### GOVERNMENT ENGINEERING COLLEGE, MODASA

Newsletter

July – December 2021

Vol. 1 – Issue 2





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# FROM THE PRINCIPAL'S DESK



Dear Students & Faculty members, Warm greetings to all.

It gives me an immense pleasure to talk to you through the **2nd volume of Institute's Newsletter GECM E-NEWS** of the year 2021. Last year remembers for corona pandemic condition, where as this year for vaccination. With a systemic effort by the government and cooperation from all people, we have

almost succeeded the corona. Institute has also arranged 03 vaccination camps in association with the District Health department for vaccination of all staff and students. As a result, all staff and more than 90% students are vaccinated at present.

Another remarkable achievement for the institute is, after a long time, institute once again gets the NBA accreditation for Mechanical program for the period of 03 years starting from 2021-22 to 2023-24. I congratulate the Institute's NBA team and Mechanical department both for achieving this status. Mechanical department has shown the excellent example of team effort. We are especially thankful to the officials of the District Roads and Building Department office for giving immense support for improving physical infrastructure of the institute during NBA visit. We are also thankful to all stake holders for possible support for the NBA visit.

Education sector is now ready for implementation of New Education Policy after a long time. This NEP2020 is the first education policy of the 21st century. This Policy proposes the revision and revamping of all aspects of the education structure to create a new system that is aligned with the aspirational goals of 21st century education.

The editorial team is really complimented for the task of collecting all information & gives it to a shape of this newsletter.

Best wishes.

#### Principal

Dr. B. J. Shah

Mechanical Engineering, Government Engineering College, Modasa Accredited by the National Board of Accreditation (NBA) for the period of Academic years 2021-2022 to 2023-2024.

### State level Celebration of 125th Birth ceremony of Zaverchand Meghani "Kasumbi no Rang"

The State Level celebration of 125th Birth Ceremony of Zaverchand Meghani "Kasumbi no Rang" is carried out at 33 places across the State jointly by the Sports, Youth & Cultural Deptt. and Education Deptt. Of Government of Gujarat on 28<sup>th</sup> August 2021. GEC, Modasa is nominated as nodal institute and successfully conducted the event at Bhamasha Hall, M. L. Gandhi Campus, Modasa. 500 students & faculties have attended the event.





#### State level celebration of Gyanshakti Divas & Yova Shakti Divas

Various events to be held across the State to mark the five Years of Good Governance under with a promise to bring qualitative changes in education sector, State level Celebration of State level celebration of Gyan Shakti Divas and Yuva Shakti Divas was held on 01/08/2021 and 05/08/2021 respectively. The event is held in association of District Collectorate. More than 500 students and faculties of GEC, Modasa participated in both the event.



#### SSIP CELL

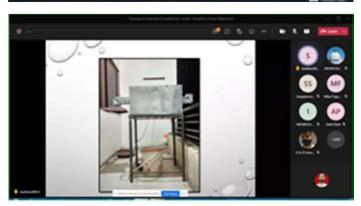
#### Startup and Innovation Exhibition Under"Azadi ka Amrut Mahotsav

SSIP-Cell, GEC Modasa has organized Startup and Innovation Exhibition Under "Azadi ka Amrut Mahotsav", on 23rd Sept 2021, wherein project groups who have completed their innovative projects as POC under SSIP scheme from the institute, have discussed and demonstrated their project. The students have discussed

motivation to select particular project, scope of the project work, what they have learned during the project duration and how SSIP helped them to realize their idea. The students from sem 3rd and 5th have participated in good numbers (216 attendees including students and Faculty) been interactive throughout the session since beginning and made the prgramme successful.







#### RUSA

#### **Programming & Operation of CNC Milling Machine**

An objective of the machining center is to enhance lean manufacturing by significantly reducing the cycle time of processes and increasing flexibility, thereby improving the overall quality of the work. This event was organized during 15/11/2021 to 24/11/2021. This event was coordinated by Dr Nisha Bora and Prof P K Gajjar.



#### Gymkhana

#### **Celebration of Independence Day**

The District level celebration of 75th Independence Day is organized at the campus of GEC, Modasa.





#### Celebration of Gandhi Jayanti as Azadi ka Amrut Mahotsav - Cleanliness drive at hostel and college campus

As a part of on-going celebration of Azadi ka Amrut Mahitsav, Gymkhana in coordination with NSS, G.E.C. Modasa has conducted a cleanliness drive for hostel premises and campus in 02 October 2021. The plogging run has seen a participation from enthusiastic students. The students followed the covid-19 guide lines and cleaned the campus by picking the single used plastic. The collected waste was then handed over to dump yard to remove the further menace. The college has also organized for beautification of campus and maintaining and conserving the natural water resources. The bicycle run is also planned in coming days







#### **Finishing School**

#### Functional English Set-B

Online training was conducted by Sudha Shah on MS team during 26/07/2021 to 05/08/2021. Total 37 student participants have taken this training. The objective of the event is to improve the English skill of the final year students for better employment opportunities. This event was coordinated by Dr Nisha Bora and Prof R B Shah.

#### **Government Engineering College, Modasa**



SET B – Functional English Skills From :  $26^{th}$  July to  $5^{th}$  August 2021

#### Employability Skills and Life Skills Set-A

Online training was conducted by Mohsina Dadu on MS team during 02/08/2021 to 12/08/2021. Total 39 student participants have taken this training. The objective of the event is to improve the life skill and employability skill of the final year students for better employment opportunities. This event was coordinated by Dr Nisha Bora and Prof R B Shah.



#### Library

#### NDLI USER AWARENESS PROGRAM

Central Library, GEC, Modasa had organised an event "NDLI USER AWARENESS PROGRAM" on 16th December 2021 for GECM staff and students in online mode.



GOVERNMENT ENGINEERING COLLEGE,MODASA

# NDLI USER AWARENESS PROGRAM

SPEAKER:-MR. OM MEHTA ASST.PROFESSOR(I.T.),GECM

DATE:-16/12/2021

TIME:-11.30 A.M. TO 12.30 P.M.

GOOGLE MEET:- meet.google.com/tep-jusg-raj



Government of India

ORGANISED BY:- LIBRARY,GOVERNMENT ENGINEERING COLLEGE,MODASA

#### Hostel

New Girls Hostel ready to start from next academic session with total number rooms 33 and capacity of girls hostel is 100.



#### Webinar

Webinar on "Outcome Based Education" was conducted on 7th August 2021 to aware the students of Mechanical Enginering Course about NBA and to share the importance of OBE. This webinar was coordinated by Dr. U. V. Shah Dr. B. C. Khatri and Prof. P. M. Mistri.

