Haque Choudhury		VIII	
	Projector	Yubraj Bahadur Chetry	Harinaguri High School	VIII	Kokrajhar
		Naba Jyoti Rabha		VI	
	Windmill	Rakesh Hanse	Jeng Rongpi English High School	VIII	Karbi Anglong
		Orbison Ronghang		VIII	
	Smart Home	Ubadulla Tapadar	Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya	XI	Karimganj
		Monjurul Hassan		XI	
	Molasses for Bhim Banana	Rimjhim Saikia	Kherajkhat Senior Secondary School	XI	Lakhimpur
		Tinamoni Bhuyan		XI	
Power Generator through Domestic Dense	Jishu Saikia	Kherajkhat Senior Secondary School	XI	Lakhimpur	
	Jadumoni Neog		XI		
Wind Energy Street Light	Josek L Tuolor	Retzawl ME School	VIII	Dima Hasao	
	Iris L Bapui		VIII		
A part of a smart city	Ashif Rahman	Adarsha Vidyalaya, Moirabari	VIII	Morigaon	
	Ashfaque Rahman		VI		
Âõ±òÂó±òï Õ±áæÃ±òòï1 Õ±¿ýÇÃÃ	Kankana Devi	Ratanpur Girls' ME School	VII	Majuli	
	Namrata Hazarika		VIII		
ÕÉéÂ±É÷¿éÂßÁ Âó±òï îÂ±ù± ÷éÂ11 Õ±¿ýÇÃÃ	Gobindra Muchaha	Fulkuchi ME School	VIII	Udalguri	
	Tara Gorh		VIII		
üÁ ± šÉ1 Âõ±ÉÂõ ßÁù Õ±1n, ý×ÃÃû±1 ÂõÉ»ýÃÃ±¿1ßÁ ¿ðÃú	Bedanga Borphukan	Jalbhari ME School	VIII	Lakhimpur	
	Kalpajit Chetia		VI		
Wetland Conservation	Purabi Hazarika	Sankardev Academy	XII	Lakhimpur	

			Joysree Saikia		XII	
		æÃ±÷Ç±ðĪ Âó±Ī1 ÁZ±1± ÷ýÃÃ ĪàĒðÃ±»± Ō±¿ýÇÃÃ	Rahul Ali Midusmoy Gogoi	Samaguria Rajamoidam ME School	VII VII	Sibsagar
		Security enhancement using solar energy	Fajlul Bari Murshidul Alam	Adarsha Vidyalaya, Barkhetri	IX VIII	Nalbari

4.	WASTE MANAGEMENT	Disposal of Waste	Nishal Dev Sarma	Girish Vidyapith Spl. High School	VIII	Baksa
		Âð¿æÇÃĪÂ ^ÂŌĒ1 ÂóÂð1 ÂŌĒ»ýÃÃ±1	Priti Devi Nikita Baruah	Balipukhuri MV School	VIII VII	Biswanath
		Pollution Solution	Sukumar Rabha Jaydev Barman	Panchapur ME School	VIII VIII	Bongaigaon
		ĪÂóùðĪûþ± ü±÷çŋĪ1 üðÃÃ ÂŌĒ»ýÃÃ±1	Chitralekha Sonowal Muhima Sonowal	Arunudoi Janajati ME School	VI VIII	Dhemaji
		æÃ±ÂŌ1 ÂŌĒ» š±Âóð ± Ō±1ŋ, ßŌÁ¿ø,ĒŽÂSĪ Â ý×ÃÃûþ±1 »ŋĒûþ±æÃð	Manab Jyoti Phukan Jyotsna Praza	Senchua MV School	VIII VIII	Dibrugarh
		Hydraulic Arm	Kapil Dev Rabha Utpal Paul	Darranggiri HS School	VIII VIII	Goalpara
		Recycle and Reuse of Polythenes or Plastic Bags	Kajal Boroo Jahnabi Gohain	Barpathar Girls' High School	VII VII	Golaghat
		Garbage & its management : a scientific study in and around Dergaon town	Sanskriti Pathak Niharika Goswami	Dergaon Girls' HS School	VIII VIII	Golaghat
		Health and Cleanliness	Piya Chakraborty Dipali Roy	G.C.M.V. School, Katlicherra	VI VII	Hailakandi
		Mini Vacuum Cleaner	Dipanwita Mazumdar Biprajeet Mazumdar	Kalyan Bengali ME School	VII IX	Karbi Anglong

