



NEWSLETTER

***ELECTRONICS AND COMMUNICATION
ENGINEERING DEPARTMENT***

January to
une 2022

ISSUE V

MESSAGE FROM HOD

Greetings from Electronics & Communication Engineering Department - GEC, Gandhinagar!! We are back again with a new altitude and attitude while presenting the newsletter of the E & C Department (Jan-June 2022) from the desk of the Head of Department-E&C. As per the Vision & Mission statements of this department, we are imparting quality education in the field of E&C Engineering and allied areas through various means of teaching-learning process i.e. Use of ICT in almost all semester classes, Use of E-Classroom provided by Microsoft Teams, Use of Virtual Laboratory (Supported By IITs) and so on. The faculties of E&C dept. committed to their role of being a teacher-cum-mentor-cum-facilitator during this tough time and with the continuing wholehearted support from the students and alumni of E&C department, we will keep achieving the greater heights at our best. This Newsletter encapsulates all such moments to share with with all my beloved stakeholders of E&C Department. Keep that spirit of Teaching-Learning alive!



Tejas B. Sheth
HOD EC

VISION OF INSTITUTE

To be a premier engineering institution, imparting quality education for innovative solutions relevant to society and environment.

MISSION OF INSTITUTE

- To develop human potential to its fullest extent so that intellectual and innovative engineers can emerge in a wide range of professions.
- To advance knowledge and educate students in engineering and other areas of scholarship that will best serve the nation and the world in future.
- To produce quality engineers, entrepreneurs and leaders to meet the present and future needs of society as well as environment.



VISION OF THE E&C DEPARTMENT

- To produce globally competitive and resourceful EC Engineers to bring out research, innovation and teamwork for development in various fields of Electronics and Communication Engineering.

MISSION OF THE E&C DEPARTMENT

- To impart quality education in the fields of Electronics and Communication Engineering through effective teaching-learning processes, well equipped laboratory facilities and collaborative ventures with industries.
- To provide the students of E&C engineering an environment of an academic freedom that will ensure the exchange of ideas and the dissemination of knowledge in this discipline.
- To provide the platform for students to perform the project work related to needs of society.

PROGRAM EDUCATIONAL OBJECTIVES (PEO)

- To prepare graduates to excel in postgraduate programmes or pursue higher studies or to succeed in industry / technical profession through global, rigorous education.
- To train graduates with good scientific and engineering breadth so as to comprehend, analyze, design, and create novel products and solutions for the real life problems.
- To inculcate in graduates professional and ethical attitude, effective communication skills, teamwork skills, multidisciplinary approach, and an ability to relate engineering issues to broader social context.

PROGRAM SPECIFIC OUTCOMES (PSO)

PSO-I: The ability to implement and apply knowledge of Electronics and Communication Engineering subjects in the analysis, design and development of various types of electronic and communication systems.

PSO-II: Demonstrate soft skills, aptitude and technical skills & knowledge to work in the industry and Research and Development organization.

FACILITIES AT E&C DEPT.

Industrial Automation Lab

This Lab is Used for the Subjects like Industrial Automation, Robotics and Automation, Biomedical Electronics, MEMS and Automotive Electronics.



Wireless Communication Lab

Computer Centre is fully configured with high performance computing facility (Intel i5, 4GB RAM). This lab is having facility like Wireless Communication Trainer boards.



Digital Electronics Lab

laboratory is fully equipped with basic electronics instruments like Digital Electronics Trainer Kits, Electronic Workbench, Digital Storage Oscilloscope, Cathode Ray Oscilloscope, Dual Regulated Power Supply, Function Generator.



Circuits and Networks Lab

EC Department is equipped with state-of-the-art machines as per university guidelines. Students can get their hands on these lab equipment and improve their skills & practical knowledge.



Analog and Digital Communication Lab

Laboratory is fully equipped with instruments like Analog Communication Trainer Kits, Digital Communication Trainer Kits, Digital Storage Oscilloscope, Cathode Ray Oscilloscope, Dual Regulated Power Supply, Function Generator



Analog Electronics Lab

laboratory is fully equipped with basic electronics instruments like Analog Electronics Trainer Kits, Analog Discovery Kit, Digital Storage Oscilloscope, Cathode Ray Oscilloscope, Dual Regulated Power Supply, Arbitrary Generator



FACULTIES IN E&C DEPT.



