

Department of Electronics and Telecommunication Engineering
K. K. Wagh Institute of Engineering Education and Research, Nashik



# PINACLE

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Department of Electronics and Telecommunication

Karmaveer Kakasaheb Wagh Institute of Engineering Education and Research, Nashik

### Principal Desk



Prof. Dr. K. N. Nandurkar Principal, KKWIEER

The vision of founder trustees to provide quality technical education for the students with rural background was realized in 1984 after the establishment of this Engineering College at Bhausahebnagar, it was later on shifted to Nashik city and has become a land mark for excellence in technical education which is evident from ranking obtained by the institute at National level during the survey conducted by NIRF of MHRD, Government of India in 2016. This was the only institute from Nashik region to find place in the top 100 Engineering institutes of the country Currently is programme of the institute are accreditation NBA and Institute obtained grade A from NAAC This is the only Institute in SPPU area to get AICTE India lab sanctioned recently. Now this is the first Autonomous engineering institute in Nashik from A.Y. 2022–23.

K.K. Wagh Institute of Engineering Education and Research, Nashik offers ten UG, three PG (Engineering) and five Ph. D. programmes of Savitribai Phule Pune University Pune with total intake of 1194 for AY 2023-24. Besides engineering, the institute also conducts courses like MCA and MBA, bending the technology with management. The objective is to develop engineers and technocrats who will contribute towards the development of society. This is achieved under the dance of advisory committee which comprises of experts from various fields.

The faculty of this institute is actively engaged in research, consultancy, training, and testing activities, besides providing high-quality academic inputs to the students. The strong interaction with industries has resulted in a large number of sponsored projects, along with opportunities for the students to join in-plant training and secure good jobs. The institute was listed in the platinum category by AICTE-C11 Industry-linked Institute Survey for consecutive 4 years. Many students have topped the university exams and joined various prestigious institutes for higher studies in India and abroad.

The institute believes in developing the overall personality of the students. Many extracurricular activities are organized throughout the year, providing opportunities for students to exhibit their talents. After winning several awards at the national level, some of the students have participated in international competitions in different countries for paper presentations and project competitions. There is a well-maintained gymnasium with excellent sports facilities. Various tournaments are held on the institute premises, and students are proud to represent the Savitribai Phule Pune University at the national and international levels.

We feel proud of the achievements of our alumni members in various fields of life, and we are sure that the students graduating from this institute will be able to face any challenge successfully in the 21st-century global competition.

### HOD's Desk



Prof. Dr. D. M. Chandwadkar

Dean, Student Affairs,

Professor and Head, Dept. of E&TC

Dear Students,

The department of Electronics and Telecommunication Engineering (E&TC) was established in the year 1984. This is one of the major departments in the institute, offering three programs. Bachelor's Degree program in Electronics and Telecommunication Engineering (B. Tech. E&TC). The sanctioned intake for this program is 120. The department also runs a postgraduate program: M. Tech (E&TC VLSI & Embedded Systems) with an intake of 18 and Research Center(Ph. D. program) in E&TC. The aim of the department is to provide technical education of the highest standard. The department has always been on a high growth path to keep pace with the everincreasing importance of the major discipline of study as current technology trends. The term Electronics and Telecommunication Engineering denotes a broad engineering field that covers important subfields such as analog electronics, digital electronics, consumer electronics, embedded systems, VLSI design, power electronics, communication systems. Electronics-based products play a vital role in our daily lives, from the sophisticated diagnostic equipment used in modern hospitals to leading-edge fibre optic communications.

Computer technology, telecommunications and consumer electronics are advancing at an ever-increasing pace. It also operates and maintains an Audio-Video Hall of capacity 150 and equipped with 200 audio video courses from IITs. The department also has a PCB lab and large number of software tools like MATLAB, CADENCE for students of use.

The faculty is actively participating in various conferences, seminars, workshops, training programs at national and international level. They also present technical papers at national and international conferences frequently, which are also published in reputed journals. DST, Govt. of India, BCUD of Savitribai Phule Pune University has funded the research proposals filed by the department faculty. Sincere and dedicated efforts of our students and staff have transformed into University toppers which has put the department at the forefront in the Pune University.

Apart from academic excellence, the department also encourages students to take part in various co-curricular activities. Our students have received prizes at different national and international competitions. Our students secured first prize in DIPEX 2023 which is one of the best technical event held in Maharashtra. Student's Association of Electronics Engineering (SAEE), organizes many expert lectures and workshops for students. This organization provides a platform for students to develop organizational skills and to upgrade their technical competence. The department conducts a national level technical symposium 'Telekinesis' annually for the benefits of the students.

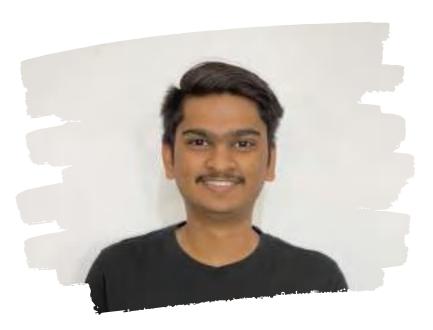
The students are taken to industrial visits and expert talks from industries are invited to interact with students regularly to bridge the gap between theory and practice. Many UG students undergo internship/vacational training in industries like HAL and BSNL. Workshops on preparation for aptitude tests and interviews for placement in MNCs are conducted for final year students. The students passed out in past three decades from this department have been successfully placed in various private sectors and public sector organisations. TCS, Siemens, KPIT, L&T InfoTech, Rishabh Instruments, Mahindra and Mahindra, CGL, PSPL and Bosch are our regular department recruiters. The also encourages the students to be entrepreneurs.

With the help of this magazine, we would like to provide them the platform to showcase their talent, so that they can express their skills.

