Annual Magazine

Jawaharlal Nehru Government Engineering College

Sundernagar



# Reflexia 2019



## Instigation

College is the place where students develop the mindset that serves them throughout their lives. Hence, it is crucial for a student to be exposed to an environment where new ideas could be developed, discussed and implemented in a productive manner. In addition to this, a creative platform must also exist so that budding "Shakespeares and Picassos" can have their skills staged. A college magazine serves all these needs.

We are happy to announce that the annual magazine of JNGEC--"Reflexia", is back with new, innovative, and freshly infused content covering all the aspects necessary to build a technical, social as well as creative aptitude in the minds of students.

This being the fifth edition speaks about the enchanted land of Egelloc. It enlightens the reader about the events unfolded in the past one year, the adventures and characters yet to come. For those still wondering, Egelloc nothing but 'College' spelled backwards:)

The overwhelming response received from the students is truly worthy of being applauded. We have tried our best to include all the received entries. However some restrictions limit us to include all the received entries in the magazine and we are deeply apologetic to all those whose entries have not been included.

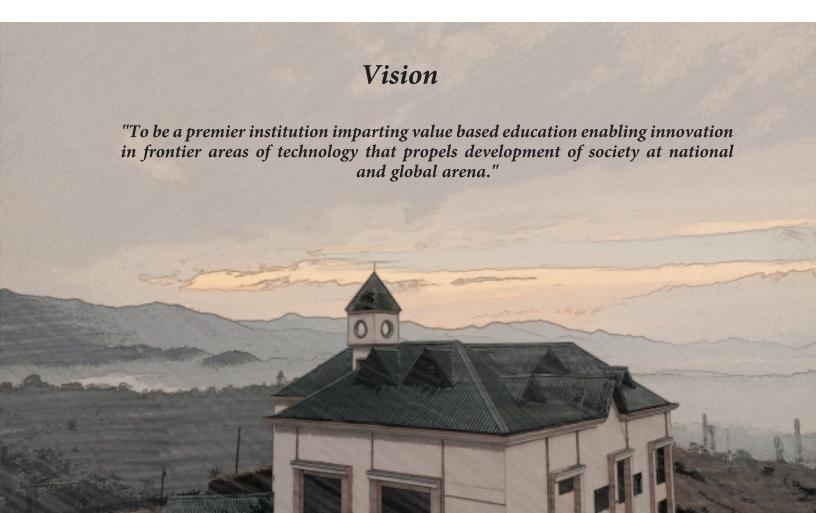
We hope that Reflexia-2019 beguiles you with its content.

Team Reflexia 2019

## Jawaharlal Nehru Government Engineering College

Sundernagar





#### From the DIRECTOR'S DESK



Educational institutions provide the rarest of opportunities for the young minds to flower into maturity with the acquisition of knowledge and development of noble virtues of humanity to be successful citizens of tomorrow. I do believe that Jawaharlal Nehru Government Engineering College is marching on the right path in this direction to make its students capable of ably shouldering the responsibilities of the engineering profession.

A College Magazine is an instrument which focuses on the academic and extra-curricular activities of the students. It also provides an opportunity to the students to demonstrate their literary and artistic talents. Reflexia, so far, has been maintaining a good standard in this regard and I am sure this issue will also continue this standard with rich contents. My greetings to the students and the faculty.

Dr. Vinod Kumar

Director-cum-Principal JNGEC, Sundernagar



#### From the FACULTY COORDINATOR'S DESK

With all the events unfolding around us, whether good or bad, students have notions on all of them and these notions must be expressed in a productive consuetude. The college magazine, Reflexia gives a medium to the students to articulate their thought processes, problems, ideas, solutions, and suggestions. As the name depicts, Reflexia refers to the reflexes (or reactions) prompted in the minds of students by events and activities ensuing in the surroundings.

Reflexia offers a podium for the students to represent what they stand for. This expression hampers the growth of students and assists them during this College phase of their lives to become a better person and an even better version of themselves. It also offers a stage for students to proclaim their creativity and talents, providing them the exposure required to hone their skills.

I am elated to bring out the fact that the allegiant team of students and teachers worked tenaciously to bring out the fifth edition of the college magazine: Reflexia 2019.

I also congratulate all the students who contributed to this year's Reflexia by catering their content.



#### Er. Nitasha Bisht

AP, Department of EC Engineering JNGEC, Sundernagar



#### **EDITORIAL**

This college magazine is a window to unfold the hidden talents and activities of the students. "Reflexia" is the reflection of the skills and year long activities performed by the students J.N.G.E.C.

We are extremely privileged to present before you the fifth edition of the Reflexia. The magazine re-emerged in its full potential capturing the lively articles, students' artistic talents, glimpses of events, activities, and achievements in the academic year 2018-19. The hard work put in by our Editorial Committee and Designers will make everyone enjoy this magazine. We would like to appreciate and laud all the contributors for their remarkable submissions that make up the bulk of the magazine. I am thankful to the members of Team Reflexia who really worked hard for the success of this magazine and this edition was possible only because of their teamwork. My heartfelt gratitude to the faculty coordinators, Nitasha ma'am and Vivek sir, for their continuous support and encouragement.

It will excite you as you read, fascinate you as you glance and tickle your imagination as you pause to ponder.

#### Happy reading!



Aanchal Sharma ECE 4th Year



Akhil Sharma CE 4th Year



## Contents













#### Dr. Rajeev Khanduja, HOD

## Department of Mechanical Engineering

#### **HOD's Message**

elcome to the Department Mechanical Engineering. It's my pleasure to introduce you to the department. The department boasts well qualified and dedicated faculty members who give the students a hands-on approach in the use of engineering principles. The objective of the department is to prepare students for successful career in industry, research, and academics to meet the need of growing technology. We provide opportunity for students to work as members of a team on interdisciplinary projects. The available equipment, excellence in instruction, and an emphasis on quality of education in Mechanical Engineering are combined together to prepare the students to step into positions of responsibility at the leading edge of today's technology. The Mechanical Engineering students with a desire to learn will develop and expand their knowledge and skills in the areas of engineering sciences, testing techniques, material properties, analysis, evaluation, and communication.