#### Memorandum of Understanding

Various departments under, Government Engineering College, Modasa signed MOU with various Industries in relevant area for enhancing industry-institute interaction through strategic partnership including Internship, Expert Lectures, Industrial Visit, Project Mentorship, Industrial Training, Laboratory Development etc. under Vibrant Gujarat summit 2022.

#### Civil Engineering Department Signed 07 MOU for

strategic partnership with following industries:

- 1 Hi-Tech Projects pvt. Ltd.
- 2 Ranjit Buildcon Ltd.
- 3 Anavya Construction & Consultancy Pvt. Ltd.
- 4 Bhumi Consultant
- 5 MAP Tachnolab Pvt, Ltd.
- 6 Singhai TechnoArch Consultancy
- Association of Consultaning Civil Engineers (India)
- 7 Ahmedabad Center-Gujarat

**Mechanical Engineering Department Signed 05 MOUs** for strategic partnership with following industries:

V Tech Makkers
 Devsta Pharmatech Pvt. Ltd.
 JM Zhongkai Chemical Equipment LLP
 JM Engineers
 Pranav Chemicals

#### Electrical Engineering Department Signed 12 MOUs for

strategic partnership with following industries:

- 1 ENDURA PUMPS, Modasa
- 2 P&N Engineering and Marketing, Ahmedabad
- 3 NIFA Electronics, Ahmedabad
- 4 YOGI CABLES, Kalol, Gandhinagar
- 5 RAM ENTERPRISE, Gasndhinagar
- 6 Spark Innovations, Vadodara

- 7 Secured Meters, Udaipur
- 8 PC Industry, Rakanpur, Ahmedabad
- 9 Ekarshi Opensource Foundation
- 10 Shree Umiya Electronics Co., Ahmedabad
- 11 Aplha Tech Automation, Ahmedabad
- 12 Ramdev Industries, Modasa





#### Electronics and Communication Department Signed 03

**MOUs** for strategic partnership with following industries:

- 1 Indicus Technology
- 2 Vector India Pvt. Ltd.
- 3 Microcircuits Technology

ComputerEngineering/InformationTechnologyDepartmentSigned04MOUsforstrategicpartnershipwith following industries:

- 1 2LC Technologies
- 2 Agile Infoways Pvt. Ltd., Ahmedanbad
- 3 WayToWeb Pvt. Ltd.
- 4 TOPS Technologies Pvt. Ltd.





#### Applied Mechanics & Civil Engineering Department

5-Days (One Week) ATAL Sponsored Online Faculty Development Programme (FDP) on **"Advances in Waste Treatment Technologies"** was organized from 23rd-27th AUGUST, 2021 in which around 75 participants from different parts of the country participated.



An Online Expert Lecture on **"Application of Remote sensing and GIS in Civil Engineering"** was organized by Civil Engineering Department of GEC Modasa on 5/10/2021 at 3.30 PM. The lecture was delivered by Dr. M.S. Gadhavi, Assistant Professor, L D College of Engineering, an expert in the above field. The lecture was attended by 85 participants.



**BRIDGE** is a technical club of civil engineering department of Government Engineering College, Modasa. The club is managed & run by students of Civil Engineering. The objective of the BRIDGE Club is to train new generations of civil engineers to meet the challenges, demands, and expectations of our global society and Nurture interdisciplinary education for solving the problems facing an ever-changing society.

The Bridge Club of Civil Engineering Department has Organized Expert Talk on "**Use of VBA in excel**" on 16<sup>th</sup> Oct 2021. Er. Kinjal Raj D.Sharma Deputy Manager at Infinite Civil Solution is Speaker of his event and total 50 were participated.



Government Engineering College, Modasa

The Bridge Club of Civil Engineering Department has Organized Expert Talk on "Use of VBA in excel"



#### Mechanical & Automobile Engineering Department

(ATAL) Academy sponsored **One Week Faculty Development Program on "Alternative Fuels"** organized during 22/11/2021 to 26/11/2021. This FDP was organized by Mechanical Engineering Department Government Engineering College, Modasa-Gujarat, India.



(ATAL) Academy sponsored **One Week Faculty Development Program on "Robotics And Automation"** organized during 20/12/2021 to 24/12/2021. This FDP was organized by Mechanical Engineering Department Government Engineering College, Modasa-Gujarat, India.



#### Electronics & Communication Department

Government Engineering College, Modasa and Electronics and Communication Engineering Department organized Expert Talk On **"Control Systems Engineering and Its Types"** from 3rd July 2021 through online platform Google meet. Dr Haresh Suthar, Associate Professor, Parul University Vadodara was our expert for the session.

#### **Electrical Engineering Department**

Offline cum virtual visit to 220KV Faredi Substation: Engineering Department, Electrical Government Engineering College, Modasa, has organized an industrial visit to Faredi Substation, Modasa Gujarat. 29 students accompanied by Dr.(Prof.) V.J.Updhyay (HoD-EE-GECM) visited the industry on 07/10/2021. Main purpose for this visit is to be familiar with industrial environment and to practical knowledge of electrical power qet transmission and distribution. Being final year students we will get to know about basic industrial functioning of power transmission and distribution. Students will also get familiar with Transformer maintenance, circuit breaker, Transformer isolator, bus bar, Protective relays, Lightening arresters, Load break switches, SCADA system, Current and voltage Transformer and Battery room.



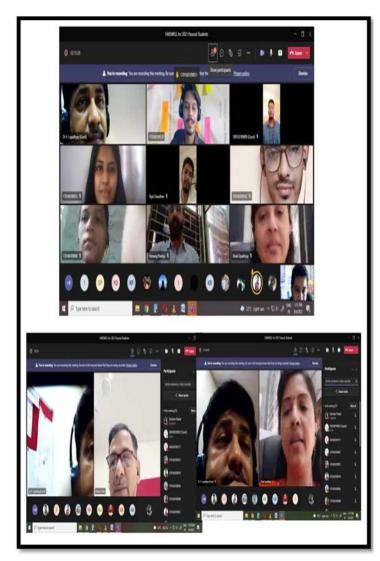
Celebration of National Consumer Rights Day: Electrical Engineering Department, Government Engineering College, Modasa, has organized a Celebration of National Consumer Rights Day for first year Students " and date was 24/12/2021. There were around 40 participants. The main focus of the talk was to aware the students about consumer rights and what should they do if so fraud happened with them. Prof. D.U.Thakar coordinated whole the event. Ms Meghavi Joshi, Deputy Manager CERC, head of the Complaint department and handling different types of Complaints and try to resolve it through mediation. Also heads the State Government project of Consumer Advice Center. Consumer Club and State Consumer Helpline.and Divya Namboothiri, handling ENVIS (Environment Information System) Project, sponsored by Ministry of Environment Forest.



