



प्रज्ञानम्



INSTITUTE GLIMPSES

Government Engineering college Patan end searingly known as G.E.C.P is situated at the scenic village katpur Patan city. Started in 2004 with an aim of imparting quality higher education in various fields of engineering, it has seen unprecedented growth. It is affiliated with Gujarat Technological University & administrated by Directorate of Technical Education, Government of Gujarat.



From the Desk of Principal

Principal



Dr. H .S. Patel

The Government Engineering College Patan welcomes all and we are delighted to introduce our college having a rich tradition of soaring high with academic excellence and overall personal growth of the students. The purpose of education is to teach our students

to think and develop a capacity to reason out facts and this is achieved by providing them excellent academic environment, state-of-the-art infrastructure, state-of-the-art laboratories, and dedicated and highly qualified faculty members with decades of teaching and industrial experience creative and practical oriented teaching-learning practices along with other developmental activities.

We are having the goal is to transform the world through technical education. It may sound idealistic, but this is precisely our long-term goal. It is what motivates the work of everyone at the Government Engineering College, Patan from faculty and staff, to students and alumni. It inspires our teaching and research. It is this goal that fuels the faculty to excel.

Institute Landmarks

Mandate

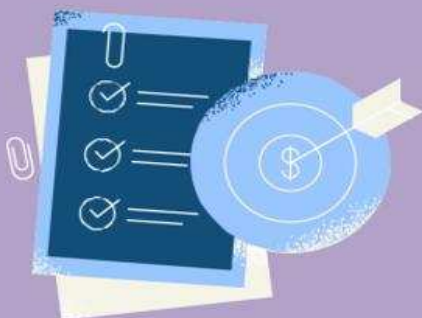
To impart the technical education as per the state and national policy which satisfy the current needs of the society, to interact with the industry and research organizations for the integrated growth, to make the liaison with statutory and professional Organizations and to provide the training and research opportunities to the student and faculties in best possible manner.

Vision

To prepare Human Resource with value based competency for technical advancements and growth of society.



MISSION



To deliver technical programs and services to cater the current needs of society and industry.

Helping industries in solving challenges by means of providing best technical human resources



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Prof. V.D.PATEL



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2. Departmental activities
3. Faculty activities
4. NSS activities

NEWSLETTER DETAILS FOR GEC PATAN (JULY-SEPTEMBER 2021)

1. PAPERS PRESENTED/PUBLISHED

Mechanical Engineering Department

- Dr Hitesh Panchal has published on Performance assessment of a solar water distiller using circular parabolic absorber: An experimental investigation Case studies in thermal Engineering International Journal (4.7 IF, SCIE) ISSN: 2214-157X
- Dr Hitesh Panchal has published on Graphite powder mixed with black paint on the absorber plate of the solar still to enhance yield: An experimental investigation Desalination International Journal (9.501 IF, SCIE) ISSN: 0011-9164.
- Dr Hitesh Panchal has published on Diesel-fired boiler performance and emissions measurements using a combination of diesel and palm biodiesel Case studies in thermal Engineering International Journal (4.7 IF, SCIE) ISSN: 2214-157X
- Dr Hitesh Panchal has published on Investigation on evacuated tubes coupled solar still with condenser and fins: Experimental, exergo-economic and exergo-environment analysis Case studies in thermal Engineering International Journal (4.7 IF, SCIE) ISSN: 2214-157X