JNGEC has grown in all directions and has become a distinguished centre for modern learning. I am happy to learn that our college is coming out with the new edition of its annual magazine--Reflexia 2019. This magazine certainly would induce the young engineers to promote their creativity in approaching things differently. I extend my best wishes and greetings to editorial board for release of our college magazine.

#### About the Department

•he Department of Mechanical Engineering was one of the first streams started in JNGEC in 2006 at the time of its inception. Department offers a four year Bachelor of Technology course in the field of Mechanical Engineering. Having one of the strongest alumni networks, this department focuses on developing engineers with sound fundamentals and revolutionary ideas. The department has specialized labs for workshop technology and CAD, making the students aware about the practical work and allowing them to keep pace with the ever developing technological advancements.



### Shining Alumni



Madhvinder Singh Parmar Lieutenant, Indian Army



**Nikhil Sharma** Lieutenant, Indian Army



**Drishti Awasthi**Digital Product Analyst, Walt
Disney Company, Hong Kong



**Sandeep Rana**Assistant Professor, Akash Institute



**Balam Sharma**Assistant Engineer, HPSEB



**Pankit Chauhan**Flying Officer, Indian Air Force





#### Er. Priya Jaswal, HOD

#### **HOD's Message**

t is my pleasure and honour to welcome you to the Department of Textile Engineering at JNGEC Sundernagar.

Each country has its diverse culture and traditions. A country is unique because of its people, who have different ways of clothing and living. Varied styles of dressing by people have resulted in improving the scope of Textile Engineering. Fashion is an extensive domain, which is directly affecting the textile trade. Consequently, Textile Industry has become one of the booming industries, and the companies are engaged in catering to the needs of international & domestic markets.

Clothing is considered as a second skin and by implementing technology in it, we are enhancing the overall functionality of the apparel. Other than garments Textile Engineering also include one segment that has received significant attention across the world i.e. technical textiles. These textiles have applications in multiple areas of economic activity, such as aerospace, shipping, sports, agriculture, defence, and health care etc.

Department is proud to possess a well qualified and dedicated faculty members who always strive to perceive and resolve students' queries, so that the overall personality of the student can be groomed in such a manner that they

## Department of Textile Engineering

pass out as 'Industry Ready Professionals.'

It gives me great pleasure to know that 'Reflexia', the annual college magazine is ready for publication. This magazine gives an insight into the range and scope of the imagination and creativity of our students and faculty members. I applaud the editorial team for the hard work and dedication they have invested in realizing this goal, and wish my dear students success in all their future endeavours.

#### **About the Department**

•he Department of Textile Engineering was started in 2006 with the start of this college and is one of its kinds in the state of H.P. The department offers B.Tech (T.E.) with the aim to provide students with technical and specialized knowledge as well as with theoretical foundations necessary for development. Textile Engineering contains the principles, law, and scientific techniques which are utilized for development and manufacturing the textile fabrics and all type of yarns. It also involves the study of principles of science that deals with the analysis of polymers involves in the formation of textile fiber. Considered to be the most innovative field, the department has well equipped state-of-the-art laboratories supervised by experienced faculty members, which provide students enough practical knowledge to withstand professional work environment.



### Shining Alumni



Ashish Kapoor
PhD Candidate, Wilson College of Textiles,
North Carolina State University, U.S.



**Sourabh Awasthi** Bureau of Indian Standards



Simran Sharma KISCO



**Bharat Rana**Officer, Product Development
Cell, Vardhman Group



Sheikh Shadab Project Manager, Volkswagen Finance Pvt. Ltd.



**Ajay Sharma** TGT, Vardhman Textiles





Prof. Himanshu Monga, HOD

#### **HOD's Message**

college magazine carries the contributions reflecting ethos and aspirations of the students, faculty, and other team members of an institution. I am happy to know that JNGEC is bringing out it's current academic year edition of the college magazine. A weak link is better than a strong memory. Nothing exemplifies it better than the nostalgic feeling one gets when leafing through the dusty old pages of his/her college magazine. It can make a reader travel down the lanes of memory, giving rise to a surge of emotions of many hues and colours.lam happy to see the amount of enthusiasm of eminent members of the college to contribute to the magazine. Not to be outdone, our students have devoted time and plunged into creating powerful strong agreement and have carried out their duties with a level of commitment.

### **Department of**

## Electronics & Communication Engineering

#### **About the Department**

he Department of Electronics and Communication Engineering established in the year 2010 in JNGEC. It offers a four year Bachelor of Technology course in the field of Electronics and Communication Engineering. Electronics is the field with the potential to bring up a revolution. Electronics industry is ever increasing. Almost all the appliances we use, like our computers, mobile phones, and even cars work through its applications. In addition to this, wireless communication and satellite technology also feats on its applications. It is perhaps the most extensive industry making the role of Electronics and Communication engineers crucial in this era.

The department has specialized labs to make students aware about the actual working and creation of devices. Having its tie-ups with reputed institutions, the department is marching ahead by providing the students an exposure to the outside world and the global competition.



### Shining Alumni



**Kanishk Vaidya** M.Tech, IISc Bangalore



Alisha Sharma
Technology Consultant, IoT & Analytics,
Hewlett Packard Enterprise



**Shriya Bhandari** Key Account Manager, Paytm



Sanchit Sood Physical Design Engineer, Qualcomm Tech



**Aman Deep Dogra**Branch Manager, H.P. Gramin Bank



Harsh Bhanot Project Engineer, Wipro Tech.





Prof. S.P. Guleria, HOD

## Department of Civil Engineering

#### **HOD's Message**

ivil Engineers are the builders of modern world and are instrumental in creating the monuments of modern technology. Due to the increased emphasis on the development of infrastructural facilities, especially in a country like India, civil engineers are required to play a major role in creating better and improved infrastructural facilities for the mankind. However, to achieve this target, civil engineers are required to be equipped with latest technical know-how and should be capable enough to tackle the constructional site challenges. In the Department of Civil Engineering, more emphasis is being given to incorporate the latest technical advancements in the curriculum; besides this, the students are also being trained to develop the soft skills and technical expertise as per the need of the society and industry. I am glad to learn that Reflexia-2019 magazine is being published in the institution with the collaborative efforts of faculty and student editors. I hope that aforesaid magazine will provide a platform for the students to express their innovative ideas and to showcase their talent and explore their creative potential. I congratulate the entire editorial team for their hard work and dedication that has resulted in the publication of this issue of Reflexia.