Departmental Logo design Competition and inaugural of department logo: A webinar session for celebration of "Engineer's day" held on 15th Sept 2021 on the occasion of 160th Birthday of Bhart Ratna Sir M. Vishveswariyaji, using MS Teams.



**Farewell of Final Year Students:** Electrical Engineering Department, Government Engineering College, Modasa, has organized a FAREWELL for 2021 Passout Students " and date was 04/09/2021.There were 100 participants. The main focus of the talk was basics about encourage the passout out batch for their upcoming journey. Prof. D.U.Thakar coordinated whole the event. The first talk was given by hod Sir Dr V.J.Updhyay followed by Senior Prof. M.J.Patel.Then all the faculties given inspiration talk to the students.



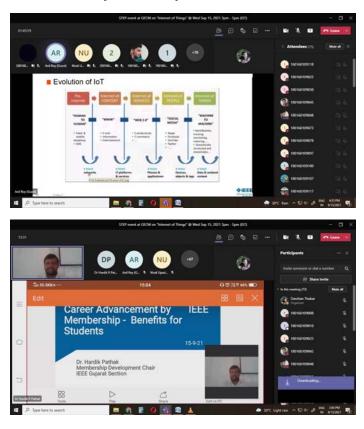
**Design Engineering Project Expo:** Electrical Engineering Department, GECM organized project expo for 5th semester students on 8th oct., 2021. 31 teams and 140 students have participated and represented their project model online via MS TEAMS. Coordinated by Prof.Darshan U. Thakar.





National Engineer's Day Celebration via Expert Lecture on IOT: Electrical Engineering Department, Government Engineering College, Modasa, and IEEE Gujarat Section has organized a webinar as a celebration of Engineer's Day on " Internet of Things" and date of webinar was 15/09/2021 and the duration of the webinar was from 03.00 P.M. to 5.00 P.M.. There were 101 participants. The main focus of the webinar was internet of things which is one topic of 5th Semester subject Signals and

Systems (3150912). The expert was Dr. Anil Roy, Associate Professor, DAIICT. The talk was started by giving introduction about IEEE Membership by Dr. Harshul Yagnik and Dr Hardik Pathak. After completing the introduction of IEEE, HOD Sir, Dr. V.J. Updhyay welcome chief guest Dr Anil Roy. Dr Anil Roy started the talk by taking quiz and distribute prize to Winner of Quiz. Dr Anil Roy sir have explained the past, present and future of internet of things. At the end of talk , doubts of students ware cleared by Dr Anil Roy Sir. bAt the end of session



The Electrical Engineering Department has conducted the following **expert sessions** by online webinar form:

A Webinar on "**Trends in Power Grid India today**" was organized by Electrical Engineering Department, Government Engineering College, Modasa on 3rd July 2021, wherein, Expert talk was carried out by "Shri R. K.Tyagi Shri Dev Prakash Paul, Power Grid Corporation."



An interactive webinar session was conducted on **"Energy Conservation Awareness Program"** was organized by Electrical Engineering Department, Government Engineering College, Modasa in coordination with PCRA (Petroleum Conservation Research Association for pre-final and final year (Sem 5th and Sem 7th) students with a view to provide fundamental understanding of significance and conservation of energy as current needs on 17th July 2021, was coordinated by Dr. H. S. Pandya.



10 Hrs Webinar Series on "Electrical Vehicular technology: Recent trends & developments": A Webinar series "Electrical Vehicular technology: Recent trends & developments" was organized by Electrical Engineering Department, Government Engineering College, Modasa Coordinated by Dr.H.S.Pandya. During 13th Sept 2021 to 29th Sept 2021 for final year students with a view to provide recent developments being done as well as scope of research in the area of Electrical Vehicular technology . During 13th Sept 2021 to 29th Sept 2021 The expert, Shri Ritul Shah, (Founder - Spark Innovations, Vadodara, Gujarat, India ). has delivered 10 Hrs of web based sessions on areas viz. Recent technologies R&D in Electric Vehicles, Companies working in the field of Electric Vehicles, Various components of an Electric Vehicles, Battery topologies and pack assembly techniques, various terminologies used in batteries, Various topologies of BMS, Features and Functionalities of BMS, Thermal management of batteries. Power train, Hybrid Power train, Pure Electric power train, Understanding of components of power train. Recent

technologies in motor controllers, Chargers, DC-DC Converters, VCU and other peripherals overview.



Webinar on "Understanding Transformer Protection", was arranged by Department of Electrical Engineering, GEC Modasa on "Recent Trends in Transformer Design" Date 11/08/2021 Time: 11.30 am to 1.30 pm, coordinated by Prof.M.J.Patel and Prof. J. B. Pujara, Expert had extensively explained all the procudures followed in industry for transformer designing and its protection. It is really fullfill the bridge between industry and institute. The students have participated in good numbers (150 attendees including students and Faculty) been interactive throughout the session since beginning and made the prgramme successful. The pictorial memory and feedback is shared here with in the following section. This is to offer heartfelt thanks to the Head of the Department Electrical Engineering and

Principal,GEC Modasa to permit and guiding for the said programme, the expert for sparing valuable time and the participants to make session interactive and interesting.



#### **Computer Engineering & Information Technology Department**

**Webinar on "Logout-Cyber Awareness"** organized by computer engineering and information technology department on 26/10/2022 which is coordinated by Prof. Prashant Modi.

**Webinar on "Career in Digital Marketing"** organized by computer engineering and information technology department and expert talk was delivered by Tops Technologies ,Ahmedabad on 04/12/2022 which is coordinated by Prof. Anil Prajapati.

Webinar on "Emerging Technologies" organized by computer engineering and information technology department and expert talk was delivered by Tops Technologies ,Ahmedabad on 04/12/2022 which is coordinated by Prof. Anil Prajapati.

**Webinar on "Front End development"** organized by computer engineering and information technology department and expert talk was delivered by Tops Technologies ,Ahmedabad on 04/12/2022 which is coordinated by Prof. Anil Prajapati.

**Webinar on "Cyber Security"** organized by computer engineering and information technology department and expert talk was delivered by Tops Technologies ,Ahmedabad on 04/12/2022 which is coordinated by Prof. Anil Prajapati.

**Webinar on "PHP-How to create web application in MVC"** organized by computer engineering and information technology department and expert talk was delivered by Tops Technologies, Ahmedabad on 05/12/2022 which is coordinated by Prof. Anil Prajapati.

The Computer Engineering & Information Technology (Coordinator: Anil Prajapati, Om Mehta, Manmitsing Zala, Nilesh Goriya) Department, has organized Industry visit at **Agile Infoways Pvt.Ltd, Ahmedabad.** 60 students of 3rd year attended this visit during 28/10/2021 to 29/10/2021.