### Meet the Creative Minds who Shape our Magazine's Narrative

#### **OUR EDITORIAL TEAM**

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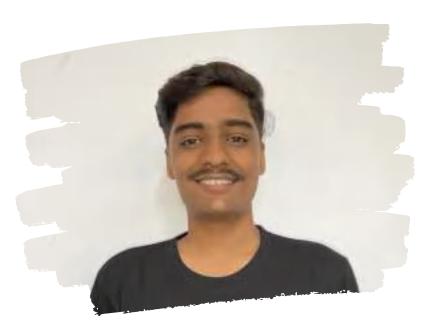
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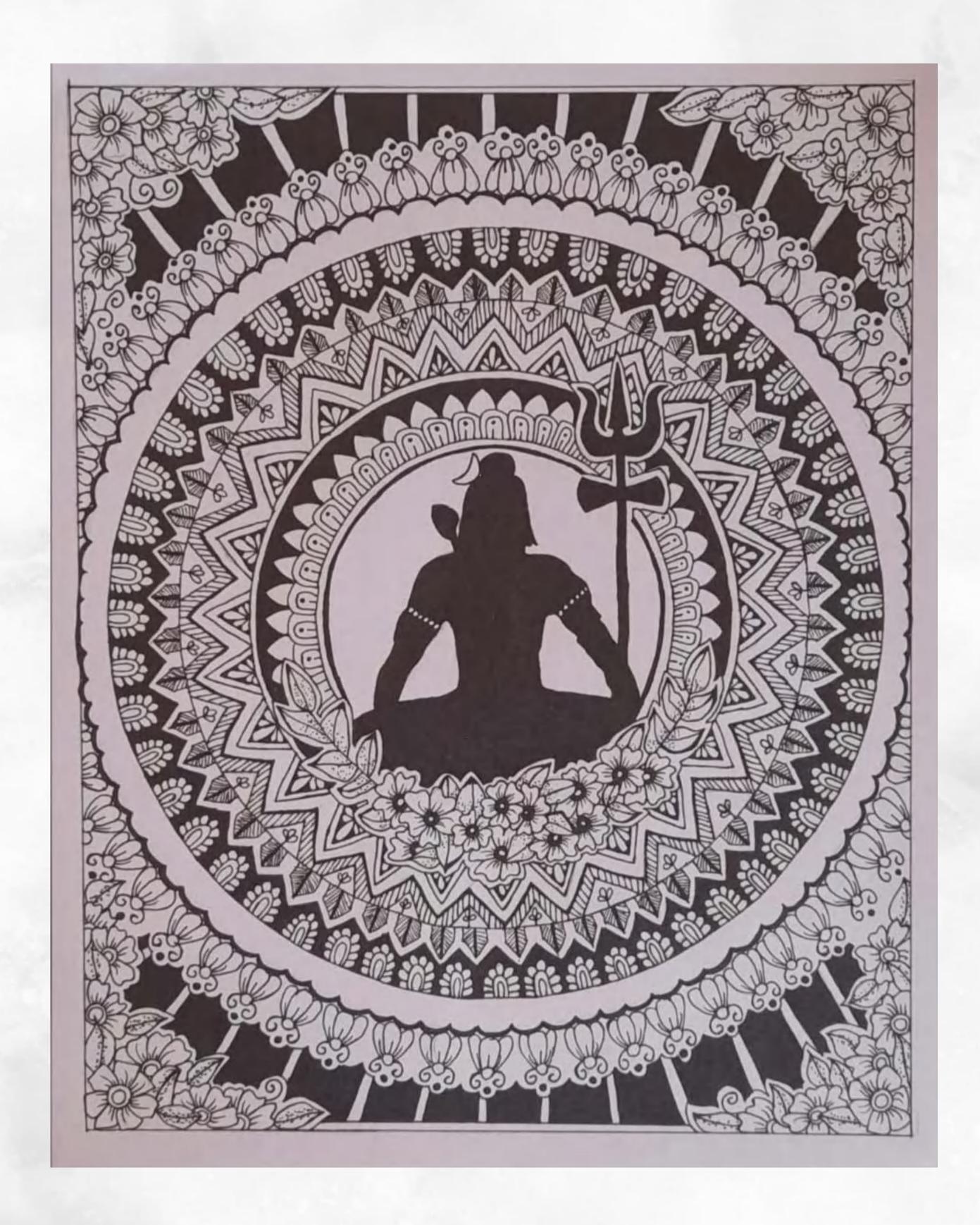