Prof. Tejas B. Sheth

Head OF The Department

Qualification: ME

Experience: 18 Years



Prof. Jignesh K. Bhavsar

Assistant Professor

Qualification: ME

Experience: 12 Years



Dr. Avani A. Vithalani

Assistant Professor

Qualification: PhD

Experience: 13 Years



Prof. Suhas H. Patel

Assistant Professor

Qualification: ME

Experience: 13 Years



Prof. Kalpesh K Patel

Assistant Professor

Qualification: ME

Experience: 12 Years



Prof. Devendra H. Patel

Assistant Professor

Qualification: ME

Experience: 12 Years



Prof. Nileshkumar M. Bankar

Assistant Professor

Qualification: ME

Experience: 10 Years



Dr. Shahid S. Modasiya

Assistant Professor

Qualification: PhD

Experience: 13 Years



Prof. Sandip J. Dawda

Assistant Professor

Qualification: ME

Experience: 14 Years



Prof. Nisha K. Prajapati

Assistant Professor

Qualification: ME

Experience: 11 Years



Prof. Ujjval R. Dave

Assistant Professor

Qualification: ME

Experience: 12 Years



Prof. Sandeep J. Rajput

Assistant Professor

Qualification: ME

Experience: 12 Years



Prof. Hina K. Patel

Assistant Professor

Qualification: ME

Experience: 14 Years



Prof. Neetirajsinh Chhasatia

Assistant Professor

Qualification: ME

Experience: 8 Years



Dr. Purvi Koringa

Assistant Professor

Qualification: PhD

Experience: 8 Years



Prof. Rajat Pandey

Assistant Professor

Qualification: ME

Experience: 7 Years



Prof. Ravi Butani

Assistant Professor

Qualification: ME

Experience: 10 Years



Prof. Nisarg Bhatt

Assistant Professor

Qualification: ME

Experience: 8 Years



Prof. Nehal Shyal

Assistant Professor

Qualification: ME

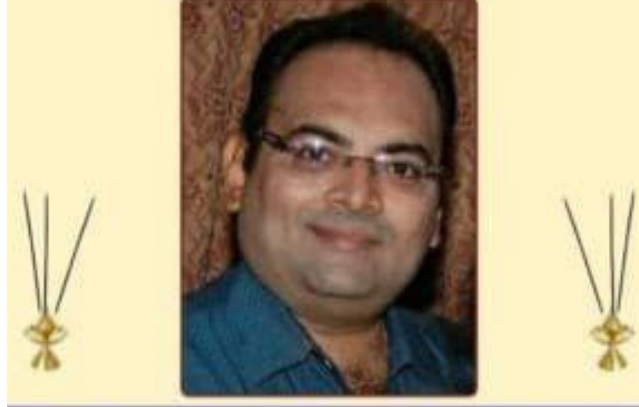
Experience: 8 Years



Shri B. K. Parmar

Instructor

In Memory of Late Prof.(Dr.) Bhavin Shedani...



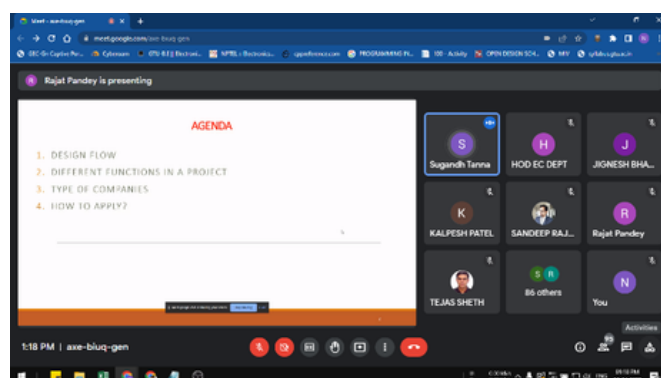
It was misfortune for the whole Electronics & Communication fraternity on the day (Dt.08/06/2022) we have lost our Head of the Department, **Prof.(Dr.) Bhavin Shedani**. Prof.(Dr.) Bhavin Shedani will be greatly missed but his warmth, kindness, and gentle spirit will be remembered forever. On behalf of E&C Department, GEC-Gandhinagar, we express deepest condolences and pray to the God for giving enough strength to his family in this difficult time.