#### About the Department

he Department of Civil Engineering was established in the year 2010 in JNGEC. Since its inception, it has gone through many technological improvements by planting laboratories and other facilities aligning it technologically equivalent to the contemporary construction industry. Civil Engineers are the fabricators of the modern world and they play a crucial role in conjuring the marvels of the present world. India being a developing nation, infrastructure holds the key to its success. Hence, civil engineers are expected to play a major role in constructing the future. The department also conducts industrial training and workshops to make students aware about the actual work scenario. The department is budding ahead to attain excellence in civil engineering and by acting as a support to the students and community.



### Shining Alumni



Vinayak Kaushal Post Doctoral Research Fellow, University of Texas, U.S.



Sachin Nadda Assistant Engineer, HPPWD



Lalit Kumar
Assistant Engineer, HPPTCL



**Vivek Sharma** PhD, IIT Bombay



**Amit Chaudhary** Assistant Manager, RBI



**Abhay Kohli** Assistant Engineer, HPPWD





#### Mr. Achhar Singh, HOD

# Department of Applied Science & Humanities

#### HOD's Message

am delighted to learn that our college is bringing out the latest publication of its annual magazine--Reflexia for the academic year 2019. It is a nice platform for both, the faculty and the students to exhibit their talents. I congratulate all the contributors, management, and members of the magazine committee for their unrelenting efforts in compiling this magazine. I wish them all the success.

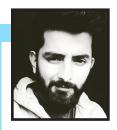
#### **About the Department**

ach and every progress of an engineer is based upon natural sciences, viz chemistry, mathematics, physics, environmental science, English etc., making these subjects crucial for the establishment of a good engineering perception and mentality. The Department of Applied Science and Humanities constitutes all this curriculum, having well equipped laboratories for bestowing practical knowledge to the students and constructing a cohesive environment for the students to excel in. The Department allows students to realize their fields of interests.

The students are also exposed to subjects like Basic Electrical Engineering, Fundamentals of Electronic Engineering, Workshop Technology, etc. So the students have the knowledge to apply all these to their respective specialties. In addition to all this, the department of Applied Science and Humanities instructs a student to learn managerial skills through subjects like Business Communication. The Department of Applied Sciences & Humanities assists in establishing a base for an engineer to flourish.



## ARTICLES



Vishal Sharma ME 4th year

#### **Exploring the Rich Heritage**

#### Indian Architecture and Literature

Present day India once was known as the Golden Sparrow (Sone ki Chidiya). Not only for its enormous wealth, but also for its rich art, culture, customs and traditions. Many art forms are believed to have been evolved in this region, be it architecture, music, dance, literature or science. Many historians described Indian art and culture as one of the best in the contemporary World.

"INDIA is the cradle of the human race, the birthplace of human speech, the mother of history, the grandmother of legends, and the great-grandmother of traditions. Our most valuable and most instructive materials in the history of man are treasured up in INDIA only."

~Mark Twain

#### Indian Architecture

One of the most enduring achievements of Indian civilization is undoubtedly its architecture which has evolved through centuries. Indian architecture belonging to different periods of history shows that progress never stopped in the subcontinent. Indus Valley Civilization (The Harappan Civilization), which is a great example of architecture and sculpture was one of the earliest civilizations which flourished in the subcontinent between 2500 BCE and 1900 BCE. It was noted for its urban planning, baked brick houses, elaborated drainage and water supply. All of this shows that life during the early age was pretty much advanced. Some of

the major cities of the Indus Valley Civilization were Mohenjo-Daro, Kalibangan, Dholavira, Lothal, Harappa, etc. Towns were laid out in a rectangular grid pattern with advanced drainage system and public baths were





prevalent in Harappa. The Great Bath of Mohenjo-Daro is a great example of such public baths. The Dockyard of Lothal was an important site of naval trade. Sculptures excavated in the Harappan sites are enough to give mesmerizing experience to anyone. These include pottery, seals, bronze figures, ornaments, and terracotta figures. With the advent of Buddhism in India, a large number of magnificent buildings came up. Some of the highlights of Buddhist art and architecture are the Great Stupa at Sanchi and the Rock-cut Caves at Ajanta. With the emergence of Hindu Kingdoms in South India, the South Indian School of Architecture began to flourish. The most notable works include rock-cut

temples of Mahabalipuram and the temples of Kanchipuram under the dynamic rule of Pallava Dynasty. Also, we cannot forget the well favoured work of the Chola, Hoyasala, and Vijayanagar rulers in the field of architecture.



The temples at Thanjavur, Belur, and Halebid bear testimony to the architectural excellence of the South Indian rulers. In Northern India, there developed a new and a different style of architecture. This was called the Nagara Style Architecture. In Middle India, the Chandela rulers built a magnificent temple complex at Khajuraho. With the emergence of the Muslim rulers, India experienced the birth of a new architectural style, the Indo-Islamic architecture, which was neither strictly Islamic nor strictly Hindu. The architecture of medieval period is divided into two parts. The Delhi or the Imperial style and the Mughal architecture. The Tajmahal, Red Fort, and Jama Masjid are among some of the great examples of the Mughal

architecture. The iron pillar at Mehrauli, and The Qutub Minar are examples of "the Delhi or the Imperial style" of architecture.

It was followed by a new style of architecture that developed as a result of colonization of India which came to be known as Indo-Saracenic architecture. The Indo-Saracenic architecture combined the features of Hindu, Islamic and western elements. The colonial architecture exhibited itself through institutional, civic and utilitarian buildings such as post offices, railway stations, rest houses and government buildings.