# **RESEARCH AND PUBLICATIONS**

#### Applied Mechanics & Civil Engineering Department

**Prof. B. J. Shah & Bhavik Patel** has published a research paper on "Contribution of RC Slab towards collapse resistance of building structures" in Journal of Engineering, Computing & Architecture, ISSN No. 1934-7197, Nov 2021.

#### **Electrical Engineering Department**

**Prof. Kaushal Bhatt** has published a research paper on "A Comparative Study on Performance of Fitness Functions for Harmonic Profile Improvement using Parameter-less AI Technique in Multilevel Inverter for Electrical Drives" in International journal of computation and digital systems, 2021.

### Electronics & Communication Department

**Prof. Bhavik A. Brahmbhatt** has published a research paper on "Grid Synchronization for Three-Phase Grid-Tied Converter Using Decouple-Second-Order Generalized Integrator" in Advances in Intelligent Systems and Computing book series (AISC, volume 1370), pp 347-359, 2021

**Prof. Nirav D. Patel** has presented a research paper on 'Investigation of Up-Link Spectral Efficiency of Massive MIMO System in Different Fading Scenario' at "Smart Modernistic in Electronics and Communication" (ICSMEC-2021) online mega international conference.

#### **Computer Engineering & Information Technology Department**

**Prof. Prashant Modi** has published a research paper on "A State-of-the-Art Survey on Face Recognition Methods" to International Journal of Computer Vision and Image Processing (IJCVIP) ISSN NO: 2155-6997, Dec, 2021.

**Prof. Mahesh Goyani** has published a research paper on "Robust image retrieval using CCV, GCH, and MS-LBP descriptors" to Multimedia Tools and Applications ISSN NO: 1573-7721, Nov, 2021.

**Prof. Sameer Singh Chauhan** has published a research paper on "BGSA: Broker Guided Service Allocation in Federated Cloud" to Journal of Sustainable Computing: Informatics and Systems ISSN NO: 2210-5379, Sep, 2021.

**Prof. Anil Prajapati and Prof. Minal Chauhan** have published a book on "Information Retrieval" with Techknowledge Publications with ISBN/ISSN No. 978-93-90694-90-7.

#### Mechanical & Automobile Engineering Department

**Prof. Kalpesh Vaghela** has published a research paper on "An experimental approach to produce and investigate the sustainability of algae biodiesel on the performance of the single-cylinder four-stroke CI engine" to International Journal of Engineering and Techniques ISSN NO: 2395-1303, 2021.

# **RESEARCH AND PUBLICATIONS**

**Pradip K Gajjar** has published a research paper on "Sensitization and Desensitization (Healing) in Austenitic Stainless Steel: A Critical Review" to Transactions of the Indian Institute of Metals – Springer. ISSN NO: 0975-1645

**Prof. Maheshbhai J. Vanajara** has published a research paper on "Experimental investigation fro the spiral coiled capillary tube for various spiral pitches for the flow of refrigerant R32" to Energy Sources, Part A: Recovery, Utilization, and Environmental Effects, 2021 ISSN NO: 15567230.

**Prof. Vanvirsinh J. chauhan** has published a research paper on "Functionalization of alumina particles to improve the performance of eco-friendly brake-pads" to Friction (International Journal), 2021 ISSN NO: 22237704, 22237690.

**Prof. Vanvirsinh J. chauhan** has published a research paper on "Susceptibility of eco-friendly brake-pads to Noise-Vibration emanation due to siloxane treatment on alumina particles" to Applied Acoustics (International Journal) (International Journal), 2021 ISSN NO: 0003-682X.

#### **Sciences and Humanities Department**

**Prof. R. P. Khatri** has published a research paper on "Thickness dependent studies of chemically grown transparent conducting Cu:ZnS thin films for optoelectronic applications" in Optical Materials, Volume 120, October 2021, 111469, 2021. "Aeroplanes are not designed by science, but by art in spite of some pretence and humbug to the contrary. I do not mean to suggest that engineering can do without science, on the contrary, it stands on scientific foundations, but there is a big gap between scientific research and the engineering product which has to be bridged by the art of the engineer."

#### British Engineer to the Royal

Aeronautical Society, 1922.

The highest education is that which does not merely give us information, but makes our life in harmony with all existence"

Rabindranath Tagore

#### PARTICIPATIONS

#### Applied Mechanics & Civil Engineering Department

**Prof. B. J. Shah** Participated in One day Seminar on "Roadmap for Implementation of NEP-2020" on 15<sup>th</sup> September 2021 hosted by Gujarat Technological University.

**Prof. B. J. Shah** Participated in two days Symposium of Vice Chancellors/Principals/Directors On "Building World-Class Universities during 13/12/2021 to 14/12/2021 hosted by Education Dept., Govt. of Gujarat.

#### **Electrical Engineering Department**

**Prof. Darshan U. Thakar** Attend the E-Conference on "Innovations in Technical Education (NC-21-1)", on 17 November 2021 hosted by NITTTR, Bhopal.

#### Electronics & Communication Department

**Prof. Chandresh R. Parekh** attended Online Orientation Training Programmer for Mentors under National initiative for Technical Teachers training during 05/07/2021 to 09/07/2021 hosted by AICTE, Delhi

**Prof. Bhavik A. Brahmbhatt** attended "Induction Training programme Phase II" during 26/07/2021 to 06/08/2021 hosted by NITTTR, Bhopal.

**Prof. Sameer H. Mansuri** attended "Induction Training programme Phase II" during 15/11/2021 to 26/11/2021 hosted by NITTTR, Bhopal.

**Prof. Sameer H. Mansuri** attended workshop on "Embedded Systems- An application driven approach" during 28/08/2021 to 27/08/2021 hosted by Atal Acadcemy, AICTE & ST Micro and ARM Education.

**Prof. Ketu R Patel** attended training program on "Work, Ethics, Motivational Climate and Attitude Development" during 11/10/2021 to 15/10/2021 hosted by NITTTR, Bhopal.

#### Computer Engineering & Information Technology Department

**Prof. S A Vahora** Participated in AICTE Training and Learning (ATAL) Academy FDP on "Robotics and Automation" organized by Government Engineering College, Modasa. during 20/12/2021 to 24/12/2021.

**Prof. A. K. Dodiya** Participated in AICTE Training and Learning (ATAL) Academy FDP on "Robotics and Automation" organized by Government Engineering College, Modasa. during 20/12/2021 to 24/12/2021.

**Prof. A. K. Dodiya** Participated in "Technical Research Methodology" organized by NITTTR, Bhopal. during 30/08/2021 to 03/09/2021.

**Prof. Upendra R. Bhoi** Participated in "Introduction to IOT (NPTEL)" organized by IIT, Kharagpur, during 26/07/2021 to 15/10/2021.

**Prof. N. D. Goriya** Participated in "Introduction to IOT (NPTEL)" organized by IIT, Kharagpur, during 26/07/2021 to 15/10/2021.