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DEPARTMENT ACTIVITIES

• E&C ONLINE ALUMNI MEET-2022

The Electronics & Communication Engineering Department had organized an Online Alumni Meet- 2022” for all batches on Dt.26/04/2022 through Google meet platform. In total, 177 nos. stakeholders have participated in this online alumni meet. Our alumni and faculty members have participated in this Online Meet by delivering the expert talk and sharing their memories with the department, most of them volunteered to render services for the benefit of the current students of Electronics & Communication Engineering Department, Government Engineering College, sector-28, Gandhinagar.



• TECH TALKS @ EC DEPT.

During the Online Alumni Meet-2021, department has arranged a technical talk from alumnus towards the larger benefits of stakeholders of E&C department.

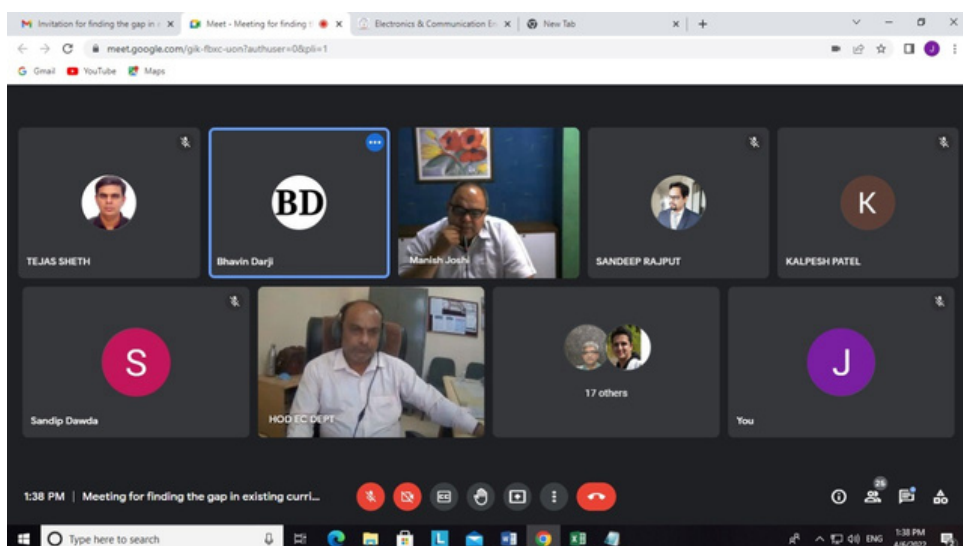
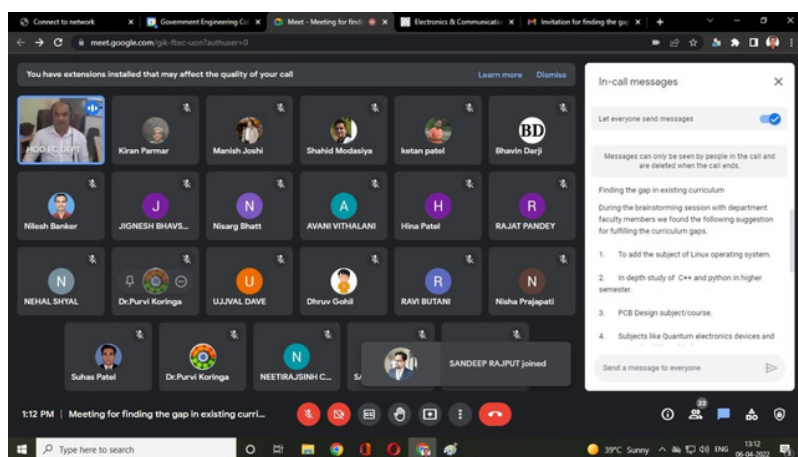
Sr. No.	Topic of the talk	Expert Details	Date & Mode of Conduction
1	Analog and Digital VLSI	Mr. <u>Sugandh Tanna</u> Sr. Software Analog IC Engineer, Texas Instruments, Bangalore	26/04/2022 – Online
2	Opportunities in VLSI	Mr. <u>Nilay Mehta</u> Lead Engineer, Eteros Technologies, Bangalore	26/04/2022 – Online

• E&C CURRICULUM GAP FINDING MEET- 2022

Towards finding the gaps in existing curriculum of Electronics & Communication Engineering, the E&C Department had organized a meet with all the stakeholders to invite the suggestions/feedback for revision of the new curriculum of the BE(EC) program. The meet was conducted online on Dt. 04/06/2022 and many stakeholders have participated in this event.