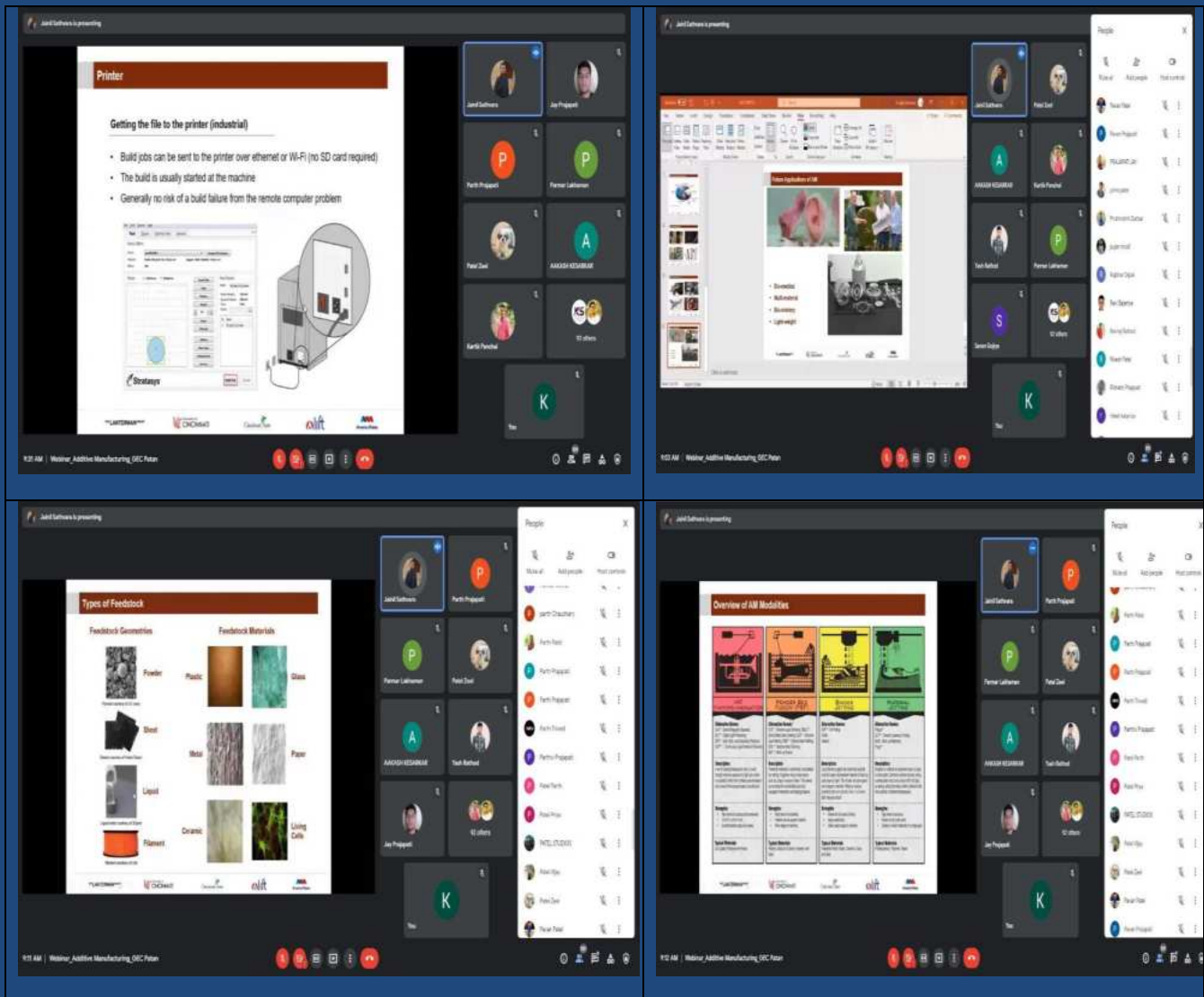
Computer Science Engineering Department

- Hiral Rathod, Sunil Kapadia, Tejas Patel published a research paper entitled “A LITERATURE SURVEY ON BLOCKCHAIN CYBER SECURITY DESIGN” International Journal of Emerging Technologies and Innovative Research (www.jetir.org), ISSN:2349-5162, Vol.8, Issue 9, page no.b512-b518, September-2021.
- Zaveri T., Prajapati P., Shah R. (2021) Novel DWT and PC-Based Profile Generation Method for Human Action Recognition. In: Verma G.K., Soni B., Bourennane S., Ramos A.C.B. (eds) Data Science. Transactions on Computer Systems and Networks. Springer, Singapore. https://doi.org/10.1007/978-981-16-1681-5_12

2. DEPARTMENTAL ACTIVITIES

Mechanical Engineering Department

- Department has organized webinar on Additive Manufacturing on 12th September, 2021
- Department has organized an expert lecture on Importance of Quality in association with ford motors on 17th July, 2021
- Department has organized an Industrial visit ONGC, Mehsana from 13th to 15th September, 2021 for the students of 5th and 7th Semester.