#### Indian Literature

A country having more than 750 identified languages acquaints us of its diversity. The earliest known works of Indian literature were transmitted orally in Sanskrit (often regarded as the Mother of all languages). The Vedas were compiled around 1500 BC-1000 BC. There are four Vedas: Rig Veda, Yajur Veda, Sama Veda and Atharva Veda, the

Rig Veda being the oldest among them. There are more than 200 known Upanishads, A set of 108 Upanishads has been called the Muktika Canon. This is supposed to be an important canon as the number 108 is equivalent to the number of beads on a Hindu Rosary or Mala. The Ramayana and The Mahabharata are the great classical

epics also known as the Mahakavya. They have become a part of the collective memory of those who follow the Hindu religion. The PURANAS are ancient Indian mythological texts, which consist of the narrative stories about the creation of the universe and illustrate its history till the supposed destruction of the universe. During the post-Vedic period, apart from Sanskrit, Pali and Prakrit languages were also used in several texts. Religious literature of the Buddhists and Jains were composed in these languages. Later, many Sanskrit poems came into being with great poets like Kalidas, Jayadev, Harisena, etc. There were several books written about the science and the state governance in Sanskrit for the reference of the learned men. One the most famous amongst is Chanakya's Arthashastra. Beside Sanskrit literature, great literary works were composed in other regional languages too, viz, Sangam literature in Tamil, and others in Malayalam, Telugu, or Kannada. Medieval literature consists of works in Persian, Urdu, Hindi and their dialects. Amir Khusrau and Abul

> Fazl wrote in Persian. Mirza Ghalib, one of the greatest Urdu poets, also composed Diwan (collection of poetry) in Persian language. Hindi literature was in the shadow of its Sanskrit antecedent. But despite that, great literary works can be seen in Hindi. Prithviraj Raso was the first Hindi book and it documents the life and challenges faced by Prithviraj

Chauhan. The bulk of the work is poetry by Bhakti writers like Kabir who is famous for his Dohas (couplets). Tulsidas, Surdas, and Mirabai are other great Bhakti poets whose efforts add a feather in the cap.

field which we should be proud of. They have given us a strong foundation to build a civilized society. The way they explored the nature and developed society without hurting the basic structure of living is par excellence. The identity that we keep in today's world is only due to the works of our great philologists. This is a legacy that we need to carry and preserve for generations to come.

Our ancestors have set exemplary benchmarks in this







**Saksham Katwal** *ECE 1st year* 

#### The Fear of Public Speaking

Today, fear of public speaking has become a serious problem especially among teenagers. In the age of projecting confidence on stage, we lack an essential skill of public speaking. According to one estimate, about 75% of people suffer from various forms of this phobia and 10% of them are genuinely terrified to face the public while speaking.

Symptoms of glossophobia, the fear of public speaking, range from knots in stomach, sweaty palms, dry mouth, shaky legs, and tightness in the throat. In extreme cases, sufferers may experience nausea, panic attacks, and excessive anxiety. Glossophobics therefore can go to a great extent in order to avoid speaking in public.

To reduce the stress that we encounter in such situations, we should firstly find a comfortable place. Now, sit down in a relaxing posture that is, feet apart, hands hanging loose, shoulders and head relaxed down. Then, try to collect your thoughts and motivate yourself so you put yourself in a comfortable space. Go to the stage where you shall be speaking and walk around it rehearsing the speech. Move around allowing your voice to fill the space of the room or hall, and practice essentially.

This is how you can easily deal with your fear of public speaking.







**Pradeep Sharma** *ECE 3rd year* 

#### The Freedom to Fail

With so much emphasis on success and testing in today's education culture, a major lesson is being missed in our classrooms; the lesson that experiencing failure is an inevitable step on your way to success. I just wonder about the direction that education is currently taking with the overemphasis on testing and examination success. We need to consider the fact the key skills that industry and commerce look for are innovation, the ability to take risks, and be creative.

There is an awareness when a project is started that may go wrong. We cannot expect perfection in just one hit! There will be ups and downs, and indeed there will be much frustration, but in the long term, the process will lead to success. The present situation is prevalent in many students, who are frightened to fail and this is not a good thing.

Countries like China are now changing their education system to reflect a more creative, risk taking culture. On top of this, they are promoting the idea of collaboration and teamwork. We work as a group and we bounce ideas off of each other. We often fail but we learn from our mistakes. Does this really reflect the individualised, exam-success-seeking student that the schools are promoting at present? I do not think so!

"One has to remember that every failure can be a stepping-stone to something better"

It is a famous quote from Colonel Harland David Sanders, an American businessman, best known for founding the fast food restaurant chain Kentucky Fried Chicken (KFC) about how he had to fail in order to succeed."





**Jasmine Kaur** TE 2nd year

#### **Destiny - A Play or a Playground?**

Everything one does or happens to him/her is according to the path he is destined to walk. God, the supreme being has written the skit and we all are playing our dictated roles in it. The stage is set and He is there to walk us through the story of our life, a planned life. If we have to play a role already written for us, how are we any different from puppets used in an act whose actions are controlled by one? And if we in fact are puppets to Him, does that mean we can not have a will of our own, or the personality that defines us and we strive to be perfect, is that personality just a written part that we would have got anyway? If there is a part laid down for us, why does He want to walk with us? Just to see how long his creations can last? Does this mean the life we think we have are just strings that control us? And if this isn't true, why do people say things like, "This is what God must've planned." or "He was destined to be like this." Do things have to end in a certain way no matter the efforts we put in? I don't think there is just one path for us.

I think of us as a living being full of life. We have been born in this world to live not to play a part, we are an entity of free will. He only wants us to live the life presented to us. And he only wants to walk with us on our paths just because he is curious about what would we make of ourselves with opportunities and obstacles we are going to face with that free will. He wants to see how are we going to play in the playground he has built for us, not how we act in the play He has written. Nothing has to be in a certain way. People make their choices, work hard, and along with a little bit of luck, it leads them to wherever they may be or are going to be.

In simple words, "Destiny is just a word used as an excuse by both failed and succeeded ones." ~ The Paradigmatic





Anshul Angira
ME 2nd year

#### The Great Indian Litterbug

He says "Home Sweet Home!" He loves to clean his home but keeps the entire country dirty. He is The Great Indian Litterbug.