During the brainstorming session with stakeholders of E&C Dept., we found the following suggestion for fulfilling the curriculum gaps:

1. To add the subject of Linux operating system.
2. In depth study of C++ and python in higher semester.
3. PCB Design subject/course.
4. Subjects like Quantum electronics devices and computing should be added.
5. IoT, Network & Cyber Security and Wireless Sensor Network can be added as Subjects.
6. In Microwave engineering, designing of different active and passive components.
7. Radio Frequency(RF) circuit design related elective subjects can be added.



• PEDAGOGY SESSIONS FOR NBA- AWARENESS AND IMPLEMENTATION STRATEGIES @ EC DEPT

The department has arranged various Pedagogy Sessions for NBA- Awareness and Implementation strategies – Criterion-4 to 7 towards preparing the NBA Self-Assessment Report(SAR) of department under the mentorship of Prof.(Dr.) Kishor G. Maradia.



• INTERNSHIP PROJECT PRESENTATION FAIR:

The Electronics & Communication Engineering Department had organized "Internship Project Presentation Fair" to showcase the Internship work done by the Final Year EC Students amongst all the stakeholders on Dt. 18/04/2022 at E&C Dept., GEC, Gandhinagar.

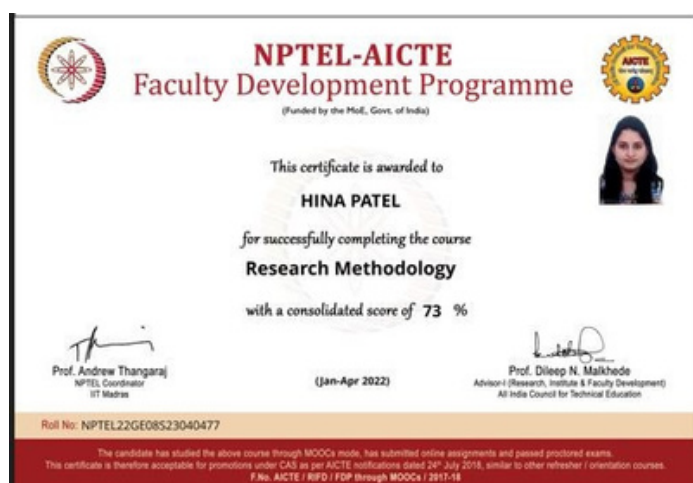


E&C FACULTY ACTIVITIES

• E&C FACULTY –TRAINING/MOOC COURSES:

1. *Prof.(Dr.) Avani A. Vithlani* has participated in the NPTEL Online Certificate Course on "Psychology of Stress, Health and Well-being" during Jan-April 2022 and secured 100% Score.
2. *Prof. Sandeep J. Rajput* has participated in the NPTEL Online Certificate Course on "Psychology of Stress, Health and Well-being" during Jan-April 2022 and secured 91% Score.
3. *Prof. Nisha K. Prajapati* has participated in the NPTEL Online Certificate Course on "Deep Learning" during Jan-April 2022 and secured 68% Score.
4. *Prof. Nisha K. Prajapati* has participated in the NPTEL Online Certificate Course on "Medical Image Analysis" during Feb-March 2022 and secured 68% Score.
5. *Prof. Hina Patel* has participated in the NPTEL Online Certificate Course on "Research Methodology" during Jan-April 2022 and secured 73% Score.
6. *Prof. Nileshkumar M. Bankar* has participated in the NPTEL Online Certificate Course on "Evolution of Air Interface Towards 5G " during Jan-April 2022 and secured 51% Score.
7. *Prof. Nisha K. Prajapati* has participated in an Online training on " Trends in Industrial Automation: Refreshing past and Focusing Future" during 13-24th June 2022 organized by IC Dept., GEC, Gandhinagar.
8. *Prof. Suhas H. Patel* has participated in an Online training on " Trends in Industrial Automation: Refreshing past and Focusing Future" during 13-24th June 2022 organized by IC Dept., GEC, Gandhinagar.