		Waste Water Management	Prasenjit Nunisa Baosringdao Phonglo	Diyungbra High School	X IX	Dima Hasao
		Ö±ÄöæÇÃð± ¿ò©¨±ø,í ÂöÉ» š±Äóð ±	Basidul Islam Saiful Islam	Kokradanga ME School	VIII VI	South Salmara
		÷±ò» >¶ Ú±»1 üÄÄöÉ» š±Ä óð± Ö±1n, Âö±¿ääÂîÂ ý×ÃÛþ±1 üÄËû±á	Rohit Konwar Jyotiraj Gogoi	Pub Sadiya ME School	VIII VIII	Tinsukia
		Waste Water Management	Anup Chetry Manash Pratim Dutta	Balijan Borjan ME School	VIII VII	Tinsukia
		Solar Energy Based Power Generation through a new device and its use	Aditi Hazarika Bandana Kotoky	Kherajkhat Senior Secondary School	XI XI	Lakhimpur
		Use of plastic in domestic purpose	Makibul Islam Najibul Ahmed	Adarsha Vidyalaya, Mandia	VII VII	Barpeta
		To create a pollution free environment for the future	Nabajit Saha Soumik Sarkar	Abhayeswari HS & MP School	X X	Bongaigaon
		Rain water harvesting	Hiyashree Barman Bandita Nath	Kasturba Gandhi Balika Vidyalaya	VIII VIII	Nalbari
5.	MATHEMATIC MODELING	ßÁ÷ à1¿äÂ á¿íîÂ1 Âó1îžÂ±	Yasin Sheikh Masud Alom Khandakar	Ponchagaon High School, Boitamari	VII VIII	Bongaigaon
		¿æÃÝËÄö±ëÇ Â1 üýÃ±ûþîÂ ÛËßÁ Âó¿1üí÷±¿ö ¿ú©† ÂöáÇ±ßÓÁ¿î ÂßÁ Ö±1n, Ö±ûþîÂ±ßÓÁ ¿îÂßÁ îžÂsíÂ	Akash Nath Priyanka Gogoi	Ujanikuri MV School	VIII VIII	Charaideo

		<p>ΒÁ±ζù1 Âó±iÇΒÁÉ ζòíÇùþ</p>				
		<p>ζæÃÝËÂõ±ëÇ Â1 üýÃÃ±ûþîÂ ÂõUöÓÂæÃ1 ΒÁ±ζù ëÂ×ζùÝ»±1 üýÃÃæÃ ÎΒÁÎúù</p>	<p>Kajukamal Konwar Ayan Nirban Borgohain</p>	<p>Mahmora High School</p>	<p>VII VIII</p>	<p>Charaideo</p>
		<p>›¶î÷ n- üÑàÉΒÁ ûÅç- Ö±1n, ÖûÅç- üÑàÉ±1 Îû±áôÂù ζòíÇùþ1 ÎΒÁÎúù</p>	<p>Arpana Gogoi Hunmoni Gogoi</p>	<p>Sukani Dighalia ME School</p>	<p>VI VIII</p>	<p>Dibrugarh</p>
		<p>Division Machine</p>	<p>Swarupa Das Shilpi Das</p>	<p>Panchgram Town High School</p>	<p>IX IX</p>	<p>Hailakandi</p>
		<p>Production of Day using Mathematical Concept</p>	<p>Madhusmita Ray Upananda Barman</p>	<p>Charaikhola ME School</p>	<p>VIII VIII</p>	<p>Kokrajhar</p>
		<p>Highest Common Factor</p>	<p>Muskan Kumari Govin Balmiki</p>	<p>Kashipur ME School</p>	<p>VII VII</p>	<p>Dima Hasao</p>
		<p>Math Magic (Ankor Jadu)</p>	<p>Begum Shahin Ahmed Begum Farhana Ahmed</p>	<p>Nagabandha Girls' ME School</p>	<p>VIII VIII</p>	<p>Morigaon</p>
		<p>Division Machine</p>	<p>Pankaj Narah Mriganka Pegu</p>	<p>Residential School for Boys</p>	<p>VII VIII</p>	<p>Majuli</p>
		<p>Application of practical geometry in our day to day activities</p>	<p>Dipsikha Rajbonshi Prinakshi Polli Devi</p>	<p>Hatighuli MV School</p>	<p>VII VII</p>	<p>Sibsagar</p>
		<p>Geo Board</p>	<p>Noor Alam Najmul Sheikh</p>	<p>Kabilabad High English School</p>	<p>VIII VIII</p>	<p>Sonitpur</p>
		<p>Relation of Angle</p>	<p>Dhritishman Das</p>	<p>Tezpur Govt. H.S. School</p>	<p>VI</p>	<p>Sonitpur</p>

			Abdul Wazid		VI	
		Simple Machine for Division	Ruma Yesmin Rina Begum	Progati ME Madrassa, Sonapur	VII VII	South Salmara (Mankachar)
		Basic Mathematical Operation	Bishal Chauhan Guddu Chauhan	Mailoo Hindi High School	VIII VIII	West Karbi Anglong
6.	TRANSPORT AND COMMUNICATION	Simple Machine for Division	Kumari Kuhi Sarma	Baguan Girls' High School	VIII	Goalpara
			Leena Sarma		VIII	
		Basic Mathematical Operation	Nayanjyoti Borah	Charaibahi H.S. School	X	Jorhat
			Jyotishmoi Sharma		IX	
		Electric Boat	Manik Roy	Bhaskar Vidyapith H.S. School	VIII	Kamrup (M)
			Ainul Haque		VIII	
		Hydraulic Excavator	Bishajit Nath	Bhelamari ME School	VIII	Nalbari
			Saurab Nath		VIII	
		Safe transportation route for Indian army	Ritom Borah	Jonaki Chamahiya Ati Model H.S. School	VIII	Majuli
			Bikash Pegu		VIII	
Preventive measures before accident on a highway	Rajdeep Sarkar	Aurobindo Bidya Niketan High School	VIII	Sonitpur		
	Sumit Sen		VIII			
Simple Machine for Division	Mangala Biswas	Dikhlem ME School	VIII	West Karbi Anglong		
	Sukla Biswas		VIII			
Preventive measures before accident on a highway	Pallab Dutta	Madhabdev Academy	XI	Lakhimpur		
	Abhilesh Sarma		XI			

Documentation : Hemanta Narayan Das, Librarian cum Documentation Officer, SCERT, Assam and Geetima Katakey, Assistant Librarian, SCERT, Assam