Assam Science and Technology University organized an online competition called "Sandhan: an innovative challenge" under TEQIP-III, MHRD, Government of India. The competition aimed at finding innovative ways to find solution to various problems that has arisen due to the outbreak of the COVID-19 pandemic. The themes for the competition were

1. Ozone decontamination method for PPE

2. Portable model of ventilators for COVID-19 patient

3. Low cost respiratory mask, anti-pathogenic PPE etc.

4. Contactless sanitization system

5. Facility to sanitize large area in short time

6. Software tools for track and tracing of COVID-19 patient.

7. Tracking and support to unorganized sector and migrant workers

8. Collection and distribution of relief materials

9. Support and counseling of people under home/ institutional quarantine.

10. Travel history Route-mapping of suspected cases (patients).

11. Home delivery of services during lockdown

12. Homeless people shelter mapping

13. Robot services for treatment, delivering food and medicines to COVID-19 patients at hospital.

14. Efficient disinfection and sterilization techniques for medical equipment.

The competition was open to all UG/PG students and researchers of ASTU affiliated technical institutions. ASTU also provided necessary financial assistance to the winning proposals under TEQIP-III project. The judging panel for the competition comprised of distinguished personals from the field of education, science & technology and medical sciences, namely Prof. Dhiraj Bora. Dr. A.K. Baruwa, Dr. A.K. Gogoi and Dr. Lohit Kumar Kalita.

48 entries were registered in the first round of the competition out which 11 projects were given seed funds for further research and development of the project. A final round of presentation was held on August 31st, 2020 via an online platform. Following is the list of winners of Sandhan: an innovative challenge.

List of winners

Rank	Project no.	Project Title	Team Members
1	43	Portable currency note sanitizer	Imran Hussain Menon Kalita Mridul Deka Majaharul Islam
2	11	Collection and distribution of relief materials using "Rahat Setu App"	Sandip Das
3	27	Unorganized and migrant workers: new way of employment	Mathura Prasad Gogoi Abhisekh Aich

Award of appreciation winners

Rank	Project no.	Project Title	Team Members
1	8	Pratiroah: an wall against pandemic	Angaraaj Das Rubayet Parvex Jahan
2	19	Geofencing COVID-19 Hotspots	Aritra Kaushik Bhaskar Jyoti Bhattacharya Pijush Bhuyan Souvik Baruah
3	22	Contactless sanitization system	Rahul Sharma Deepsekhar Dey Bibov Bhuyan
4	44	Goods delivering robots with sanitization system	Surajit Dev Sharma Bishnu Kalita Jadav Tumung
5	49	Autonomous room sanitization bot	Anup Sharma Madhurjya Deori

Following is the poster of Sandhan: An innovative challenge that was circulated.

SANDHAN: AN INNOVATION CHALLENGE TO FIGHT COVID-19 PANDEMIC

Organized by
Assam Science and Technology University
under TEQIP-III

THEMES:
1. Ozone decontamination method for PPE
2. Portable model of ventilators for COVID-19 patient
3. Low cost respiratory mask, anti-pathogenic PPE etc.
4. Contactless sanitization system
5. Facility to sanitize large area in short time
6. Software tools for track and tracing of COVID-19 patient.
7. Tracking and support to unorganized sector and migrant workers
8. Collection and distribution of relief materials
9. Support and counseling of people under home/ institutional quarantine.
10. Travel history Route-mapping of suspected cases (patients).
11. Home delivery of services during lockdown
12. Homeless people shelter mapping
13. Robot services for treatment, delivering food and medicines to COVID-19 patients at hospital.
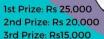14. Efficient disinfection and sterilization techniques for medical equipment.

GUIDELINES:
1. To participate in the SANDHAN, the applicants have to submit a proposal to develop an innovative and efficient solution to fight against COVID 19.
2. The proposal should submit in the prescribe format through online mode only.
3. The proposal can be submitted individually or jointly. For joint project, the maximum member in the research group should not exceed 4 members.
4. The applicant have to submit the proposal (maximum five (5) A4 pages) on any of the given topics.
6 The proposals will be evaluated by the judges based on clarity, inventiveness, practicability and social impact.
7. The short listed proposals have to present by the applicant through power point presentation.
8. Selected proposals are to be presented in the next levels of the competition (in this step, Apps may be published in ASTU's Google Play Store or mobile responsive web may be hosted in organizers server)
9. The best three (3) proposal will be selected for 1st, 2nd, and 3rd prize. Few other projects will be considered for consolation prize.

IMPORTANT DATES:
Opening of online registration: 02/06/2020
Last date of online registration and
submission: ~~25/06/2020~~ ➝ 05/07/2020
Final Completion: ~~30/06/2020~~ ➝ 13/07/2020

PRIZE

1st Prize: Rs 25,000
2nd Prize: Rs 20,000
3rd Prize: Rs15,000
There will be five consolation prize of Rs 10,000.

For more details
Contact: 9954077964
email: sandhan.astu@gmail.com
Google form link: https://forms.gle/JiZcoZYcD5jaW8NG7
or scan the QR code

Here are some of the pictures from the final presentation event that was hosted in the seminar hall of ASTU on August 31, 2020.