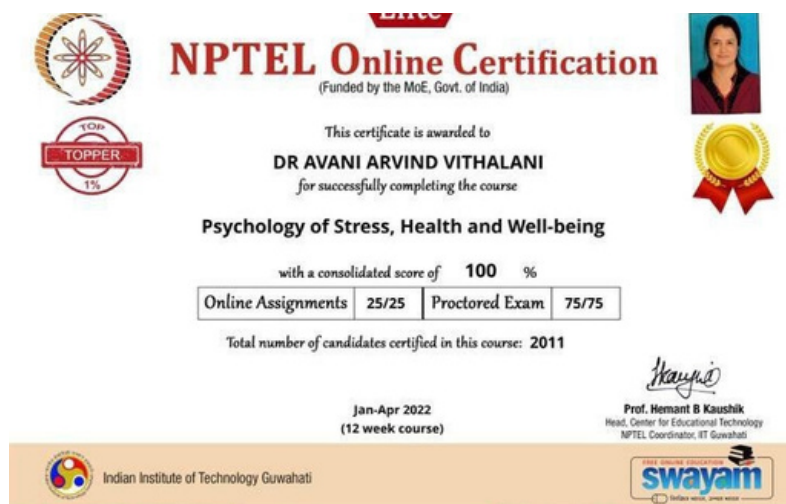
• E&C FACULTY –EXPERT LECTURES DELIVERED:

1. Prof. (Dr.) Avani A. Vithalani has delivered an expert talk "Data Communication Networks" at GUJCOST sponsored two-week Short Term Training Programme during June 13th to 24th, 2022.
2. Prof. Ravi Butani has delivered an expert talk "Embedded Systems for Drone Applications" at GUJCOST sponsored two-week Short Term Training Programme during June 13th to 24th, 2022.



• E&C NOTEWORTHY ACHIVEMENTS BY FACULTY MEMBERS

Prof.(Dr.) Avani A. Vithlani has participated in the NPTEL Online Certificate Course on "Psychology of Stress, Health and Well-being" during Jan-April 2022 and secured 100% Score – Topper (Elite Certificate)



• E&C PAPER PUBLICATION DETAILS

Ø *Prof. N. K. Prajapati* published research paper on “A Systematic Literature review on Automatic Recognition and Classification of Coronary Atherosclerosis” in 4th International Conference on Communication and Computational Technologies, 26-27 February ,2022.

Ø *Prof. R. G. Pandey* published research paper on “3x3 Split-Ring Resonators Array-Inspired Defected Ground Plane Antenna for 2.4/5.5 Ghz Wireless LAN Applications” in Proceeding of Internation Conference on Communication and Artifical Intelligence.

Ø *Prof. R. G. Pandey* published research paper on “Dual Band compact spli-ring resonator-shaped fractal antenna with defected ground plane for sub-6-Ghz 5Gand global system for mobile communication applications” in International Journal of Communication Systems, 10/5/2022, Volume-35, Issue-7.

Ø *Prof. R. G. Pandey* published research paper on “Left Handed Material Inspired Multi-Layer Planar Antenaa Design for Satellite Communication Applications” in Progress in Electromagnetics Reseach M, 1/2/2022, Volume-108.

Ø *Prof. R. G. Pandey* published research paper on “Design and Analysis of Modified split ring resonator structured Antenaa for WCDMA and WiMAX applications” in Proceedings of the International e-Conference on Intelligent Systems and Signal Processing.

E&C PLACEMENT CELL (2021-22)

The Training and Placement cell continuously explores different areas of opportunities for placement. The Department's T&P team maintains liaison with industries for various training programs for students as per the need of industries as well as for final placement of students. Due to strong liaisoning with industries, our students are placed at many well-known companies. During the academic year 2021-22, there are in total 27 students got placement in various industries through on campus placement drive.

Some of the major recruiters are:

- Simform
- RadixWeb
- TCS
- Phonon Communication
- Softnautics
- Pronesis Technologies
- Engibrain Technologies
- Argusoft
- Infer India Technologies
- La Net Technologies
- ToTheNew
- Broadwave Tech Solutions
- Exposys Data Labs
- Meditab



E&C STUDENT'S ACHIVEMENTS

- Students Related Activities:

Gohil Dhruv Alpeshbhai (Enroll No. 200130111102) has successfully participated in workshop on “Roboton” organized by IEEE



Shubham Thaker (Enroll No. 180130111108) has secured 95.16% in Programming and cognitive aptitude test conducted by TCS-NQT in April-2022

TCS NQT Scorecard
Name: Shubham Thaker
NQT ID: NQT21121203908
Date of Exam: Apr 2022

	Numerical Ability	Verbal Ability	Reasoning Ability	Total Marks	Total Percentage (%)
Marks Obtained	539.56	595.70	577.58	1712.84	95.16
Maximum Marks	600	600	600	1800	

The raw scores have been normalized and changed to scaled score.