Sushant Shelar TE

#### NOTE:

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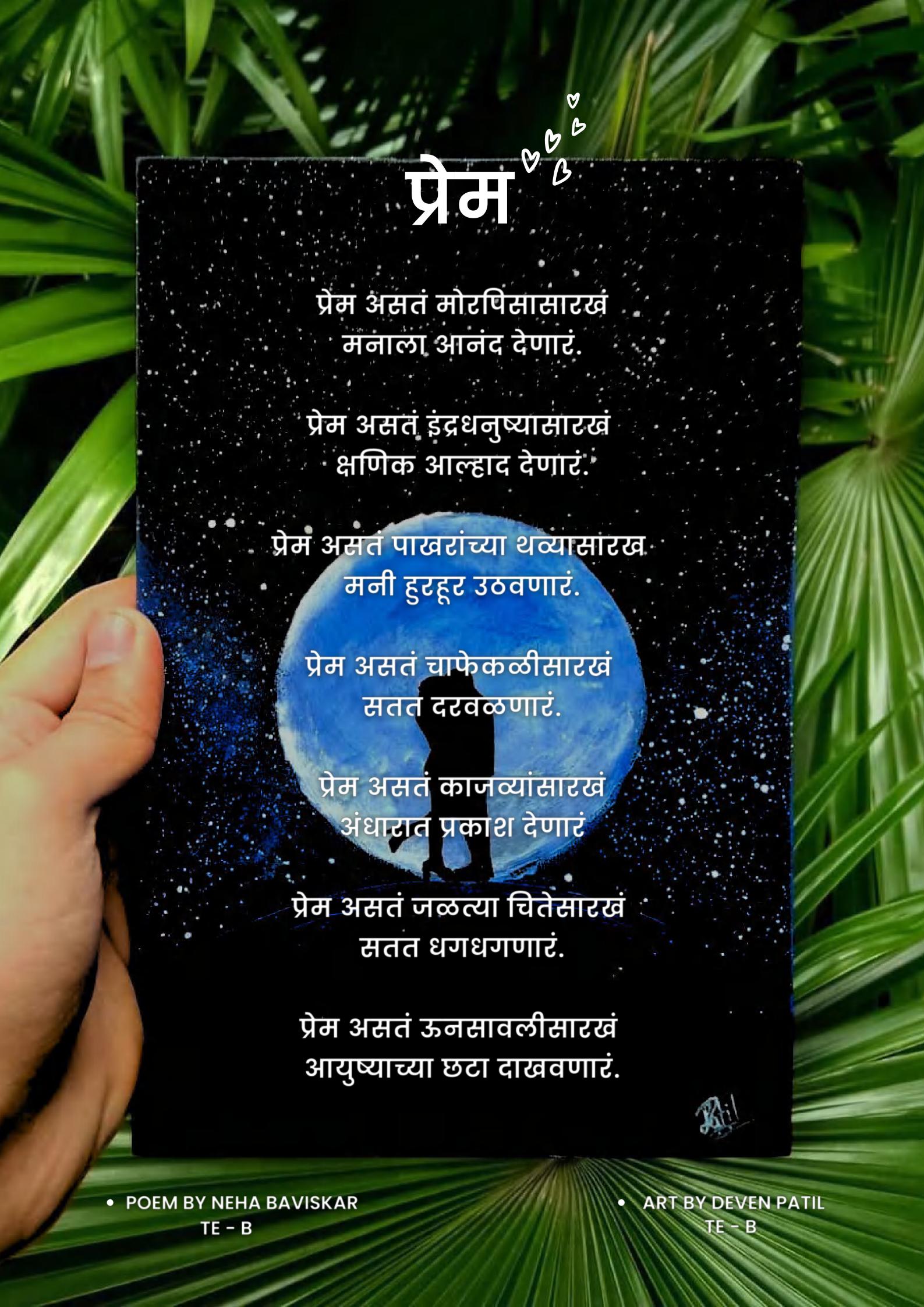
GAURI CHAUDHARI FE - G



कभी सोचा है हवा क्यू स्त्रीलिंगी है..? स्वतंत्र, मदहोश, चंचल सी जहा चाहे उस दिशा मैं घूमती जिसे छुए राहत सी देती बांध न पता इसे कोई अपने मैं ही मस्त रहती.... दिनया की गंदगी खुद मैं बहाके लेती फिर भी लोगो को प्राणवायु है देती इसके मंद मंद झोके मोहब्बत का मौसम लाते और गुस्सा होने पर तूफ़ान है आते औरत की जिदंगी कुछ ऐसी ही है होती शायद इसी लिए यह "हवा" (स्त्रीलिंगी) है कहलाती....



SHREYA SATBHAI SE - B





GAURI CHAUDHARI FE - G





न्यूटनच्या डोक्यावर पडले नसते सफरचंद मग पडले नसते डोके PHYSICS मध्ये बंद पुरवता आले असते फिरण्याचे छंद

दिली नसती पायथागोरसला मास्तरांनी शिक्षा तर घ्यावी लागली नसती MATHS ची दिक्षा आता घेतो आम्ही मास्तरांकडून मार्कांची भिक्षा

फर्डिनांड मॅगेलन ने केली नसती पृथ्वी प्रदक्षिणा GEOGRAPHY च्या क्लासमध्ये मग वाजवले असते तबले वीणा ग्रहतारे असलेल्या कुंडलीसाठी द्यावी लागली नसती दक्षिणा

मेंडलीव ने जर शोधला नसता PERIODIC TABLE CHEMISTRY शिवाय आयुष्य होऊन गेले असते STABLE नाचलो असतो खूप, लावून टिव्हीला केबल

रॉबर्ट हूक ने शोधली नसती जर CELL तर BIOLOGY मध्ये कशाला झालो असतो फेल वाटले नसते लेक्चरला क्लासरूम जेल

NEHA BAVISKAR TE - B



I have not failed 10,000 times—I've successfully found 10,000 ways that will not work."

# मेत्री

मैत्रीचा एक सुंदर ऋणानुबंध त्यातून दरवळणारा मस्तीचा गंध

> मैत्री एक सुंदर किनारा कधी आणतो शहारा

मैत्री एक सुंदर रेशीम धागा कधी कधी असतो नाकावर त्रागा

मैत्री एक सोसाट्याचा वारा त्यातून वाहतो आपुलकीचा झरा

मैत्री एक फुलांचा बहार नाते एक आंबटगोड सदाबहार.



## My Last Crave

No any says, my early wakes, Made my life meaningless, Couldn't replace, your image, Fit in my mind, is traced.

You are the only one, in my life, Enlightening my positive vibes, You're my friend, you're my well wisher, You are the only one mine.

I'm the bud, you are those units, Changed me into plant, In whole my life, is cleared, Living without you, I can't.