Once I took my aunt to a semi-government hospital for a regular checkup. As I stepped into the hospital, my eyes caught the glimpse of the modern art around the corner of the walls usually of red colour fading away the actual white paint of the wall, courtesy of the Great Indian Litterbug.

The most amazing thing about this art is that it is been updated everyday by many incredible artists so called as common man. The man who says that the government has exhausted the country's resources, the so called common man is actually the great Indian litterbug who has superpowers of changing the environment. He is such an expert and professional in his techniques that he can convert a city into a dump yard. He is the Indian who celebrates littering as a birth right since the time he is born and the most beautiful part about this is that his littering gets better and better as he grows up.

In schools we got moral education about sharing and guess what! The litterbug takes it very seriously as he shares his waste, like waste paper with so drastic colours based on the flavors he takes, fish bones, plastic bottles and banana skin.

Do you know why Indians lack behind in basketball? Is it the height factor? No!

Actually we don't have a habit or practice to throw things in the basket and that's
why the bins are always empty and the waste is all around it, guarding it like an
army. Once a lady asked the litterbug, "Why do you pee on the walls?" The answer he
replied "For a man has to go when a man has to go, I will. Anything, everywhere, day
or night."

This iconic litterbug shows much interest in the global environment and yet so little care for his surroundings. He says it beautifully as he says, "As I spread my unholy water, let us pray, let us spray."





Diksha Thakur ECE 1st year

#### **Redefining Patriotism**

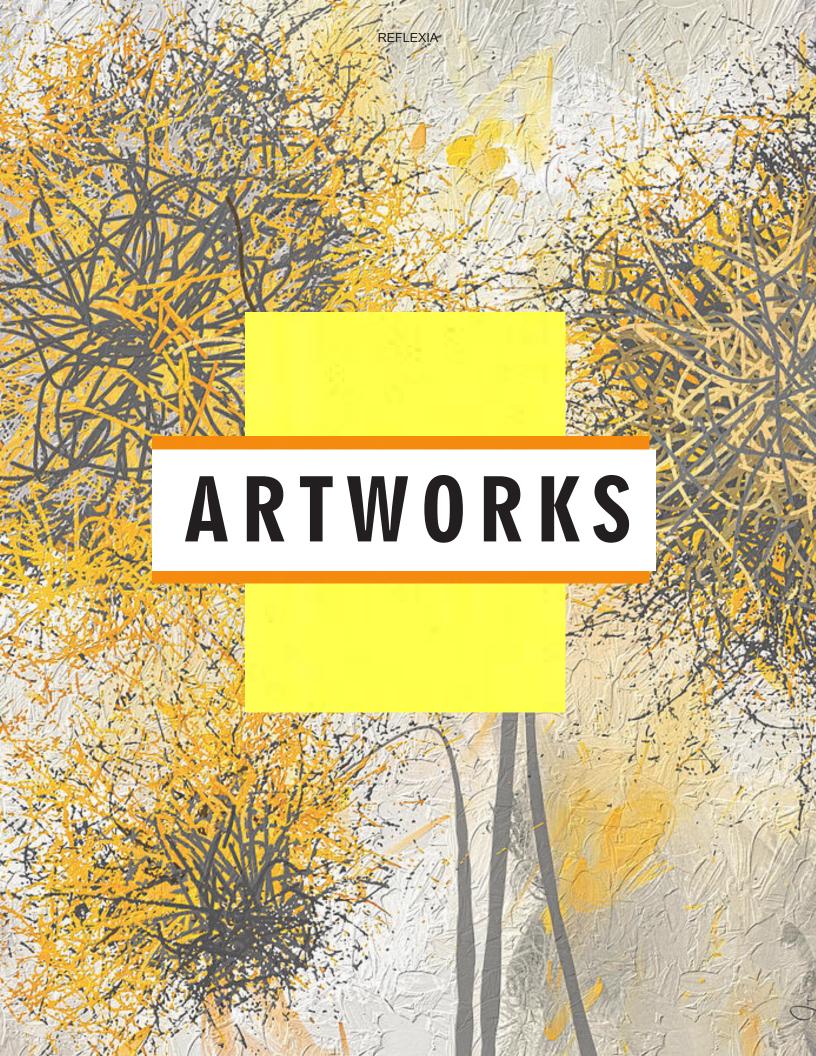
Great Indians embraced the gallows for their ideals, and thus became martyrs. Where every drop in the freedom fighter's blood fought not for itself but for the nation. Such a nation has today become indigent instead of indigenous of 'patriotism'. Yes I am talking of India where patriotism needs to be revived and redefined.

We all probably remember patriotism when there is an Indo-Pak cricket match and when terrorists bomb our trains. But we definitely forget it when we cast our vote in the elections, when a week long hungry beggar asks for a rupee, when we shamelessly throw garbage on the roads and yet so many times more. Patriotism is observed as nothing else than the 'pain on the prick of a pin'. It is rather believed to be a formality, a formality of saluting the national flag and 52 seconds of frozen stature during the national anthem. May be even a frozen heart with no gratitude for the martyrs because of whom we are living so well

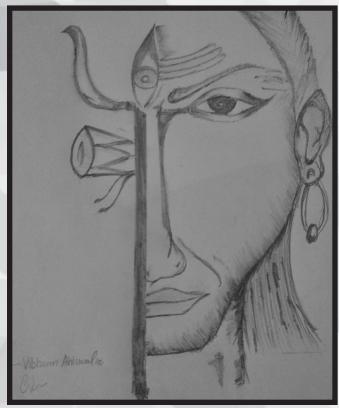
Now let us consider what patriotism should be in true sense. Patriotism need not have a mass motive, it need not be national. Small things and actions persuaded with a notion of doing good to other countrymen is patriotism. Patriotism should be imbibed by us to put into our day to day lives. As Elphinstone proposed 'Divide eta rule', that is, the path towards conquering an empire is division. Thus we will have to give up the ignoble thinking that we have nurtured towards the society. That is, the social divisions made by ourselves need to be abolished. Or it won't take long for another British Empire to crack us down.