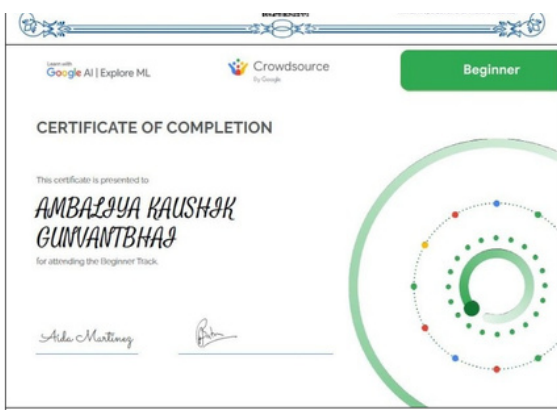
Click HERE for exciting job opportunities, update your digital profile in TCS ION Job Listing Platform.

27th Apr 2022

Gohil Dhruv Alpeshbhai (Enroll No. 200130111102) has successfully participated in IP awareness/training program organized by NIPAM.



Ambaliya Kaushik has completed the beginning course of Machine Learning with google



Reshmi Paul (Enroll No. 2001301111010) has successfully completed Bootcamp Course on “C/C++ for competitive Programming (CP)” under Club ide of Gec Gandhinagar.



E&C STUDENT'S ACHIVEMENTS

Shubham Gupta (Enroll No. 190130111055) has successfully completed Stanford Online MOOC Course on “Supervised Machine Learning: Regression and Classification” on Coursera platform.



Stuti Alpeshkumar Patel (Enroll No. 200130111044) has successfully completed Course on “Internet of Things (IoT)” organized by IIT Tirupati.



• E&C NOTEWORTHY ACHIEVEMENT EVENTS & PHOTOGRAPHS



Four Students of EC Department, GEC Gandhinagar, Jayesh Upadhyay (190130111012), Ravi Kola (190130111069), Rishi Mehta (200130111017), Jesal Shah (200130111085) have successfully participated in DD Robocon-2022 held on 16-17 July-22 organized by IIT-Delhi in collaboration with Prasar Bharti and received "Visvesvaraya Design Award" association with GTU Robotics Club (GRC).

E&C EXTRA CURRICULAR ACTIVITIES

- 24 students of EC department attended “*Global Ayush Investment and Innovation Summit-2022*” at Mahatma Mandir, Gandhinagar on 20/04/2022.



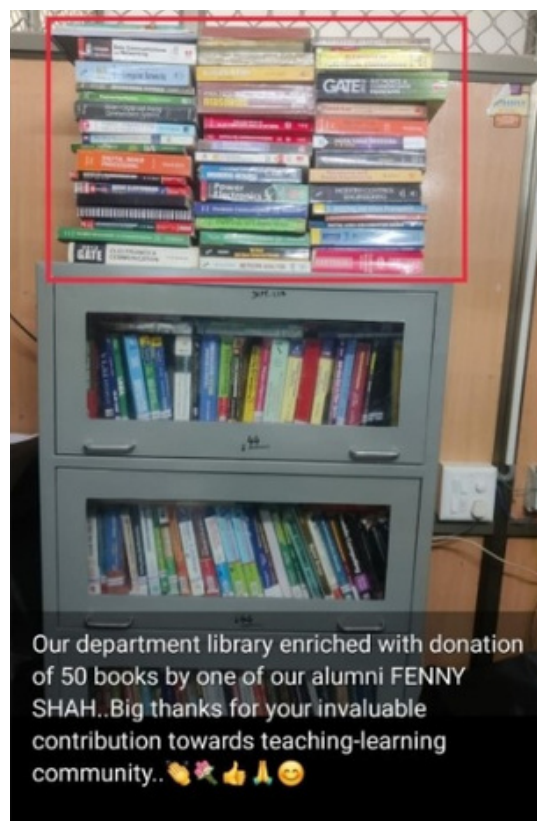
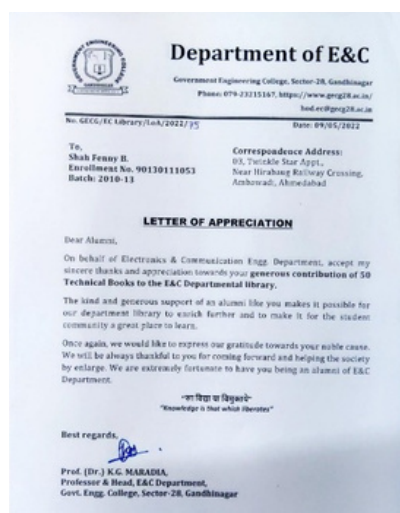
20 students and 02 Professors of EC department attended Startup Exhibition at Science City, Ahmedabad on Dt.23/02/2022 under the theme “Building a Climate Resilient Gujarat” Education Department and Science and Technology Department, Government of Gujarat