Name of Student	Brief Description of Achievement	Name and Address of Awardee	Month and Year of Award
Desai Nishant	“Participated in Traditional Costume, Garba and Folk Dance” at NSS state day celebration and secured second position in folk dance.	NSS cell, Gujarat State	Sept,2021

Electrical Engineering Department

- ATAL FDP organized during 5- 9 July 2021 on title “Role of Renewable energy resources in Power System” by Electrical Engg. Deptt. ,GEC, Patan
- Expert lecture delivered on topic “Quantitative impact of PEV on Power System with Renewable Resources “on 7/7/2021 at ATAL FDP by Dr.V.K.Prajapati
- Expert lecture delivered on topic “Energy recovery during deceleration of Induction motor Drive for Electrical Vehicle : “on 15/7/2021 at HSET, Sidhpur by Dr.P.D.Patel
- Expert Lecture delivered on Design of 300 KW ground Mounted solar Plant at GANPAT UNIVERSITY, Kherva by Prof. S.G.Prajapati
- Expert Lecture on Overview of Solar Energy and Rooftop system delivered at LDRP, GANDHINAGAR by Prof. S.G.Prajapati

3.Faculty Activites

Mechanical Engineering Department

Name of Faculty	Brief Description of Achievement	Name and Address of Awardee	Month and Year of Award
Dr Hitesh Panchal	Editorial Board Member (Associate Editor) for Multidisciplinary International Journal of Gujarat Technological University (ISSN : 2581-8880)	Dr Hitesh Panchal	September 2021
Dr Hitesh Panchal	100 Eminent Academicians of 2021 by International Institute of Organized research	Dr Hitesh Panchal	July 2021
Dr Hitesh Panchal	International Outstanding Young Research Award 2021 by Green Thinkerz International Award	Dr Hitesh Panchal	July 2021

Name of Faculty	Title of Training	Start Date	End Date
Prof S. P. Patel	Train the Trainer Program	20-09-2021	24-09-2021
Prof. K. V. Patel	Effective Use of Office Software	05-07-2021	09-07-2021

Computer Science & Engineering Department

Sr. No	Title	Name of the faculty	Department	Place	Duration
1	Induction Phase-I	Prof. HiralRathod	CSE Department	NITTTR, Bhopal	23/08/2021 To 03/09/2021
2	Induction Phase-I	Prof. Payal J. Prajapati	Computer Science & Engineering	NITTTR, Bhopal	02/08/21 to 13/08/21

4. NATIONAL SERVICE SCHEME (NSS) ACTIVITY

[1] “CATCH THE RAIN” on 8th August 2021

We all know day by day earth ground water was decreases. So our government start a campaign of Jal Shakti Abhiyan. This campaign will be carried out in both rural and urban areas. Its objective is to store rain water. This campaign will be run before and during monsoon across the country from 22 March 2021 to 30 November 2021. In which through people's participation It will be started as a movement for water conservation at the ground level. The aim of this campaign is to make rain water storage for all. Catch The Rain Event is Organized by The National Service Scheme (NSS) Functioning at Government Engineering College, Patan on 8th August 2021 Under The Campaign Of Jal Shakti Abhiyan.

In This Event Many Student Of Our Collage Joined Us With Online Platform MS Team. Our Event Start with Sarasvati Vandana and After The Sarasvati Vandana Our Chief Guest Siddharaj B Ashal And Also a Expert Talk He Gives An Information About Rain Water Harvesting And He Also Mention About Real Meaning Of Rain Water Harvesting, He Teach Us How To Use This Method in farming And Increase A Water Level of Borewell And Harvesting With Rain Water. He Gives Some Example of Farmers Who Harvesting With Rain Water. After The Expert Talk Our NSS Volunteer Gives Speech on Catch The Rain Event And Show Us Some Videos On Catch The Rain And Rain Water Harvesting. Last Activity of The Event We Take A Pledge On Catch The Rain.

