



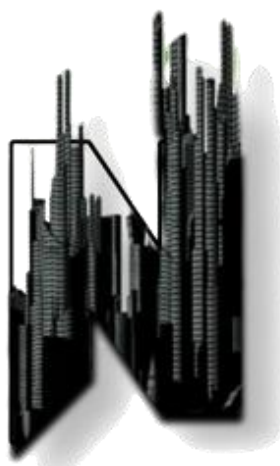
SARVAJANIK EDUCATION SOCIETY
SARVAJANIK COLLEGE OF ENGINEERING & TECHNOLOGY
DR. R. K. DESAI MARG, ATHWALINES, SURAT - 395001
Towards progressive civilization.....



CIVIL ENGINEERING DEPARTMENT

A

Report on



NIRMAAN-2021

17th – 18th September, 2021

Under the banner of



NIRMAAN-2021

Sarvajanik College of Engineering & Technology organizes the technical festival ‘Kshitij – AnantGyan Ki Talash Mein’ annually since 2002. This technical fest is conducted for the young brains to boost their technical knowledge and showcase their innovative and creative skills.

Every year, Civil Engineering Department organizes technical festival “Nirmaan” under the banner of Kshitij. Following this tradition, Nirmaan-2021 was held during 17th-18th September, 2021. Students from different college had participated in various technical events of Nirmaan-2021. We received the smash hit response from participants by enrolling 550 entries.

We introduced various events like **Quagmire**, **Cubomania**, **Juggling Jenga**, **Pirates of the Caribbean**, **Quizpicable Me** and **Abhivyakti**. After completion of all the events, the winners were felicitated with prizes and certificates.



Inauguration of NIRMAAN 2021

The inauguration of NIRMAAN 2021 under the banner of Kshitij was held on 17th September, 2021 in Civil Engineering Department. It was attended by all faculty members, students coordinators, volunteers and participants with full of energy and enthusiasm. We had inaugurated Nirmaan 2021 with the blessing of God Ghanpati and the aarti was done by all our worthy faculty members and students coordinators.



All the events received astounding response from all student participants from different colleges which made the Nirmaan 2021 a successful one. In Nirmaan 2021, total six events were designed for the students to develop skills like Planning, Management, Technical, Communication, etc.



✚ Offline Event

- **Cubomania** – Casting and testing of concrete cube
- **Juggling Jenga** – Stability of structure made of wooden blocks
- **Quagmire** - Stability of sand against vibration
- **Pirates of the Caribbean** – Treasure hunt
- **Abhivyakti** – Poster/Paper presentation

✚ Online Event (National Level- Under ISTE Students Chapter)

- **Quizipicable me** – Three rounds consist of Quiz, Evacuation plan and Rapid fire.

Cubomania



Event was organized on 17th September 2021 at Concrete Technology lab. Around 15 groups were participated in Technical event from different branches of SCET & also from all years. In this event, participants had prepared the concrete cube using specific mix design criteria instructed by Faculty coordinator **Dr. Kamlesh Dalal** and the strength of concrete cubes have been tested on the next day means after 24 hrs. of casting strength. The time duration given to cast the cube was about 2:30Hr and participants had to maintain certain water ratio as per criteria given by student's coordinators. The cubes were tested for its compressive strength in Compressive testing machine after 24 hrs. and winners were declared on the basis of max. Compressive strength achieved by the cube in machine.



Juggling Jenga



In this event, participants were supposed to build a structure and achieve the maximum height by using the most innovative and thoughtful ideas with the help of provided material and under the guidance of **Dr. Manisha Vashi**. The event was organized on 17th September 2021 in Surveying Lab from 11:30 AM onwards. A total of 48 teams (Total Students-168) were registered in this event. The participants had to build a stable structure by using wooden blocks of 4 different shapes within the stipulated time. After that, the jury **Prof. Himanshu Padhya** had judged the participants by removing 3 to 4 blocks randomly from the structure and test the structure for its stability. After the removal of such blocks, if the structure was stable then it had given max points.