Not only being patriotic towards your country is patriotism but honouring our opponents' patriotic feelings is also a facet of the diamond, patriotism. Patriots don't talk about taking life but of giving life for their country. Patriotism is not all about attack, it's about defence, it's about counterattack. At last I feel, what cannot describe patriotism better than this is - patriotism is like a needle that joins and unites and not a scissor that cuts and divides.

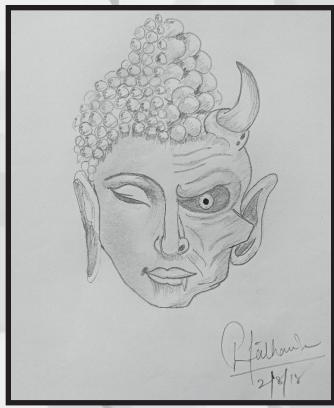




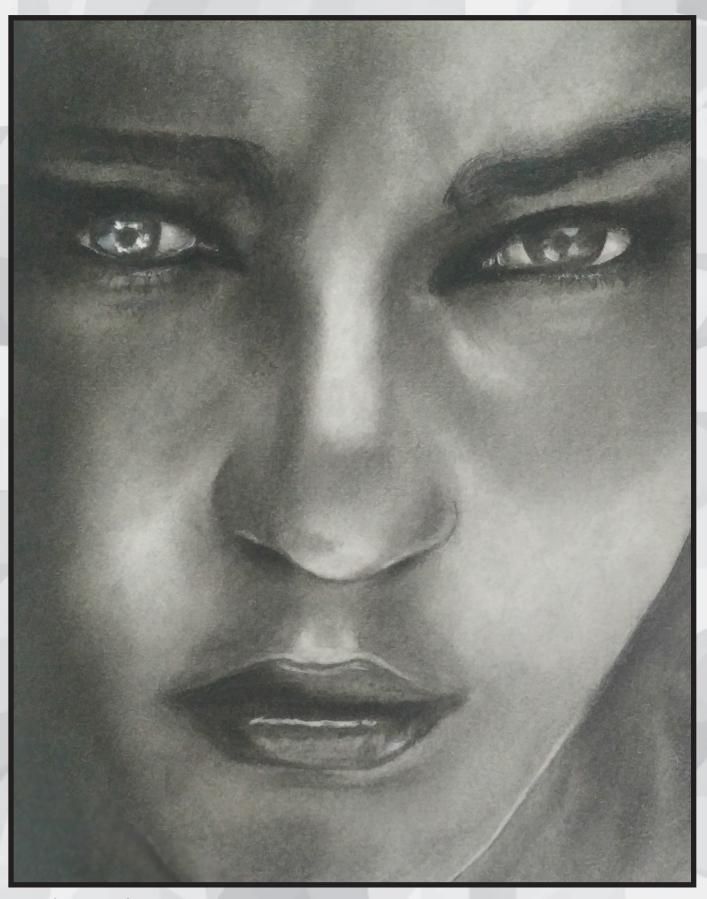




Vibhum Ahluwalia (CE 1st year)



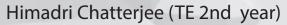
Rajat Pathania (ME 3rd year)



Artika Bansal (ME 1st year)





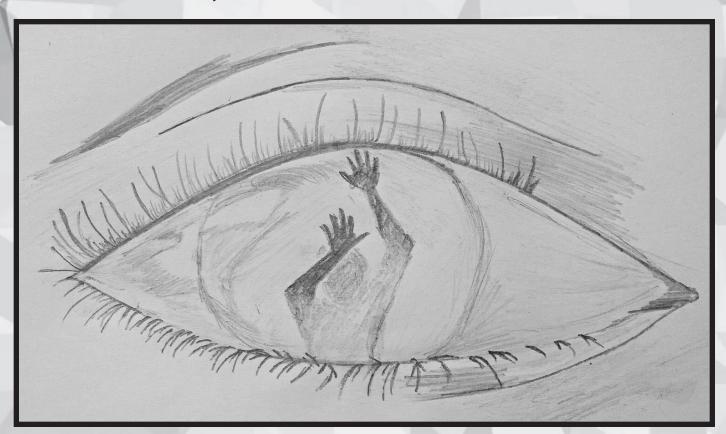




Shubham Jamwal (ME 3rd year)



Tanvi Chauhan (CE 1st year)



Aman Dhiman (ME 3rd year)



Jahanvi Thakur (ME 1st year)





**Divynish Sharma** *ECE 3rd year* 

#### 5D Optical Data Storage

A tiny glass can actually store 360TB of Data for 13.8 Billion years!

At first glance, five dimensional storage might sound a bit like pseudoscience-but, in this case, the data is really stored on five different dimensions (surfaces, planes). The zeros and ones to be stored can now be stored on this tiny glass discs created by researchers at the University of Southampton that are capable of storing up to 360-Terabytes of five dimensional (5D) digital data, and unless you crush it, these discs are so non-volatile that data stored on them should "survive the human race." The interesting fact is that each one of these discs can withstand temperatures up to 1,000° C, and can keep data intact for 13.8 Obillion years at room temperature. Documents like the Magna Carta, are recorded using ultra-fast laser, producing extremely short and intense pulses of light. The file is written in three layers of nano-structured dots separated by five micrometers.



To record data, spots are imprinted on the glass using a femtosecond laser. A femtosecond laser, in this case, produces bursts of laser light that last for just 280 femtoseconds (280 quadrillionth of a second). These spots, thanks to the nanostructuring of the surface, and some hologram cleverness, are capable of recording up to three bits of data in two "dimensions." By varying the focus of the laser, the team are able to create layers of dots that are separated by five micrometers (0.005mm) in the z-axis (the third dimension). Then, by simply moving the laser horizontally and vertically, these tri-bits can be stored in two more dimensions, bringing the total to 5D. The image at the top of the story helps illustrate this concept. To read these spots, an optical microscope that's capable of untangling the polarized light reflected by the three-bit spots is used.

"Who knows what's going to happen thousands of years down the line, no one can predict that," says Patel. "But what we can guarantee is that we have the ability to store the culture, language, and the essence of the human race in a simple piece of glass. For future civilizations — or whatever else is out there."