Major outcomes of event:

- After this event we gain knowledge about rain water harvesting and how to store a rain water and use in daily life.
- This event creates a awareness about judicious use of water and avoid wastage of water.



કેઈલી કિટેક્ટર

સરકારી ઇજનેરી કોલેજમાં એન.એસ.એસ. યુનિટ દ્વારા કેચ ધ રેઈન કાર્યક્રમ યોજાયો

(ડી.ડી.ન્યૂઝ) પાટણ સરકારી એન્જિનિયરિંગ કોલેજ, પાટણ સ્થિત કાર્યરત એન.એસ.એસ. યુનિટ દ્વારા ૮મી ઓગસ્ટના દિવસે જળ શક્તિ અભિયાન હેઠળ 'કેચ ધ રેઈન' કાર્યક્રમનું આયોજન કરવામાં આવ્યું હતું. આ કાર્યક્રમનું આયોજન ઓનલાઈન એમ. એસ. ટીમમાં કરવામાં આવ્યું હતું. કાર્યક્રમની અંદર કોલેજના આચાર્ય, પ્રોફેસર ગણ તથા મોટી સંખ્યામાં વિદ્યાર્થીઓ જોડાયા હતા.

પૃથ્વી પરની વસ્તી વધી રહી છે તેથી પાણીનો વપરાશ પણ વધી રહ્યો છે પૃથ્વી પર પીવાલાયક પાણી બહુ ઓછું છે, ભૂગર્ભ જળ પણ ઓછું થઈ રહ્યું છે, વરસાદનું પાણી પીવા લાયક હોય છે, ચોમાસામાં પડેલા વરસાદી પાણી દરિયામાં વહી જાય છે, વરસાદી પાણીનો કોઈ ઉપયોગ થતો નથી. વરસાદી પાણીનો યોગ્ય ઉકેલ થાય તે હેતુ થી કેન્દ્ર સરકારે એક અભિયાન ચાલુ કર્યું છે જળ શક્તિ અભિયાન આ અભિયાનમાં કેન્દ્ર સરકાર અને રાજ્ય સરકાર મળીને કામ કરે છે સરકાર દ્વારા વરસાદી પાણીનો બચાવ કેવી રીતે કરવો અને તે પાણીનો યોગ્ય ઉપયોગ