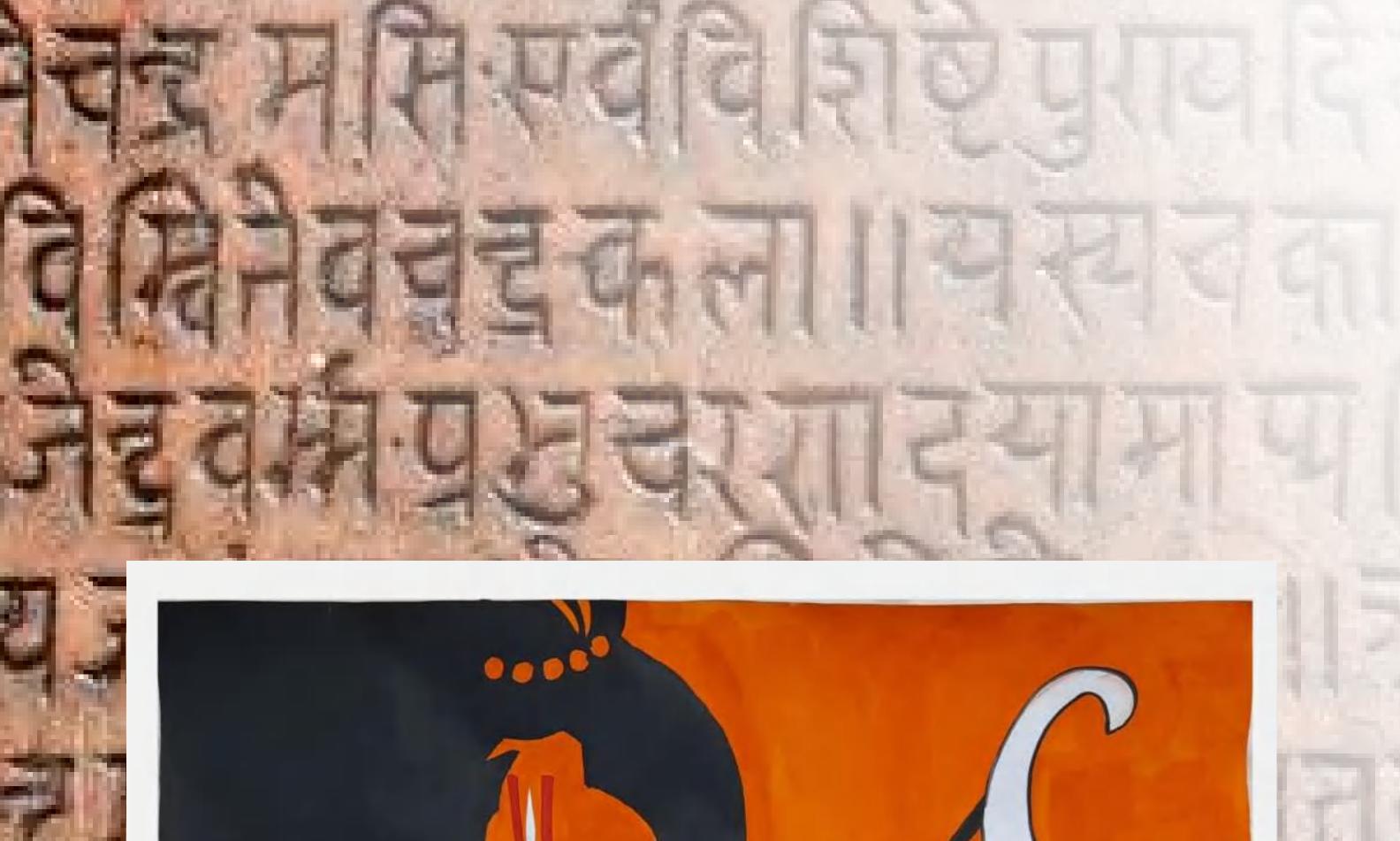
Make comeback, no any crack, Till left between us, Harassing memories, losing mind, Feeling guilty, happened worst.

One slake remain, would like to complete, In falling sun, with soothing band, I just want to hold your hand.

DARSHAN KHUTE FE - F



SHREYA SATBHAI SE - B





MANJUSHRI MORE BE - ELTX





सतेज सायंकाळ

निरभ्र आभाळ ....

खुलणारी चंद्रकोर

डोकावणारा चकोर....

वाहणारी नदी

त्यात बगळ्यांची गर्दी....

चांदण्या अफाट

त्यांचा रुबाबात थाट....

नजारा मनोहर

त्यात शांती निरंतर....



SHREYA SATBHAI SE - B



# फुलांची जत्रा

एक चाफा, सुंदर ताफा मनोहर सुवास अन् मोकळा श्वास एक मोगरा, जरासा लाजरा साजिरा आणि गोजिरा

एक जास्वंद खुले आसमंत डोलता वृक्ष उभा अक्ष एक गुलाब सांगे रुबाब काव्यांची साथ आणि सौंदयिचा घाट

एक सूर्यफल, ऊनसावलीची हुल जगण्याचे कुतूहल नि कोमेजणे अटल एक गुलमोहर, घनघोर बहर टिपूर वारा, सडाच सारा.

> NEHA BAVISKAR TE - B



### वसा

जेव्हा पहिल्यांदा पाहिले मी तुला.... काही सुचेनासे झाले मला तुझ्या स्पर्शाने आलेला अंगाला शहारा तो कानात गुणगुणणारा वारा

तुझं ते बिनधास्त जगणं लहान बाळा प्रमाणे वागणं तुझ्या स्वप्नात एव्हढा झालो मी मग्न आता ठेंगणे वाटू लागले गगन

वारतं तुझं आवडतं फुल व्हावं तुझ्या रेशमी केसात वसावं मनमोहक सुगंध होऊन तुझ्या आजू बाजू दरवळावं

वारतं तुझ्या डोळ्यातील काजळ व्हावं थोडं अजून सौंदर्य तुझं वाढवावं आणि ते काजळ पसरु नये म्हणनू तुझ्या आसवांना थांबवावं

तुझ्या या प्रेमात झालो मी येडा पीसा कळेना तुझ्या विना जगु कसा... सांग सखे आयुष्यभर सोबत राहण्याचा घेशील का गं वसा....?

PRERANA PUNDE SE - A



SHREYA SATBHAI SE - B

### FREEDOM

There are different ways we experience joy. Sometimes joy is in going to the club and dancing to loud music. Sometimes joy is reading a book in your room when no one is there to disturb you. sometimes joy is in eating chips and watching your favorite show. sometimes joy is going on a walk by yourself. But you cannot show off that nice peaceful walk on Instagram or Snapchat like you can with clubbing. but deep down in the corner of our minds, we can all agree that the peaceful walk you had in the evening was better than a chaotic club.