**Prof. V. R. Patel** Participated in "Introduction to IOT (NPTEL)" organized by IIT, Kharagpur, during 26/07/2021 to 15/10/2021.

**Prof. N. N. Maltare** Participated in "Introduction to IOT (NPTEL)" organized by IIT, Kharagpur, during 26/07/2021 to 15/10/2021.

**Prof. N. V. Nagekar** Participated in "Introduction to IOT (NPTEL)" organized by IIT, Kharagpur, during 26/07/2021 to 15/10/2021.

**Prof. R. J. Prajapati** Participated in "Programming in JAVA(NPTEL)" organized by IIT, Kharagpur, during 18/01/2021 to 09/04/2021.

**Prof. S. G. Patel** Participated in "Technical Research Methodology" organized by NITTTR, Bhopal. during 30/08/2021 to 03/09/2021.

**Prof. S. G. Patel** Participated in AICTE Training and Learning (ATAL) Academy FDP on "Robotics and Automation" organized by Government Engineering College, Modasa. during 20/12/2021 to 24/12/2021.

**Prof. P. R. Gamit** Participated in AICTE Training and Learning (ATAL) Academy FDP on "Robotics and Automation" organized by Government Engineering College, Modasa. during 20/12/2021 to 24/12/2021.

**Prof. A. D. Chaudhari** Participated in "Technical Research Methodology" organized by NITTTR, Bhopal. during 30/08/2021 to 03/09/2021.

**Prof. P. A. BHURA** Participated in FDP on "Cloud Computing and Big Data Applications" organized by Government Engineering College, Rajkot. during 25/10/2021 to 29/10/2021.

**Prof. M. H. VALERA** Participated in FDP on "Cloud Computing and Big Data Applications" organized by Government Engineering College, Rajkot. during 25/10/2021 to 29/10/2021.

**Prof. P. S. Modi** Participated in FDP on "Cloud Computing and Big Data Applications" organized by Government Engineering College, Rajkot. during 25/10/2021 to 29/10/2021.

**Prof. K. K. Jani** Participated in One week FDP on "Using ICT Tools in Teaching and Learning" organized by NITTTR Bhopal during 30/08/2021 to 03/09/2021.

#### Mechanical & Automobile Engineering Department

**Prof. Kalpesh V Vaghela** attended Electric Vehicle Designe judge in FS switzerland virtual event During 16/07/2021 to 18/07/2021.

**Prof. Kalpesh V Vaghela** attended Electric Vehicle Designe judge in Formula Bharat 5th FSEV Concept Challenge during 24/07/2021 to 04/08/2021.

**Prof. Kalpesh V Vaghela** attended Electric Vehicle Designe judge in Formula Bharat Virtual 2021-22 during 07/09/2021 to 02/11/2021.

**Prof. Pradip K Gajjar** participated Induction Programme Phase-1 during 23/08/2021 to 03/09/202 organized by NITTTR, Bhopal.

**Prof. Piyush M. Mistri** attended training Program on Train the trainer for Faculty (Basic – Automotive) during 25/10/2021 to 29/10/2021 organized by iACE, Gandhinagar.

**Prof. Piyush M. Mistri** attended training Program on Alternative Fuels during 22/11/2021 to 26/11/2021 organized by GEC, Modasa Under AICTE ATAL FPD.

**Prof. Mital G Patel** attended training Program on Alternative Fuels during 22/11/2021 to 26/11/2021 organized by GEC, Modasa Under AICTE ATAL FPD.

**Prof. Hetal I Chaudhari** attended training Program on Alternative Fuels during 22/11/2021 to 26/11/2021 organized by GEC, Modasa Under AICTE ATAL FPD.

**Prof. Rahul B. Shah** attended training Program on Alternative Fuels during 22/11/2021 to 26/11/2021 organized by GEC, Modasa Under AICTE ATAL FPD.

Prof. Kapil S Bankerattended trainingProgram onAlternative Fuels during 22/11/2021to26/11/2021organized by GEC, Modasa Under AICTE ATAL FPD.

**Prof. Milap Madhikar** attended training Program on Alternative Fuels during 22/11/2021 to 26/112021 organized by GEC, Modasa Under AICTE ATAL FPD.

**Prof. Yogesh M Bhoya** attended training Program on Robotics and Automation during 20/12/2021 to 24/12/2021 organized by GEC, Modasa Under AICTE ATAL FPD.

**Prof. Mital G Patel** attended training Program on Robotics and Automation during 20/12/2021 to 24/12/2021 organized by GEC, Modasa Under AICTE ATAL FPD.

**Prof. Hetal I Chaudhari** attended training Program on Robotics and Automation during 20/12/2021 to 24/12/2021 organized by GEC, Modasa Under AICTE ATAL FPD. **Prof. Rahul B. Shah** attended training Program on Robotics and Automation during 20/12/2021 to 24/12/2021 organized by GEC, Modasa Under AICTE ATAL FPD.

**Prof. Kapil S Banker** attended training Program on Robotics and Automation during 20/12/2021 to 24/12/2021 organized by GEC, Modasa Under AICTE ATAL FPD.

**Prof. Milap Madhikar** attended training Program on Robotics and Automation during 20/12/2021 to 24/12/2021 organized by GEC, Modasa Under AICTE ATAL FPD.

**Prof. H. R Prajapati** attended training Program on Robotics and Automation during 20/12/2021 to 24/12/2021 organized by GEC, Modasa Under AICTE ATAL FPD.

#### **Sciences and Humanities Department**

**Prof K. B. Naik** attended "Induction Phase-1 training" organized by NITTTR, Bhopal during 23/08/2021 to 03/09/2021.

**Prof D. J. Prajapati** attended "Complex Analysis (NPTEL)" organized by organized by IIT, Kharagpur.

#### ACHIEVEMENTS

**Dr. Mahesh Yeolekar** from Sciences and Humanities Department is awarded an Outstanding Mathematics Teacher Award" from the Gujarat University Department of Mathematics Alumni Association (GUDMAA) on 25th December 2021 at Gujarat University.

**Prof. J. C. Gamit** from Mechanical Engineering Department Completed his Ph.D on 14<sup>th</sup> July 2021 from S. V. N. I. T, Surat.

**Prof. V. J. Chauhan** Mechanical Engineering Department Completed his Ph.D on 13<sup>th</sup> November 2021 from IIT Delhi.

**Prof. V. J. Chauhan** Mechanical Engineering Department filed a patent Copper-free eco-friendly friction materials/brake-pads/shoes; Patent ID: No. 202111038295 on 24th August 2021.

**Prof. Kalpesh Vaghela** from Automobile Engineering Department received Award for "person of the Extracurriculur activities" from Imperial Society of Innovative engineers(ISIE) on 27/08/2021.