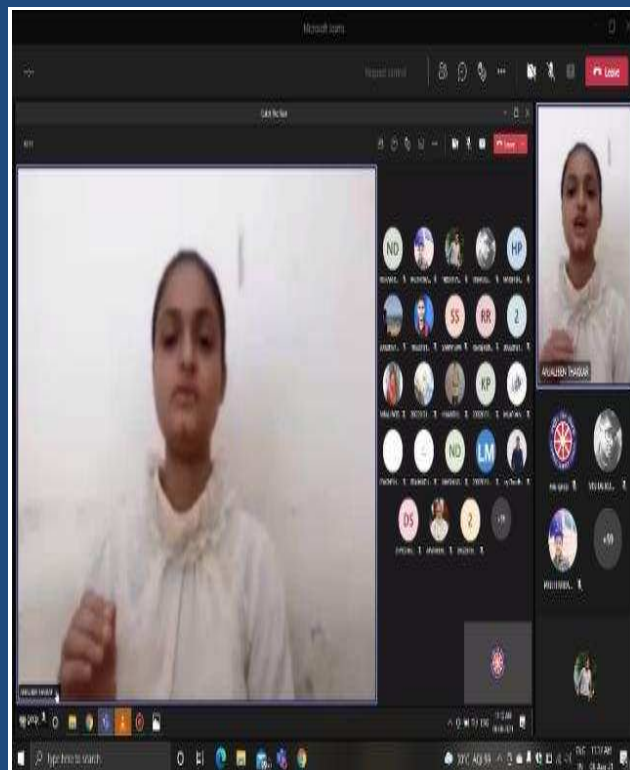
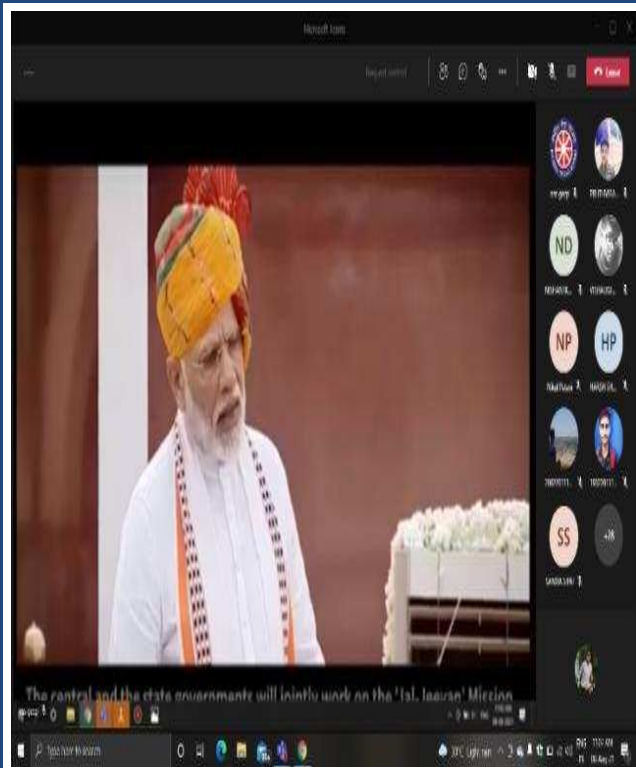


કરવો તે માટેની અલગ અલગ યોજનાઓ બહાર પાડવામાં આવી છે.

આ કાર્યક્રમમાં વરસાદી પાણીનું સંચયન કેવી રીતે કરવું એના ઉપર ચર્ચા કરવામાં આવી હતી. જેમાં મુખ્ય વક્તા તરીકે સિદ્ધરાજ અસલે વરસાદી પાણીનો સંગ્રહ કેવી રીતે કરવો અને તેના શું ફાયદા છે તેના વિશે જાણકારી આપી હતી. કાર્યક્રમના અંતમાં સૌના દ્વારા શપથ ગ્રહણ કરવામાં આવ્યા હતા. પાણીનો બગાડ ન કરવા અને તેનો વિવેકપૂર્ણ ઉપયોગ કરવાના શપથ લીધા હતા. એન.એસ.એસ. કાર્યક્રમ

અધિકારી તરીકે ફરજ બજાવતા ડો.એ.કે. ચૌધરીના માર્ગદર્શન હેઠળ 'એન.એસ.એસ. યુનિટના સ્વયંસેવકો' દ્વારા આ અભિયાન નું સુંદર અને સફળતાપૂર્વક આયોજન કરવામાં આવ્યું હતું.

વિસ્તારો તેમજ ગ્રામ્ય વિસ્તારોમાં ચચેલી ન રહ્યું હોવાથી પણ પાસે આમેય વહેલી ચૂંટણી (પાન-૧નું ચાલુ) બેઠા નાની મોટી ઈજ્જતો થઈ છે. આ પટના પહોંચી હતી અને તમામને સાવરકુંડલા સિંહ હતા. સાવરકુંડલા પોલીસે આ મામલે આ આવતો હતો અને કેવી રીતે બેલેન્સ ગમાવી



[2] “Independence Day” on 15th August, 2021.

Independence Day, in India, national holiday celebrated annually on August 15. Independence Day marks the end of British rule in 1947 and the establishment of a free and independent Indian nation. It also marks the anniversary of the partition of the subcontinent into two countries, India and Pakistan, which occurred at midnight on August 14–15, 1947. On every 15th August, the Prime Minister hoists the Indian flag on the ramparts of the historical site of Red Fort in Delhi. Twenty-one-gun shots are fired in honour of the solemn occasion. In his speech, the Prime Minister highlights the past year's achievements, raises important issues, and calls for further development. He pays tribute to the leaders of the Indian independence movement. The Indian national anthem, "Jana Gana Mana", is sung. The speech is followed by a march past of divisions of the Indian Armed Forces and paramilitary forces. Parades and pageants showcase scenes from the independence struggle and India's diverse cultural traditions.