Maybe on the surface expensive coffee shop is very cool for an Instagram story but deep down we all crave a hot cup of chai. I read this exact paragraph somewhere that said, "How do you separate your truest friends from the countless people you think are your friends? Did someone cancel a trip so they could be with you when your mother was in the hospital? Did anyone sit up with you the entire night like your father did when it seemed that your entire world had collapsed? Did a friend show up at your doorstep unannounced because you hadn't answered two consecutive phone calls? Your friends are not those you share drunken party pics or stories where everyone stares blankly into their phones at parties, making other equally exciting plans. Your friend is that person who sits with you wordlessly, offering just himself or herself, because that is all you need at that moment. In the end, what we will remember are our friends' arms, how long they held us, how kindly they heard us, and most importantly, left their own lives to be present just for us."

This world is constantly brainwashing us with its definition of joy, friendship, and life but when we take a moment and think. we realize that our definitions of joy, friendship, and life are very different from this world but we have the right to freedom to define our definition of joy, friendship, and life. So enjoy your walk in the evening and make the setting sun your companion of joy without worrying about this world.

VARAD ZODGEKAR



### WORDS

WE OFTEN GET SWEPT AWAY BY WORDS WE HEAR

THEY MAKE US IMAGINE THINGS
THEY MAKE US BELIEVE WHAT PEOPLE SAY
AND THAT'S HOW WE GET EASILY BETRAY
I THINK, WORDS CAN REALLY DO WONDERS
THEY CAN MAKE YOU OR BREAK YOU IN
PIECES

BUT PROVING THEM TAKE, EFFORTS ALWAYS
SELDOM, WORDS SEEMS AS SHINING AS SUN
BUT ALWAYS REMEMBER THAT
SAME WORDS CAN CAUSE YOU HURTFUL BURN
THAT'S WHY LOOK AT PERSON'S ACT,
AND HOW HE SERVES
BECAUSE ACTIONS SPEAKS LOUDER THAN
EVER CAN WORDS



SANIYA DOLAS TE - A

### ENEMY

I HEARD THE SOUND OF A HERD

COMING FROM BEHIND

AS I TURNED MY HEAD TO SEE

IT WAS A MARCHING ARMY, MAKING ME BLIND

I STOOD THERE LIKE A ROCK, TO KNOW WHAT'S GOING ON FOUND OUT, IT WAS ONLY ME THEY WERE MARCHING UPON THE ARMY WAS WITH CAVALRY, INFANTRY,

AND WELL-EQUIPPED TROOPS

THOUGH I KNEW THERE WASN'T ANY CHANCE TO SURVIVE I STARTED RUNNING WITH NO EXCUSE

MOVED MOUNTAINS TO RUN AS FAST AS I COULD STILL GOT

CAPTURED LIKE A BUG WOULD

SOLDIERS BEGAN TO STRIKE ME, ONE AFTER ANOTHER

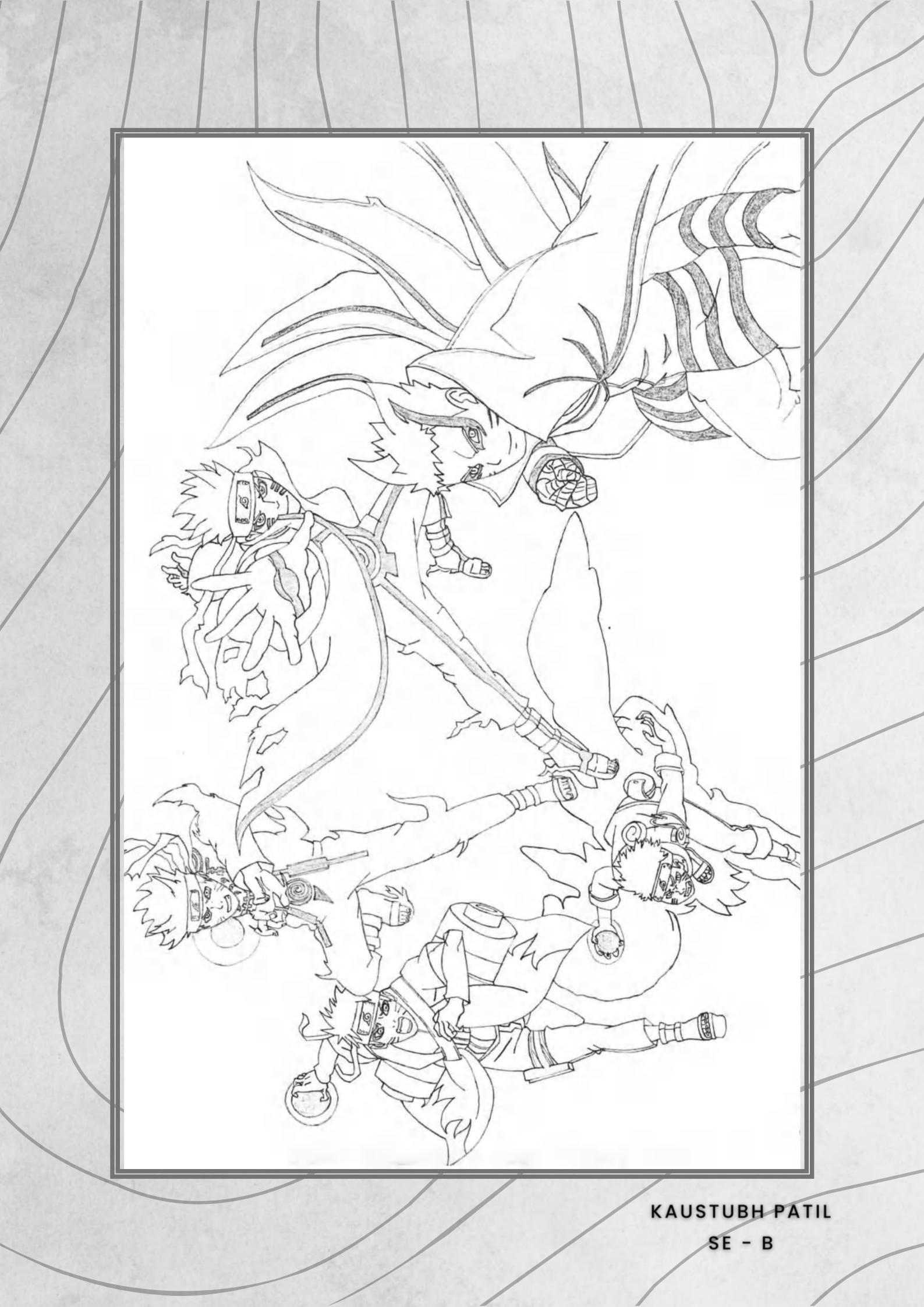
BUT WITH EACH CUT, SOMEHOW THEY SEEMED FAMILIAR