**Prof. N. N. Maltare, Prof. Safvan A. Vahora, Prof. Viral R. Patel and Prof. Prashant S. Modi** from Computer Engineering and Information Technology Department has Published an Indian Patent on "Drunk Driver Alert System (Ddas) Using lot, Image Processing And Machine Learning to Protect From Accident". Patent Application no. 202121034134. The Patent Office Journal No. 34/2021.

Ministry of Commerce & Ir Government of India	Application Details	PROPERTY INDIA International control waves accounted a control of waves
APPLICATION NUMBER	202121034134	
APPLICATION TYPE	ORDINARY APPLICATION	
DATE OF FILING	29/07/2021	
APPLICANT NAME	Prof. Nilesh Maltare     Dr. Safvan A. Vahora     J. Prof. Viral R. Patel     Prof. Prashant S. Modi     S. Dr. Sachin Patel     Prof. Virendra Singh	
TITLE OF INVENTION	DRUNK DRIVER ALERT SYSTEM (DDAS) USING IOT, IMAGE PROCESSI LEARNING TO PROTECT FROM ACCIDENT	NG AND MACHINE
FIELD OF INVENTION	BIOTECHNOLOGY	
E-MAIL (As Per Record)	vsasawat@gmail.com	
ADDITIONAL-EMAIL (As Per Record)	vsasawat@yahoo.co.in	
E-MAIL (UPDATED Online)		
PRIORITY DATE		
REQUEST FOR EXAMINATION DATE		
PUBLICATION DATE (U/S 11A)	20/08/2021	

**Malek Md. Sahil** from Electrical Engineering Department is qualified in event Hash Code 2021 by Google on 05/05/2021 organized by Google.



Anish Patel from Electrical Engineering Department has secured 2nd position in event Hand Bill on Energy Conservation on 24/07/2021 organized by Technical Events cell, Parul University.

<b>Parul</b> <sup>®</sup> University	
ELECTRICAL ENGINEERING DEP FACULTY OF ENGINEERING AND TECHN	
Certificate of N	Nerit
This is to certify that ANISH PATEL	
fromGOVERNMENT ENGINEERING COLLEGE MODASA	participated and
secured 2ND position in Handbill on Energy Conservation organized by E	Electrical Engineering Department, Faculty o
Engineering and Technology (Parul Institute of Engineering and Technology-	Diploma Studies) in association with Technica
Events Cell, Parul University on July 24, 2021 at Parul University, Vadodara.	
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Historica Mr. Parrier Vasculai Lecture: Certifical Department TCC contribution - Deriver the CC contribution - Deriver the Contract	Comparison Studia Manager Recipical Genera Advisor Medical Genera

**Paresh VINZAVA** from Electrical Engineering Department has completed 20 Hours Course on "AWS Acedamy Graduate".



**Bina Patolia (190160116105)** from Information Technology Department has Participated in Inter University Yoga Competition at Bhuvneshwar on 28/12/2021 sponsored by GTU.



**CHETAN GUNAVANTBHAI KALSARIYA (150160102051)** from Automobile department successfully cracked ARTO Class-III written exam.

### OUTREACH

#### FACULTY OUTREACH

#### Applied Mechanics & Civil Engineering Department

**Dr. B. J. Shah delivered Expert Lecture** on "Bridge Design & Construction for Infrastructure Development" in ATAL FDP conducted by GEC Dahod on 30/08/2021

**Dr. B. J. Shah delivered Expert Lecture** on "Analysis and Design of Reinforced and Prestressed Concrete Bridges" in ATAL FDP conducted by Marwadi University, Rajkot on 23/11/2021

**Dr. B. R. Shah delivered Expert Lecture** in 5-Days (One Week) ATAL Sponsored Online Faculty Development Programme (FDP) on "Advances in Waste Treatment Technologies" was conducted from 23rd-27th AUGUST, 2021 in which around 75 participants from different parts of the country participated.

**Dr. U. K. Khare delivered Expert Lecture** in 5-Days (One Week) ATAL Sponsored Online Faculty Development Programme (FDP) on "Advances in Waste Treatment Technologies" was conducted from 23rd-27th AUGUST, 2021 in which around 75 participants from different parts of the country participated.

**Dr. S. S. Singh delivered Expert Lecture** in 5-Days (One Week) ATAL Sponsored Online Faculty Development Programme (FDP) on "Advances in Waste Treatment Technologies" was conducted from 23rd-27th AUGUST, 2021 in which around 75 participants from different parts of the country participated.

#### **Computer Engineering & Information Technology Department**

**Prof. S A Vahora delivered an Expert session** on "Recurrent neural network and Applications" organised by Centre of Excellence - Machine Learning and Data Science at A. D. Patel Institute of Technology, New V. V. Nagar On 06/08/2021.

Prof. S A Vahora delivered an Expert session on
"Transfer Learning and Auto Encoders" organised by at
G. H. Patel College of Engineering and Technology,
Vallabh Vidyanagar, Gujarat, India On 17/12/2021.

**Prof. M M Goyani delivered an Expert Talk** on "Supervised and Unsupervised Machine Learning" in One Week ATAL FDP on "Machine Learning Concepts using Python" at Government Polytechnic, Gandhingar on 06/07/2021.

**Prof. M M Goyani delivered Expert Talk** on "Introduction to Machine Learning" in One Day Expert Talk at S N Patel Institute of Technology, Bardoli on 07/07/2021.

**Prof. M M Goyani delivered Expert Talk** on "MATLAB and Its Applications in Image Segmentation" in One Day at Parul Institute of Computer Applications, Vadodara on 17/08/2021.

**Prof. N N Maltare delivered a Webinar** on "Making transition from IPv4 to IPV6" on 08/10/2021.

#### **Sciences and Humanities Department**

**Dr. Mahesh Yeolekar delivered an expert talk** on "Beauty of Mathematics" at the "Celebration of National Mathematics Day" at Ganpat University, Mehsana on 23/12/2021

**Dr. Mahesh Yeolekar organized** an introductory webinar on "Toys & Games Club" on 7/8/2021 through Microsoft team's online mode about 150 students attended the event.

### FORTHCOMING EVENTS

Department of Computer Engineering & Information Technology, Government Engineering College, Modasa has Scheduled an **Alumni Meet'22** on 02, January to gather former students at the institute.



# **ALUMNI MEET '22**



DEPARTMENT OF COMPUTER ENGINEERING & INFORMATION TECHNOLOGY

TnG (Toys & Games) Club, Government Engineering College, Modasa scheduled **College Level ToyFest-2022** On 20th March 2022.