E&C SOCIETAL ACTIVITIES

Two of our alumni have done generous contribution by donating in total 75 Technical books to the E&C Departmental library.

On behalf of E&C department, we sincerely appreciate the efforts and thanks to our alumni for enriching the department library and helping the society by enlarge.



CREATIVE CORNER



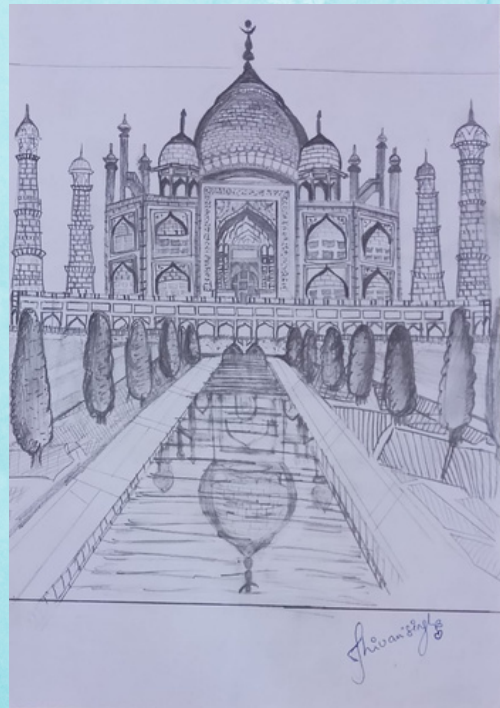
Pankti Chauhan
Enroll.No.:-190130111036



Dhrumi M. Chaudhari
Enroll. No.:- 200130111029



Kesar Bavda
Enroll.No.:- 200130111003



Shivani Singh
Enroll.No.:-200130111018



CREATIVE CORNER



Komal Panchal
Enroll. No.: -200130111002

નથી જાણતો કે...

નથી જાણતો કે કાલે શું થવાનું છે, એટલે જ
જે છે એ આજે જ માણવાનું છે..

નથી સમજતો કે કોણે ક્યારે જવાનું છે, એટલે જ
જ્યાં છીએ એને મન ભરીને જીવવાનું છે..

નથી વિચારતો કે પછી ક્યાં વિચરવાનું છે, એટલે
જ
જેટલું બને એટલું મુક્ત બની વિહરવાનું છે..

નથી ભૂલતો કે પછી કેટકેટલુંય ભૂલવાનું છે,
એટલે જ
જેટલાં સંબંધો છે એને સમજીને સમજવાના છે..

અને અંતે..

જાણું છું એટલું જ કે અંતે બધુંય ત્યજવાનું છે,
એટલે જ
આ ક્ષણભંગુર જીવનને ક્ષણે ક્ષણે માણવાનું
છે..

અમારાં ઈ. સી. ખાતાનાં વડા પ્રો.(ડૉ.)શ્રી,
ભાવિન શેઠાણી સાહેબની વસમી વિદાય
અત્યંત દુઃખદાયી છે, ઈશ્વર એમનાં દિવંગત
આત્માને ચીરશાન્તિ અર્પે એવી પ્રાર્થના સહ,

પ્રો. નિલેશ એમ. બેંકર
ઈ. સી. વિભાગ
તા. ૦૮/૦૬/૨૦૨૨



Khushi Gajjar
Enroll.No:-
190130111046



Priyangi Sisodiya
Enroll.No.: -200130111020

છોડી દેવાની હતી...