**Anish Dhiman** *ME 2nd year* 

#### A Car Grown in Lab

There is no denying that Mercedes-Benz has been one of the greatest innovators in the car industry. But, the inventors of diesel, supercharged engines for passenger cars, anti lock brakes, electronic stability systems and more may have one-upped themselves with the BIOME. Unveiled at the L.A. Auto Show back, the ambitious goal of Mercedes-Benz is to create a 100% organic and biodegradable car which can be grown in a laboratory. Not built but Grown! The Mercedes-Benz BIOME grows in a completely organic environment from seeds sown in a nursery. Out on the road the car emits pure oxygen, and at the end of its lifespan it can be simply composted or used as building material. To get an idea of how revolutionary this is, scientists have been trying for ages to make a car which runs on water/oxygen and releases hydrogen. This organic hybrid will be a complete symbiosis with nature, as



it does not run on oxygen, thus improving the overall air quality of life as well. Not only would such a car prevent air pollution from increasing, it would also actively cause air pollution to decrease.

The car would be made by growing a material called BioFibre, an organic material lighter than metal and plastic, yet stronger than steel. In total, there are six laboratory-designed BioFibre seeds which will grow into the car, and each seed will look like the signature Mercedes-Benz star The interior of the BIOME will spawn from the DNA of the star on the front of the car, and the exterior will germinate from a star on the back of the car Each wheel will also be grown by four other seeds.

At the moment though, the BIOME is simply a concept car, it is way ahead of its time. However, with some inspired innovation and ingenious engineering, the BIOME may become as common as the Maruti within the next few decades. The seed has already been planted, it just needs to be watered.





**Vishal Thakur** ECE 2nd year

#### Nima: Portable Gluten Sensor

For people with gluten allergies or celiac disease, the idea of eating out in restaurants can be terrifying. It typically involves scrutinizing menus and food labels, interrogating waiters, or having to bring their own meals wherever they go. But now, a discreet new device, small enough to fit into a pocket or purse, could make eating out an easier and safer experience for gluten-sensitive people.



Manufactured by San Francisco-based startup 6SensorLabs, the portable glutentesting device, called Nima, can test food for the presence of gluten, providing results within minutes and reducing people's food anxiety The device could also provide greater social freedom, making meals more enjoyable, said 6SensorLabs co-founder and chief technology officer Scott Sundvor Using the Nima device, individuals can make sure their food is gluten-free by placing a tiny piece of their meal inside a disposable capsule, twisting the cap shut and inserting the capsule into the Nima's main sensor unit. Within 2 to 3 minutes, Nima will let users know if the food is safe to eat by displaying a smiley face on the screen if there is no gluten, or a frown if the result is positive for the protein, the company said.

Gluten refers to the proteins found in cereal grains endosperm (a type of tissue produced in seeds that are ground to make flour). Gluten both nourishes plant embryos during germination and later affects the elasticity of dough, which in turn affects the chewiness of baked products. Gluten is actually composed of two different proteins: gliadin (a prolamin protein) and glutenin (a glutelin protein). Though true gluten" is sometimes defined as being specific to wheat, gluten is also found in barley, rye and a grain that is a cross between wheat and rye called triticale.

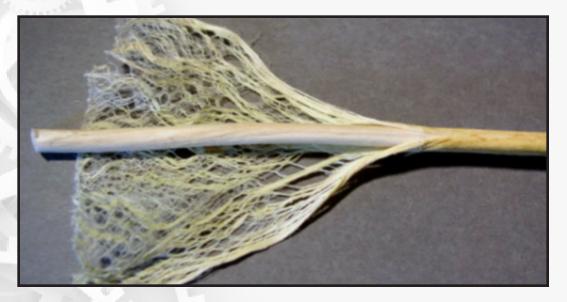




Aditya Chauhan TE 2nd year

#### **Lotus Fibres**

Using lotus fabrics and textiles may sound exotic to western ears, but in countries like Thailand and Myanmar, for example, lotus fibers have been used for special garments for centuries. Not surprisingly because the manufacturing process produces a luxurious fabric that feels like a mixture of silk and raw linen that is also stain-resistant, light weight, soft, silky and extremely breathable. 'What's not to love?' one may ask again. In this case, it is the complicated and lengthy manufacturing process that is the biggest hurdle when using lotus stems.



After harvesting the lotus stems, they are cut open at the end to extract the long, thin fibers. This must be done within three days of harvesting to achieve optimal results. The fibres thus obtained are washed and hung to dry before hand-woven on traditional looms. The quality of the lotus fabric is so superior that there have been attempts at commercial use; Jaipur-based Hero's Fashion Pvt Ltd from India, for example, has already found many followers with its white NoMark Lotus shirt.

It remains to be seen how commercially viable and suitable for large scale production lotus - portrayed here is. Similarly, hemp, nettles and coffee have huge potential for the mass market, whereas fabrics made out of pineapple should be interesting for the luxury market.





**Harit Guleria** CE 3rd year

### Harvesting Energy from Roads

Solar panels on roads are now reality, as Missouri's Department of Transportation has announced it will trial Solar Roadway's solar road tiles in a sidewalk at the Historic Route 66 Welcome Centre. While this is a minor trial, the goal of the project is to see if the technology is viable and safe for use on regular streets.

Solar Roadways is a startup whose hexagonal modular paving tiles combine specially engineered solar cells, alongside LED lights that are able to create lines and signage without difficulty. Heating elements integrated into the tiles prevent snow and ice accumulation.

The hexagonal shape offers extra stability against wear, and also flexibility when installing at curves, hills, and other odd-shaped areas. Each panel contains a microprocessor, and are able to communicate with each other, a central control station, and vehicles.

A specially formulated tempered glass allows the tiles to be safely walked and driven upon, with the toughness to support the weight of semi-trucks up to 113,398 kg. When laid on the ground, the panels have a tractioned surface similar to asphalt, but are imperious to potholes. The roughness of the surface is able to stop a vehicle travelling at 129 km/h in the required distance, even in wet conditions.