A similar tradition is followed all over India at different levels. GEC Patan also celebrated this glorious occasion on the college campus. Starting with a warming morning in front of an administrative office, everyone was gathered including our respectable faculty, helping guards and NSS volunteers. Then after a moment, sharp at 9:30 reputed professor G.A. Patel Sir hosted the tricolor flag and showered the essence of love and patriotism. It was followed by reciting national anthem. This flag hosting was honored with a disciplined parade by security guards. Then after Prof. G.A. Patel sir encourage and energize the youth and faculty for facing common problems during this pandemic with his heart warming words. He also added some historical affections of our freedom fighters who were accountable for our freedom and independence. After his beloved speech, the NSS team had also arranged some brunch for the faculty and students who bought leisure time to make a tribute to our nation. On enclosing the event we capture some memorable photographs which convey harmony and nationalism.

Major Outcomes of the Event

- Enhance the patriotism in every heart.
- Refine the unity and communication in NSS volunteers.





સરકારી એન્જિનીયરીંગ કોલેજ પાટણ ખાતે સ્વતંત્રતા દિવસ ઉજવાયો

(નિ.ન્યુ.સ.)

પાટણ, તા.૧૭

સરકારી એન્જિનિયરિંગ કોલેજ, પાટણ સ્થિત કાર્યરત 'એન.એસ.એસ.' યુનિટ દ્વારા ૧૫મી ઓગસ્ટના રોજ '૬૫મા સ્વતંત્ર દિવસ' ની ઉજવણી કરવામાં આવી હતી. ભારત દેશ '૧૫મી ઓગસ્ટ ૧૯૪૭' ના રોજ સ્વતંત્ર થયો હતો તે નિમિત્તે આજે ભારતની આઝાદી ને ૭૫ વર્ષ પૂર્ણ થયા. આ વર્ષે કાર્યક્રમ 'આઝાદી કા અમૃત મહોત્સવ' હેઠળ આયોજિત કરવામાં આવ્યો હતો. જેમાં કોલેજના પ્રિન્સિપલશ્રી, તમામ વિદ્યાર્થી ગણ તથા વિદ્યાર્થીણો જોડાયા હતા. સૌપ્રથમ સાહેબશ્રી દ્વારા ધ્વજારોહણ કરવામાં આવ્યું હતું. ત્યારબાદ સાહેબ દ્વારા સુંદર વક્તવ્ય રજૂ કરવામાં આવ્યું હતું. જેમાં એમને સમજાવ્યું કે જયારે દેશમાં ઇંગ્લેન્ડેનું રાજ હતું ત્યારે આઝાદી માટે સ્વતંત્રતા સેનાનીઓ દ્વારા ખૂબ જ સાહસથી લડત આપવામાં આવી હતી. આજની તારીખમાં પણ આપણે એજ સાહસથી કોરોના મહામારીને લડત આપવાની છે. આ કાર્યક્રમ એન.એસ.એસ કાર્યક્રમ અધિકારી તરીકે ફરજ બજાવતા ડો.એ.કે.વીંધરી સાહેબના માર્ગદર્શન હેઠળ એન.એસ.એસ ના સ્વયંસેવકો દ્વારા આયોજિત કરવામાં આવ્યો હતો.

[3] “RakshaBandhan Celebration with Patan Police Force” on 21th of August, 2021

Celebrated on the full-moon day of the Hindu month of Sravana (July/August), this festival celebrates the love of a brother for his sister. On this day, sisters tie rakhi on the wrists of their brothers to protect them against evil influences, and pray for their long life and happiness. They in turn, give a gift which is a promise that they will protect their sisters from any harm. Within these Rakhi reside sacred feelings and well wishes. This festival is mostly celebrated in North India.