THEY KEPT TEARING ME UNTIL I WENT INSANE

AND LEFT ME WHEN I COULDN'T EVEN FEEL THE PAIN

ON THE VERGE OF DEATH, I SAW THE GENERAL WALKING
TOWARDS ME
WHOM I THOUGHT TO BE MY BIGGEST ENEMY
THAT WAS THE DAY I GOT TO KNOW
I MYSELF AM MY OWN FOE.

AMRUTA DHALKARI SE - B



## 7 Need You!

I want you to be there when I cry,
Bring me a band-aid when I bleed.
I've lost the light this world used to hold,
but you're the only star I need.

I don't want to seem selfish, and I don't want to ask too much of you.

But if you have a lifetime to spare,
I'm willing to hand mine over too.

It's 3AM and the lonely is sinking in,
I'm looking at your picture again.
You smiled so bright the last time I saw you,
but now your smile looks so dim.

I wrote you a lullaby,
even though I know we're not kids anymore.
Maybe someday I will sing it to you,
and you will remember the promise
I made to love you forevermore.



## PATHS YOU CAN CHOOSE AFTER ENGINEERING...

Hey there everyone I hope you all are enjoying your engineering days but at the same time it is utmost important that we know what we are going to do after ENGINEERING. In this article i will be making you aware of the things you may go for after your Engineering. So starting with the article let's divide the students in two groups, First who have compromised and opted for E&TC and second who are interested in working in core industry.

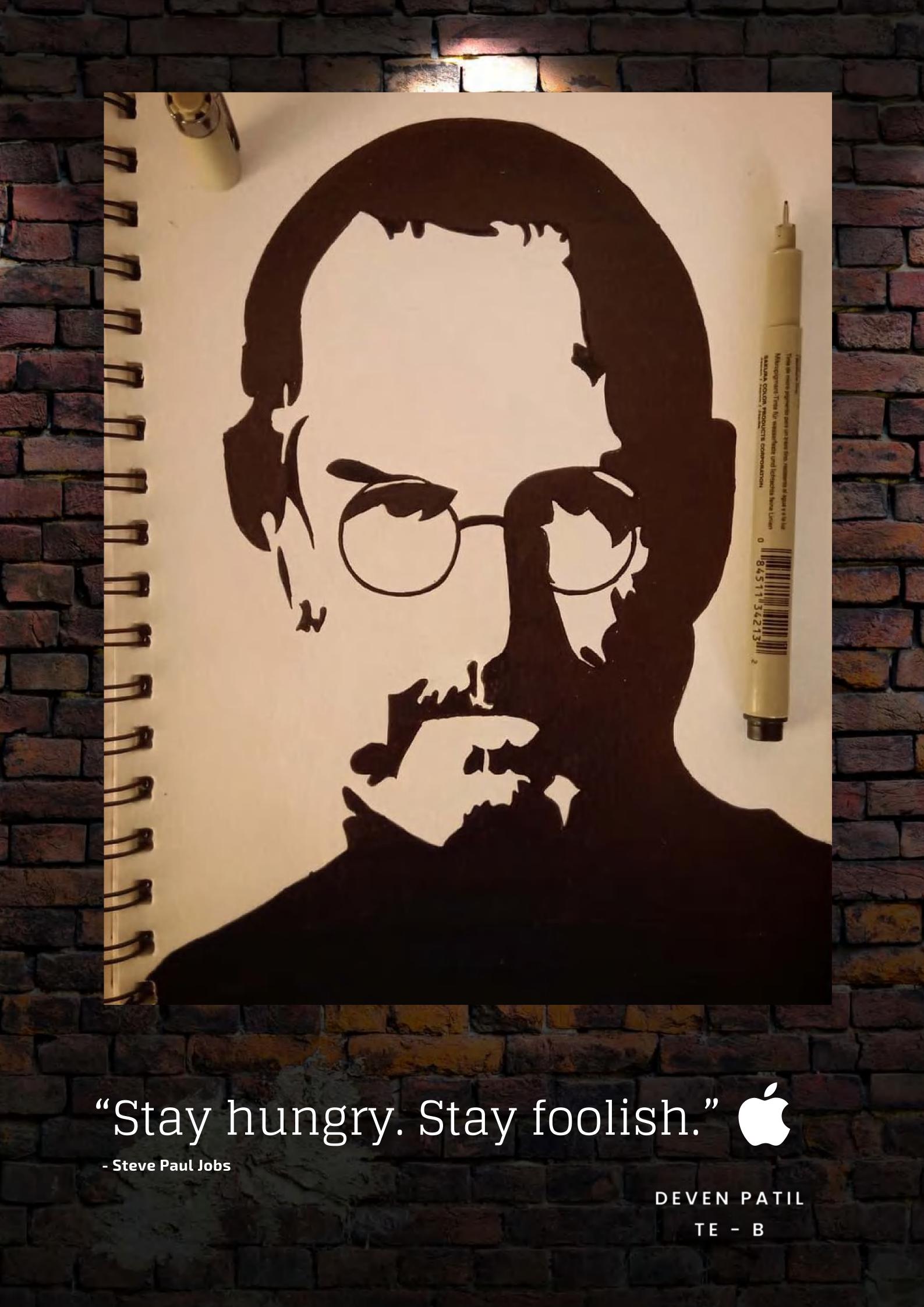
Talking about the first case as we know the IT branch has a vast variety of jobs in which we can work in but mostly students are only aware of one job which is Software Developer. There are various other field as well such as Cloud Computing, Kubernetes and Devops are also some of the fields which has great future and it can be learned through Online platform such as Udemy and many more.