Quizpicable Me

Sarvajanik Education Society
Sarvajanik College of Engineering & Technology

CIVIL ENGINEERING DEPARTMENT
PRESENTS
क्षितिज
NIRMAAN 2021
QUIZPICABLE ME

DATE : 17TH & 18TH SEPT 2021
VENUE : ONLINE

TIME : 1ST & 2ND ROUND-17TH SEP, 1.30PM
3RD ROUND - 18TH SEP, 10 AM

EVENT COORDINATOR
PROF. HIMANSHU PADHYA
PROF. SEJAL BHAGAT

1st PRIZE :- 5000/-
2nd PRIZE :- 1000/-
3rd PRIZE :- 500/-

STUDENT HEAD
LEENA PANJWANI (9265267351)
DEV PATEL (9723725032)

The event was organized on 17th September, 2021 in online mode from 1:30 PM onwards in Civil Engineering Department. It was coordinated by two faculty coordinators **Prof. Himanshu Padhya** and **Prof. Sejal Bhagat**. The event received an overwhelming response from the students of not only the region, but participation was also from other states as it was organized on **national level** and sponsored by **ISTE Students Chapter**. Total three rounds were conducted and 190 participants were participated in the first round. First two rounds, were conducted to select final (About 09) participants, who went to the last round, where they faced in interview / questions of GK from senior faculties of the department that include invited faculties like **Dr Pratimaben** and **Dr Mehaliben** with **Prof. Himanshu Padhya** and **Prof Sejal Bhagat** who contributed to their best. Final round was concluded smoothly, and the winners were announced accordingly.



Pirates of the Caribbean



A pirate of The Caribbean was a treasure hunt event and it was an adventures experience for the participants. The event was conducted under the guidance of **Prof. Payal Zaveri** and **Prof. Ankita Parmar**. It was organized on 18th September, 2021 in surveying lab from 8:30 AM onwards. This event never fails to bond a group and get the competitive spirit pumping. It strikes the right balance between fun and challenging and teaches teams a lot about communication and time management. Participants need to think creatively, flex their problem solving muscles and work together to crack the clues.



Quagmire



Event was based on the concept of compaction and liquefaction of sandy soil and it was carried out under the guidance of Faculty coordinator **Prof. Ratna Jadvani** on 18th September 2021 in Concrete Technology lab. Total 53 teams participated in the event. There were 100 students in total. The event was divided into two rounds. In the first round the participants had to make a structure of sand, conical in shape by compacting it at optimum water content and then after seismic loads were applied. The first round needed compaction of sand (Particle size less than 2 mm). The sand structure was formed and a statue was mounted on top of it and was given vibrations by means of a vibrating platform. The structures survived in vibrations up to 2 min & 30 sec qualified the first round and were eligible for the second round. In the second round 12 teams were short listed and the procedure for making the structure from sand was same as before and prior to put it into test for vibrations its base area was flooded with water. The structure survived for longer time was declared winner.



Abhivyakti



The event was organized on 18th September, 2021 in Geo-tech lab from 1:30 PM onwards. It was coordinated by faculty coordinator **Prof. Mitali Shah**. Participants had to show their technical skill by either preparing poster or paper based on the theme of Emerging Trends in Civil Engineering and also it was open for all field of engineering. The participants have presented a review on various emerging areas of civil engineering like Green Building, Smart Construction Technology, AI Application in Civil Engineering etc. The winners awarded on the basis of innovation and emerging new areas of engineering.



Acknowledgement

We would like to thank SES management for providing the infrastructure and support for conducting the event. We heartily thank SAWC for providing funds to conduct the event. We extend our heartfelt thanks and gratitude to **Prof. (Dr.) Jigar Sevalia, Head, Civil Engineering Department** and all the worthy faculty members as well as non-teaching staff members of the department for making the **NIRMAAN-2021** a grand success. Special thanks to entire team of student tech-heads, student coordinators and volunteers for their efforts towards making NIRMAAN-2021 successful. Finally, we thank all the participants without whom the event would not have been possible.



Thanks from Nirmaan-2021 team



Faculty Conveners:

Prof. Khushbu Gandhi

Prof. Hemali Jardosh

Tech Heads:

Mr. Paras Prajapati

Mr. Aayush Contractor