This does not mean that the brother protects the sister. Our soldiers also protect us at the border. Our police personnel also stand guard and protect us. Our police personnel have also played a very important role in this Corona epidemic. The lockdown has been fully complied with by our police personnel. Our traffic police are also on high alert all day to ensure that there is no traffic jam on the roads. Whether it is a hot summer afternoon or a heavy rainfall, he is always on duty.

We are our NSS students: On the morning of 21st August, we first went to the police station of B division and took permission and we tied Rakhi and fed sweets to the police personnel from there. We then tied Rakhi to the traffic police at Siddhpur Char Rasta and fed them sweets. From There we went to the SP office in Patan and after getting permission we tied Rakhi and fed sweets to the police personnel there. The police there gave us a lot of information. In which he gave information about how to solve the difference of theft. Those people thanked us. We also had the pleasure of tying the Rakhi of the police personnel guarding us.

Major Outcomes of the Event

- The police there gave us a lot of information.]
- Police personnel have done their duty very well away from their families and at the risk of their lives under the guise of fear of Corona.



[4] 7 Days Special Camp from 1/09/2021 to 7/09/2021 At Katpur village

NSS Unit GEC Patan organized a seven-day Special Camp from 1st September to 7th September at Katpur, near Patan. Special Camping forms an integral part of the National Service Scheme. It has carried out various social activities by the volunteers related to literature, environmental safety, health and hygiene, and helping the victims during natural calamities. It has special appeal to the youth as it provides unique opportunities to the students for group living, collective experience sharing.

DAY 1- Vaccination Survey and awareness rally

The first day was started with the NSS volunteers' meeting. It was followed by an inauguration ceremony at primary school at katpur village in the warm presence of principal of GEC Patan, faculties, sarpanch of katpur and also teachers and principal of a primary school. After this warm initiative, volunteers move door to door for vaccination surveys by splitting themselves into different groups. And also tried to spread awareness among them by practical conversation and sharing pros with them. The residents also get convinced that vaccines should be taken by everyone.

Then after the lunch, the skill session was hosted by senior coordinators of the NSS team, which carried out the introductory part and extempore session. The summing up of 1st day of the event was done in front of the college by NSS Song.





DAY 2- TREE PLANTATION

This day was started with rituals and bhajans in the fresh morning for arousing everyone. It was followed by warm exercise, running, and a parade. Then the energy was regained by breakfast and volunteers were gathered at E.C. department hall for managing Taluka level “Van Mahotsav”. This event took place in collaboration with the forest department of Patan district.

Started with an inauguration by our welcomed guest and faculty along with Saraswati Vandana, anchor Dixita Patel invited RFO officer P.M Chaudhary for a welcome speech. It was followed by the heartening speech of our special guest Taluka Panchayat Pramukh Shree Maya Ben Jala. She tried to limelight the crisis we faced during corona due to lack of oxygen and environmental affection. Then Dixita Patel invited our chief guest MLA Shri Dr.K.C.Patel to enlighten us with his views on forests and the environment. He enriches volunteers by telling them the importance of trees and their by-products. ‘Don’t Go Against the Nature’ quote was provoked by him. Taluka Development Officer, Patan has also felt gratitude for being present in such an event. And also, the forest department gave price money to a katpur woman for planting 1000 plants. Before enclosing the event, V.L Desai in charge of Vanpal gave a vote of thanks to everyone present there. Then our guests, faculties, and volunteers plant the trees around the campus and also interacted with the forest department. After lunch, the second day was enclosed with a pre-planning of the next day and the NSS song.