SSIP Cell, GEC Modasa, planned Awareness program inline with DTE, in order to introduce students, Faculty Mentors regarding **SSIP 2.0. on 13th January, 2022.** 

Education Department, Government of Gujarat. Hon. Principal Secretary, Education Department, Government of Gujarat will address virtually and give the information regarding the SSIP 2.0 policy to the stake holders.



Department of Civil Engineering Technology (Faculty Coordinator: Prof. A J Patel), Government Engineering College, Modasa has scheduled **Model Making event for civil engineering student to resist horizontal force** on 19<sup>th</sup> March 2022.

#### SALIENT FEATURES OF NEW EDUCATION POLICY 2020

#### THE VISION OF THIS POLICY:

- An education system rooted in Indian ethos that contributes directly to transforming India, that is Bharat, sustainably into an equitable and vibrant knowledge society, by providing high-quality education to all, and thereby making India a global knowledge superpower.
- The curriculum and pedagogy of our institutions must develop a deep sense of respect towards the fundamental duties and Constitutional values, bonding with one's country, and a conscious awareness of one's roles and responsibilities in a changing world.
- To instill a deep-rooted pride in being Indian, not only in thought, but also in spirit, intellect, and deeds, as well as to develop knowledge, skills, values, and dispositions that support responsible commitment to human rights, sustainable development and living, and global well-being, thereby reflecting a truly global citizen.

#### THE FUNDAMENTAL PRINCIPLES OF THE POLICY:

- Recognizing, identifying, and fostering the unique capabilities of each student, by sensitizing teachers as well as parents to promote each student's holistic development in both academic and non-academic spheres.
- According the highest priority to achieving Foundational Literacy and Numeracy by all students by Grade 3.
- Flexibility, so that learners have the ability to choose their learning trajectories and programmes, and thereby choose their own paths in life according to their talents and interests;
- No hard separations between arts and sciences, between curricular and extra-curricular activities, between vocational and academic streams, etc. in order to eliminate harmful hierarchies among, and silos between different areas of learning.
- Multidisciplinary and a holistic education across the sciences, social sciences, arts, humanities, and sports for a multidisciplinary world in order to ensure the unity and integrity of all knowledge;
- Emphasis on conceptual understanding rather than rote learning and learning-for-exams.;
- Creativity and critical thinking to encourage logical decision-making and innovation;
- Ethics and human & Constitutional values like empathy, respect for others, cleanliness, courtesy, democratic spirit, spirit of service, respect for public property, scientific temper, liberty, responsibility, pluralism, equality, and justice;
- Promoting multilingualism and the power of language in teaching and learning;
- Life skills such as communication, cooperation, teamwork, and resilience;
- Focus on regular formative assessment for learning rather than the summative assessment that encourages today's 'coaching culture';
- Extensive use of technology in teaching and learning, removing language barriers, increasing access for Divyang students, and educational planning and management;

- Respect for diversity and respect for the local context in all curriculum, pedagogy, and policy, always keeping in mind that education is a concurrent subject;
- Full equity and inclusion as the cornerstone of all educational decisions to ensure that all students are able to thrive in the education system;
- Synergy in curriculum across all levels of education from early childhood care and education to school education to higher education;
- Teachers and faculty as the heart of the learning process their recruitment, continuous professional development, positive working environments and service conditions;
- a 'light but tight' regulatory framework to ensure integrity, transparency, and resource efficiency of the educational system through audit and public disclosure while encouraging innovation and out-of-the-box ideas through autonomy, good governance, and empowerment;
- outstanding research as a corequisite for outstanding education and development;
- continuous review of progress based on sustained research and regular assessment by educational experts;
- A rootedness and pride in India, and its rich, diverse, ancient and modern culture and knowledge systems and traditions.
- Education is a public service; access to quality education must be considered a basic right of every child;
- Substantial investment in a strong, vibrant public education system as well as the encouragement and facilitation of true philanthropic private and community participation.

# QUALITY UNIVERSITIES AND COLLEGES: A NEW AND FORWARD-LOOKING VISION FOR INDIA'S HIGHER EDUCATION SYSTEM

- Quality higher education must aim to develop good, thoughtful, well-rounded, and creative individuals.
- It must enable an individual to study one or more specialized areas of interest at a deep level, and also develop character, ethical and Constitutional values, intellectual curiosity, scientific temper, creativity, spirit of service, and 21st century capabilities across a range of disciplines including sciences, social sciences, arts, humanities, languages, as well as professional, technical, and vocational subjects.
- A quality higher education must enable personal accomplishment and enlightenment, constructive public engagement, and productive contribution to the society.
- It must prepare students for more meaningful and satisfying lives and work roles and enable economic independence.
- Some of the major problems currently faced by the higher education system in India include:
  - A severely fragmented higher educational ecosystem;
  - Less emphasis on the development of cognitive skills and learning outcomes;
  - A rigid separation of disciplines, with early specialisation and streaming of students into narrow areas of study;
  - Limited access particularly in socio-economically disadvantaged areas, with few HEIs that teach in local languages
  - Limited teacher and institutional autonomy;
  - Inadequate mechanisms for merit-based career management and progression of faculty and institutional leaders;

- Lesser emphasis on research at most universities and colleges, and lack of competitive peer-reviewed research funding across disciplines;
- Suboptimal governance and leadership of HEIs;
- An ineffective regulatory system; and
- Large affiliating universities resulting in low standards of undergraduate education.

This policy envisions the following key changes to the current system:

- Moving towards multidisciplinary universities and colleges, with more HEIs across India that offer medium of instruction in local/Indian languages;
- Moving towards a more multidisciplinary undergraduate education;
- Moving towards faculty and institutional autonomy;
- Revamping curriculum, pedagogy, assessment, and student support
- Reaffirming the integrity of faculty and institutional leadership positions
- Establishment of a National Research Foundation
- Governance of HEIs by independent boards having academic and administrative autonomy;
- "Light but tight" regulation by a single regulator for higher education;
- Increased access, equity, and inclusion.

Source : https://www.ugc.ac.in/pdfnews/5294663\_Salient-Featuresofnep-Eng-merged.pdf

#### By Prof. V. J. Upadhyay, Prof & Head, Electrical Department, GEC-Modasa

#### ENGINEERING NETWORK STREAK

**Rocket Boys :** One of the best series of 2022 available on Soney liv app, The story of two extraordinary men Vikram Ambalal Sarabhai and Homi Bhabha who created the history while building the India's future. The series showcase the real hero of India and the encourage the young mind towards the right path. They were the true nation builder of this country. Best part about the storyline is they tried to connect the puzzle the best way possible it starts with a rivalry between Homi Bhabha and Vikram Sarabhai including the characters like CV Raman, JRD Tata and APJ Abdul Kalam. Even though it looks like a rivalry but in this series you will see how both of them tried to build a strong foundation for India in either building space rockets or be it building Atom bombs.