Talking about the second case, As an Electronics engineering there are far more opportunities than you think. The most important and though the interesting fields are Mobility, VLSI, Embedded electronics and many more. As we all must be aware that we have a Chip shortage in the market, as Electronics engineering we are the one who are going to design and manufacture this chips. So just imagine what level of impacts we electronics engineer have in the current market. There are many institute which provides courses which helps us to learn about this technologies as well. Now coming towards the students who are willing to do masters there are many paths we can choose depending upon our interest like MBA, MTECH and MS.

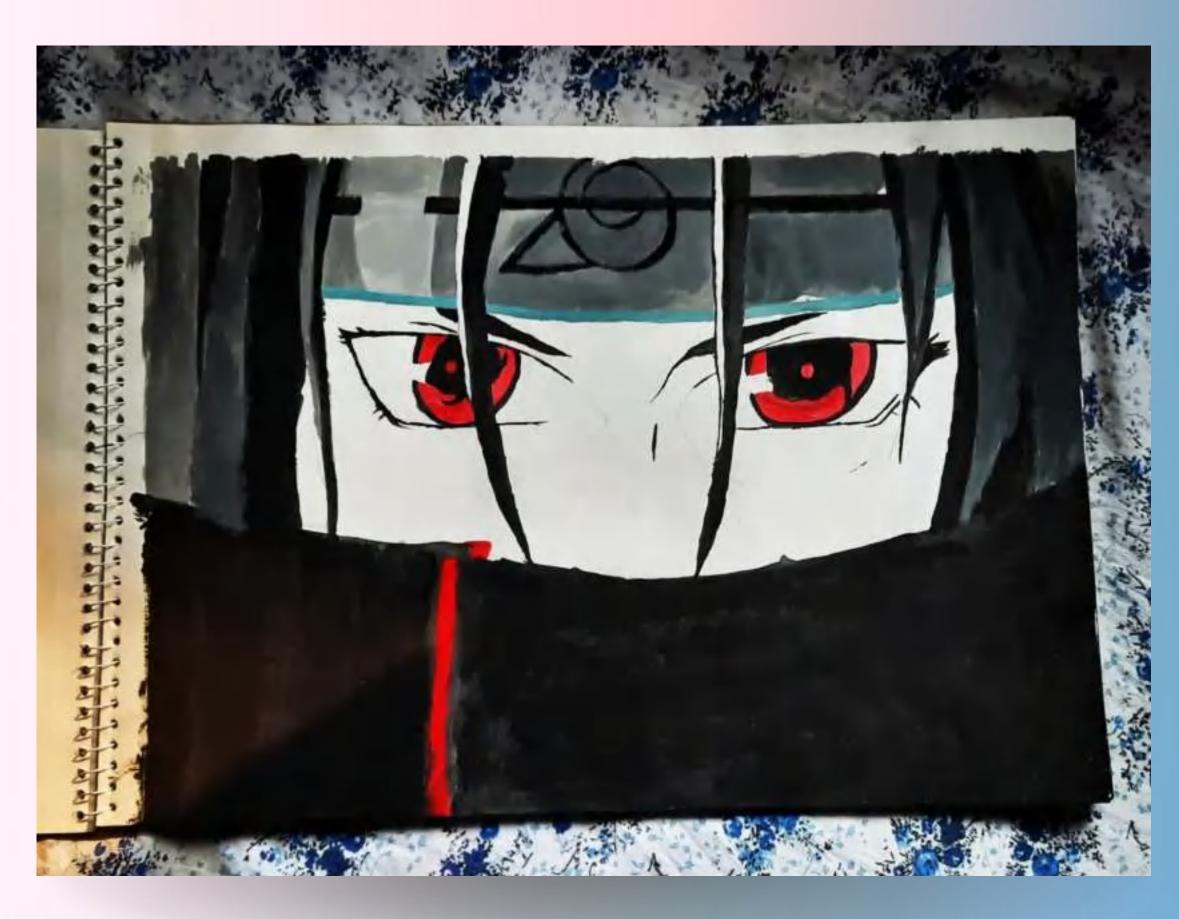
There is one more division we can make out in students that is Government Job and trust there are tons of opportunities in this domain. Starting with the UPSC, as an engineer you can give UPSC to become IAS/IPS officer and if you want to enter in technical then IES is the better option as well. Talking about domains in Defence, one can give AFCAT, CDS exams which will help you to become officer in any of the forces. Also if you dont want to give these kind of exams then you can go for TGC,SSC entry as well where students are shortlisted on basis of there marks scored throughout the Enginnering.

I hope this article will help you to get aware of the things that can be perceived after your Engineering.