DAY 3- ANIMAL CHECK-UP

The blooming day was started with “Prabhat feri” at 5 AM and a peaceful environment was formed with Ram Dhun. Then the morning energy improvised with normal workout and parade in college ground. Then volunteers went to the village to invite villagers who have an occupation as animal husbandry for the animal check-up. The veterinary doctor was welcomed for examining the animals. Dr. A.K.Chaudhary sir and H.S.Bhutadiya sir had joined the session for overall supervision. After several check-ups, a veterinary doctor also answered the doubts of volunteers and enrich their knowledge. He elaborately explains the lime-lighted topics like herding, cattle breeding, milk formation, and quality, etc. He also provided medicines and suggested needed changes for unwell animals. Till 11 AM many villagers take advantage of this campaign. After lunch, the extempore skill session has been taken by Prof. Shraddha Modi and Prof. H R Trivedi. In this session, every volunteer participated. After such an informative session, volunteers returned to the ground for a parade. The 3rd day of special camp was ended by the planning of the 4th day and NSS song.





DAY 4- Medical camp, Blood Donation, Superstition

The hectic day was started with “Prabhat ferī” as usual. After arousing everyone by sweet bhajans, boys’ volunteers went for routine exercise and parade on college ground. Then after regaining energy by breakfast, volunteers were gathered in front of E.C.Department for organizing multiple events. They were divided into several groups for performing different tasks to manage medical camp and blood donation campaigns together. Many of them moved door to door to invite villagers of katpur and rajpur town for medical camp and blood donation. Medical Camp was held in Katpur Gram Panchayat Office. Doctors from GMERS nursing college, Dharpur, and their team were welcomed to cure local people. It was started at 10:30 and many villagers take advantage of this campaign. Every patient was cured without charge.

A blood donation campaign was also arranged on the college campus. The team of the Red Cross Society of Patan had supervised this event. Many villagers from rajpur and katpur, faculties and NSS volunteers had actively participated in this campaign. Donors were also honored with gifts and certificated for theirselflessness and empathy towards needed ones. As it was the occasion of teacher’s day, girls’ volunteers taught the students of katpur government school. And also honored every teacher and faculty for their contribution to everyone’s life. After completing multiple events, an awareness program on superstition was arranged at Katpur Gram Panchayat at 8 PM. Darshanbhai Chaudhary from “Punabha Lok Vigyan Kendra” was the Chief Guest of this program. Mataji's Pinch From Coconut, Scattering Kanku From Hand, Setting Fire With Water, Taking Kanku Steps, Etc, by explaining such examples he awakens villagers that this all has a scientific logic. After succeeding in this event, NSS thanked everyone by NSS clap.



DAY 5- Cleanliness Drive and Plastic Free Campaign

As a routine, 5th day was also started with “Prabhat feri” and melodious Ram Dhun. It was followed by a regular workout and parade. The moto of that day was to make a dirt-free environment. So, volunteers went to the village and swept the roads with a broom and collected all the garbage, and thrown it in dustbins. The streets and alleys were cleaned. Villagers were thankful to the NSS team for their initiative and they have also shown their gratitude by offering tea.

Along with cleanliness, volunteers also aware villagers to avoid plastic. By explaining the pros and cons of plastic use, they tried to convince locals to avoid them and keep nature clean. After these two tiring events, volunteers had taken lunch. Then the extempore skill session was hosted by senior coordinators and the knowledge and experiences were exchanged. In the evening, parade training was given to volunteers. Then the team analyses the day and pre-plan another day at the dining table.





BEFORE

AFTER

DAY 6- FIRE SAFETY PROGRAM

As a routine, the 6th day was also started with “Prabhat feri” and melodious Ram Dhun. It was followed by a regular workout and parade. The energy was regained by breakfast. Then NSS team was headed to the katpur village for the next program on fire safety. The fire management team was invited by Dr.A.K.Chaudhary sir and other faculties present there. When people were assembled, the safety team started their demonstration over the ignited fire. They explained the technical rescue, fire protection, and emergency extinguishers by their demo. They also answered many general doubts of people. Some villagers also got the advantage of extinguishing the fire and learning about fire safety. The team also practically explained the uses of safety tools like fire hydrants, sprinklers, etc. After successfully completing this event, the NSS team thanked everyone by NSS clap.

In the evening, at the dining hall, everyone was gathered to analyze the whole special camp and celebrated the successful completion of the special camp.