**Cubicles:** All the series of viral fever are youth concentrate and narrate the problems of different young people. Cubicles having two-part part one is available on YouTube while part two available on Sony liv as well as TVF play. The story of Piyush Prajapati, a 22-year-old, fresh out of college and recruited like most of his batch-mates into an Indian IT company. From the time he gets his first salary, working weekends, work-life balance, a little bit of heart to all kinds of highs and lows, the show follows many firsts and chronicles the life of Piyush, a typical Indian first jobber and the people around him. People who worked in office cubicles, those will be able to engage from start to end.

**Campus Diaries :** Campus Diaries is a coming-of-age drama of six students at Engineering College. The series remained your college days and narrate many problems of engineer in proper ways. Many positive things student can get by this type of series. If any engineer student watches this story than he can release that the engineer is not common man. The series tell that to become an engineer is not an easy task.

**TVF Aspirants :** It is the story of three UPSC aspirant's journey and most importantly - their friendship besides all odds! The story of aspirants was engaging and encourage the young mind to do hard work for great position.

**TVF Pitchers:** It follows four friends, Naveen, Jitu, Yogi and Mandal, who quit their jobs in order to develop their own start-up company. To achieve success one should do hard work. Face the challenges. Don't give up. Pitchers is not about Achievements. It's about friendship ,love ,Family , growths.

**Shark Tank:** Shark means - it's not about just giving money but also helping the businesses grow through their network, other companies and connections which are really really felt that these sharks can't bring in Shark Tank India is an Indian business reality television series that airs on SET India. The show is the Indian franchise of the American show Shark Tank. It shows entrepreneurs making business presentations to a panel of investors or sharks, who decide whether to invest in their company. Shark Tank will connect to each one of you regardless of your age. Hugely informative and enjoyable

**HOSTEL DAZE:** Through the adventures of four friends 'Hostel Daze' captures what goes inside an engineering hostel in India. After the fun of watching 3 idiots, Chhichhore and happy days (Telugu film) – Amazon prime releases another TV series of the same category. This hostel life TV series shows how hostel life gives you various experiences in positive and negative way. Hostel Daze transports to one of the most elite engineering colleges in the country,

#### By Prof. Darshan U. Thakar, Asst. Prof. Electrical Department,, GEC-Modasa

### **CREATIVE CORNER**

शाख से शाख, और कलियों से कलिया लिपट जाती है, मौसम-ए -बहार मे डालियो से डालिया लिपट जाती है

एक सुकून सा महसूस होता है बाप के सीने में तब, माईके आ के, मुस्कुरा कर माँ से बेटिया लिपट जाती है

एक सी इज़्ज़त, एक सा ओह्दा बक्शा है गज़ल ने हर जुबाँ को, हिन्दी-उर्दु यूँ मीले जैसे नदीयो से नदीया लिपट जाती है

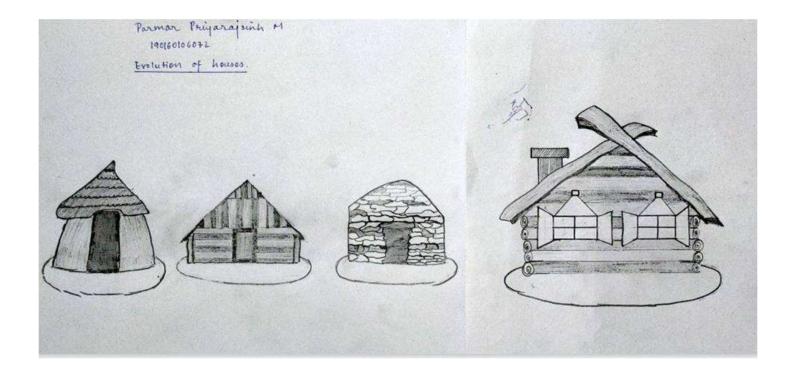
गाँव में कदम रखता हु तो यो घीर लेती है बचपन की यादे, ससुराल से लौटती दुल्हन को जैसे सहेलियाँ लिपट जाती है

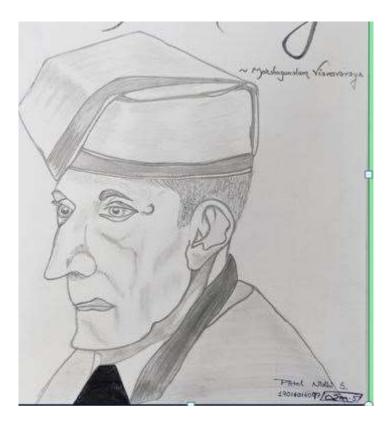
सच्चाई की थोड़ी कड़वाहट जुबा पे रखना मेरे दोस्त, मीठा ज्यादा हो जहा, गंदी मक्खियां लिपट जाती है

तन्हाई के गम से एक ही रात में बूढ़े हो जाते है माँ बाप, औलाद से बिछड़ते ही चेहरे पे जुरिया लिपट जाती है

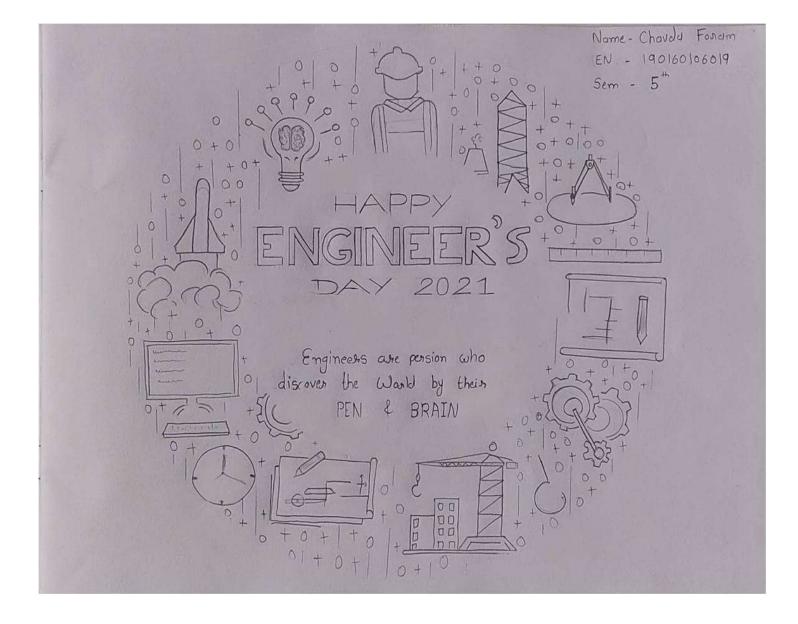
- Dr. Mahesh Goyani

### CREATIVE CORNER





### CREATIVE CORNER



# **GECM E-News**

Newsletter | July – December 2021

Government Engineering College, Modasa.

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