"વાત" છોડી દેવાની હતી ને "હાથ" પકડી
રાખવાનો હતો,
પણ તેણે "હાથ" છોડી દીધો ને "વાત" પકડી
રાખી,,,

"જાત" છોડી દેવાની હતી ને "સાથ" પકડી
રાખવાનો હતો,
પણ તેણે "સાથ" છોડી દીધો ને "જાત" પકડી
રાખી,,,

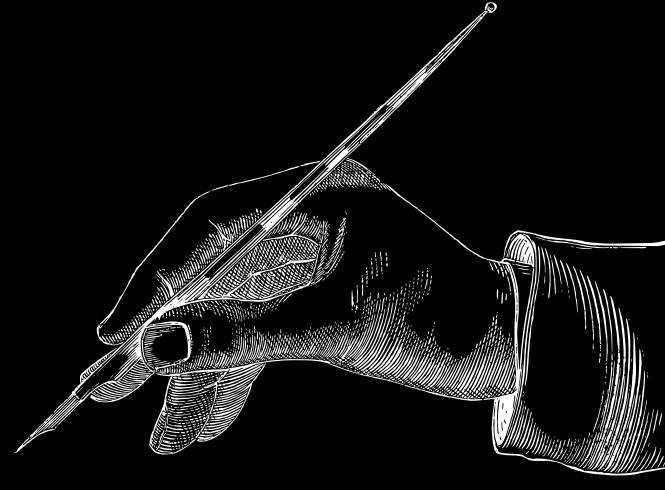
"રીત" છોડી દેવાની હતી ને "પ્રિત" પકડી
રાખવાની હતી,
પણ તેણે "પ્રિત" છોડી દીધો ને "રીત" પકડી
રાખી,,,

"જીદ" છોડી દેવાની હતી ને "ઉમ્મીદ" પકડી
રાખવાની હતી,
પણ તેણે "ઉમ્મીદ" છોડી દીધો ને "જીદ" પકડી
રાખી,,,

અને અંતે,

"માયા" છોડી દેવાની હતી ને "કાયા" પકડી
રાખવાની હતી,
પણ તેણે "કાયા" છોડી દીધી ને "માયા" પકડી
રાખી,,,

એક મિત્ર દ્વારા મળેલ પ્રથમ પંક્તિઓ થી
પ્રેરાઈને,
પ્રો. નિલેશ એમ. બેંકર
તા. ૧૩/૦૩/૨૦૨૨



સૂરજની શીતળતા...

દિનભર કાળઝાળ ભરી ગરમી ઓકીને,
સાંજ પડે મેં સૂરજની એ શીતળતા જોઈ છે..

એકપગે અડીખમ ટટ્ટાર ઉભા રહીને,
તળાવ કાંઠે મેં બગલાની એ એકાગ્રતા જોઈ છે..

અનેકોનેક ઉચાળાઓ સમી ભરતી સહીને,
પખવાડીએ દરિયાની મેં એ સ્થિરતા જોઈ છે..

દુનિયાભરની દુન્યવી એવી ભાષાઓ બોલીને,
માતૃભાષા બોલતી મેં જીભની એ ધન્યતા જોઈ છે..

સમરાંગણે અનેકવિધ શત્રુઓ ને વીંધીને,
પોતીકાથી હારેલા મેં વીરોની એ વીરતા જોઈ છે..

અને અંતે,

કેટકેટલાય ઠેકઠેકાણે ભટકી હારી થાકી ને,
માઁ ના ખોળે મેં મનની એ મુગ્ધતા જોઈ છે..

બળબળતા ઉનાળાની સાંજે,
સૂરજની શીતળતા ને સથવારે,

પ્રો. નિલેશ એમ. બેંકર
તા. ૨૫/૦૫/૨૦૨૨





TEAM EC

EDITORS

Prof. Nilesh Banker
Prof. Nisha Prajapati

CONVENER

Pankti Chauhan, Sem 7
Shubham Gupta, Sem 7

DESIGN TEAM

Amit Jha, Sem 5
Kesar Bavda, Sem 5
Vaishnavi Shah, Sem 5