YUKTA GARUD







ANKIT GORANE TE - A



# गर्व मला मी नारी आहे.

जीवन परिभाषित करणारा, प्रबंध विद्याधारी आहे सन्मानाची मी अधिकारी, गर्व मला मी नारी आहे

हिरवे काकण मन वृंदावन, देह पंढरी काळस राउळी आनंदाचे फूल सुवारिक, उर्जित मी मनुहारी आहे

संस्काराचे मयदाचे, अलंकार सजतात अनोखे सृजन जगाचे रूप धरित्री, तगमग जीवघेणारी आहे

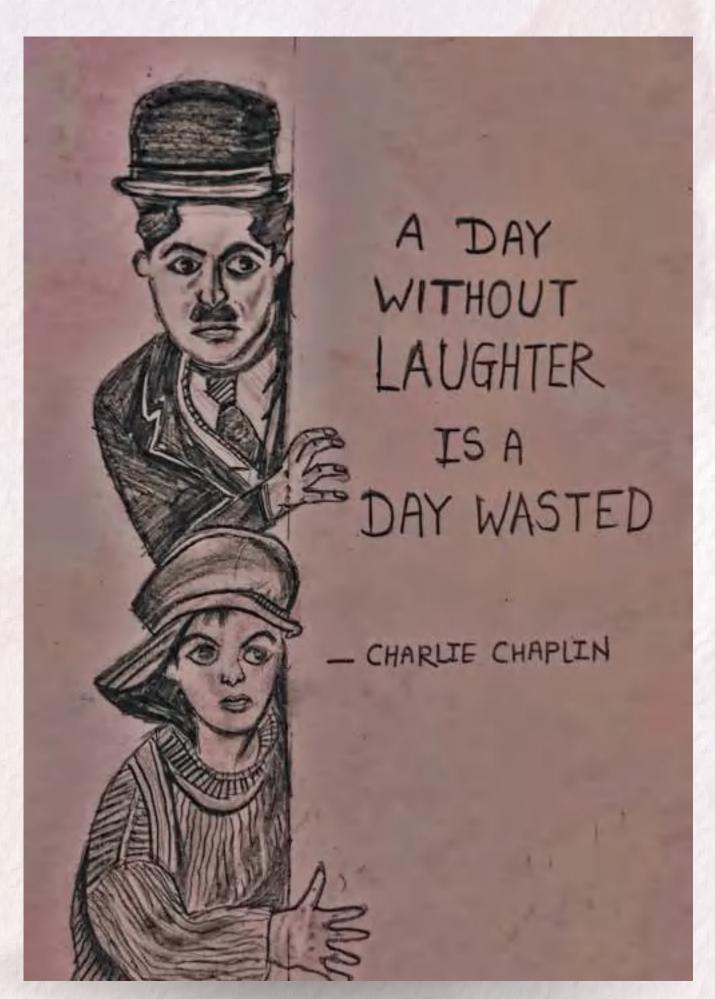
अखंड प्रांजळ संवादालय, मनात पावित्र्याला जागा आई, मुलगी, दुहिता जाते, जिवापाड जपणारी आहे

नारी निर्मित समाज सुंदर, हे निरलस मैत्रीचे नाते सौभाग्याचे लेणे मी तर, दुहिता मंगलकारी आहे

दासी ना अबला मी जर्जर, कोमल पण कमजोर नसे मी सशक्तेची निर्मल धारा, उद्याची ललकारी आहे...!!!



SAYALI KHOBRAGADE TE - A



GAYATRI PAGARE FY - G



MINAL CHAVAN SE - B





DEVEN PATIL
TE - B







SAMYAK SHINGI TE - A



SAMYAK SHINGI TE - A

#### UNLEASHING TALENTS AND TRIUMPH ON THE CRICKET FIELD



The ENTC (Electronics and Telecommunication) Department's cricket team in the Karmaveer Premier League (KPL) inter-department tournament displayed exceptional talent, teamwork, and indomitable spirit. Led by their captain, Varad Gampawar, the team consisted of Shreyas Ingale, Amay Tambe, Pratik Dhabade, Shivam Shrivastav, Shashikant Lohar, Prasad Dawange, Prathamesh Borse, Siddhesh Jagtap, Rutwik Bembade, Krish Makwane, Jayesh Chavan, and Gaurav Gunjal.

Throughout the tournament, the team showcased their remarkable skills and resilience. Varad provided strong leadership, guiding the team with his strategic decision-making. Shreyas and Amay contributed as valuable all-rounders, making an impact with their batting and bowling abilities. Pratik's disciplined bowling and crucial wickets played a vital role, while Shivam's agile fielding added to the team's success. Shashikant's hard-hitting batting and Prasad's composure in the middle-order were crucial in securing victories.

Prathamesh, Siddhesh, Rutwik, Krish, Jayesh, and Gaurav also made significant contributions, whether with their batting, bowling, or fielding skills. Collectively, the ENTC team's dedication, perseverance, and unity propelled them to triumph in the tournament. Their achievement brought immense pride to the entire ENTC department, and their success serves as an inspiration to others, highlighting the importance of teamwork and passion in achieving victory.

### CHAMPIONS IN SPIRIT, RUNNERS-UP ON THE COURT



The ENTC (Electronics and Telecommunication) Department's volleyball team, led by Captain Ajinkya Sarise, achieved a commendable runner-up position in the fiercely contested Karmaveer Premier League (KPL). This outstanding accomplishment is a testament to their unwavering passion, teamwork, and exceptional skills.

Throughout the tournament, the team showcased their remarkable talent, demonstrating precise serves and swift reflexes. Ajinkya Sarise's exceptional leadership guided the team, while the combined efforts of each member played a crucial role in their success. The defensive prowess of Viraj Bhalerao and Palash Pachorkar provided solid resistance, complemented by the powerful spikes of Girish Patil. Together, they formed an indomitable force that left opponents astounded.

The ENTC Department takes great pride in acknowledging the volleyball team's remarkable achievement in the Karmaveer Premier League. Their accomplishment not only exemplifies their dedication but also inspires other aspiring athletes within the department. The team's success stands as a testament to the department's commitment to fostering both academic and athletic excellence. Congratulations to the ENTC volleyball team for their outstanding performance and for upholding the spirit of sportsmanship and achievement!



## CARPEDIEM

**OPTIMISTIC** 

GRAPHICS

SSION

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Composition

**OPTIMISTIC** CREATIVITY CREATIVITY **ABSTRACT** 

Details ABSTRACT

**PASSION** 

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**OPTIMISTIC CREATIVITY ABSTRACT** 

**Details** Δ **PASSION** SKETCH

RPEDIEM

FROM THE First Stroke Rie Final Masterpiece, Art of Creativity IS a JOURNEY OF SELF-WISCOVERY CAPLORATION