The Solar Roadways team hopes the use of their panels would create a highway system that would pay for itself over time by generating renewable energy. The electricity from the roads could also be used to power nearby houses and buildings, helping eliminate power lines. The smart technology within the panels could also work with the next generation of smart cars.







**Onkar Sharma**ME 2nd year

### Does VR Make You Sick?

Virtual reality, long the stuff of sci-fi movies and expensive, disappointing gaming systems, appears poised for a breakout. Facebook CEO Mark Zuckerberg spent \$2 billion in 2014 to acquire Oculus VR and its Rift virtual-reality headset. Google now sells a box cardboard viewer that lets users turn their smartphone screens into virtual- reality wonderlands for a mere \$15. And YouTube just introduced live, 360-degree video streaming.

How VR Sickness works?

Imagine standing below decks in a boat on choppy seas. The entire cabin is moving, so your eyes tell you you're standing still. But you feel the movement -up, down, pitching side to side. You start to feel clammy. Your head aches. You go pale and reach for a trash basket to retch into.

The problem starts in the vestibular system, a series of fluid-filled canals and chambers in the inner ear This system includes three semicircular canals, all lined with hair cells, so named for their hair-like projections into the liquid-filled channels. As the head moves, so too does the fluid in the canal, which in turn stimulates the hair cells. Because each canal is situated differently, each sends information on a different type of motion to the brain: up/down, side to side and degree of tilt. Connected to the semicircular canals is the utricle, a sac containing fluid and tiny calcium carbonate particles called otoliths. When the head moves, so too do the otoliths, sending the brain signals about horizontal movement. Next door, a chamber called the saccule uses a similar setup to detect vertical acceleration. This system typically works in tandem with the visual system and with the proprioceptive system, integration sight and sensation from the muscles and joints to tell the brain where the body is in space. A virtual-reality environment hammers a wedge between these systems.

Virtual-reality developers are working to combat the nauseating side effects of their products. People have different levels of susceptibility to virtual-reality sickness, and they can also adapt to situations that initially turn them green around the gills.





**Divyansh**ME 2nd year

### Microsoft HoloLens

NASA is aiming to send astronauts to Mars sometime in the 2030s, but a new technology could help scientists explore the surface of the Red Planet from its sprawling craters to its enormous volcanoes -from right here on Earth. Researchers at NASA's Jet Propulsion Laboratory in Pasadena, California, partnered with Microsoft to develop software that uses the tech giant's HoloLens headsets to allow scientists to virtually explore and conduct scientific research on Mars. The HoloLens is an augmented reality platform that allows us to overlay imagery on top of the world and integrate it into that world as we are looking at it.

According to NASA, this new capability could reduce crew training requirements and increase the efficiency at which astronauts can work in space. In order to prepare for the mission, and what it would be like to use HoloLens at the International Space Station, NASA had a chance to experiment with it quite a bit at the Aquarius underwater research station as a part of NASA Extreme Environment Mission Operations NEEMO.

In December 2015, a shuttle resupply mission successfully reached the International Space Station. Among the cargo were two Microsoft HoloLens devices for use as a part of NASA's Sidekick project. The goal of Sidekick is to enable station crews with assistance when and where they need it.



\*Image Source: Internet







Aarti Rangray
CE 1st year

### No Shame

The unexplored body being touched as if it is sacred.

It was the misfortune of that body that it was sold.

Her story remained untold.

And nobody even dared,

To talk about it,

To fight against it.

Treated like a mannequin,

With no feelings.

Numbed thoughts and no healings.

As if treating her like that was his license.

A small girl

With dreams, hopes, aspirations.

Lost in the swirl

Of patriarchy and male chauvinism.

In this modern era where we are taught to generalise sex education.

Some people go beyond, even beyond those firm borderlines and limitations.

Burdened with the shame,

She didn't even utter his name

Then silently, listened to rumors lame,

And the rapist was just enjoying the game.

Shame? Really...?

What was her fault to be ashamed?

When the world itself was tamed.

It's not her,

But us, who need to introspect.

Because she's a human too,

Who needs equal respect.

Even after being raped,

Healing wounds gaped.

She gathered her courage,

And showed her rage.

Oh, sorry!

Things mentioned above are just an imagination.

Because she is a girl,

How could she shout out loud,

Or describe her pain.

When in the age where she doesn't even know what's happening,

Where she is muted,

And we're daily shocked to hear women committing suicide.

Why?

Why, because she was ashamed?

Was this all her fault?

No!

Still, she was left in the silence weeping for hours.

Nobody even saw those hidden scars.

Why was she blamed?

This is the case of a strong, independent young women.

Who just wants to protect her so called 'sacred hymen'.

So, what could you expect from a seven year old helpless girl?

Who don't have an idea of what's going on,

How could we expect her to be strong?

When we aren't ending that swirl

And holding it too long.

The world is changing and we also must change.

Please

Help them, they are not bodies to be sold,.

They weren't meant to be tamed.

Just make a step little bold,

Give her the support she needs.

Raise her with the mentality which feeds,

Feeds her with the courage she needs,

Every morning for breakfast.

Make that cry of her the first and the last!

Because it's easy to be the one in the audience,

But it's really hard to even imagine being the victim of that criminal

offence.





Aakanksha CE 1st year

### एक शहज़ादी की कहानी

एक शहज़ादी थी जंगल की, जो कामना करती थी सबके मंगल की। सारी दुनिया में हो रहा धोखा उसने भी देखा, फिर भी इस सबको कर अनदेखा, निकल पड़ी वो ढूंढने एक ऐसा मौका, ज़माने को प्रमाण अपनी मेहनत का देने का ये बताने का-

कि मैं सिर्फ एक फूल की कली नहीं, हैं मुझ मैं कुछ काँटे भी, मैं सुंदर कल कल बहती नदी ही नहीं, हूँ हर अत्याचार के खिलाफ उठने वाला सैलाब भी, मैं सरल बहती हवा ही नहीं, बन सकती हूँ वक़्त आने पर तूफ़ान भी।

पर वो बेचारी, जानती नहीं थी हर तरफ घूम रहे थे अत्याचारी, ढूंढ रहे थे वो भी एक मौका, अपनी दरिंदगी दिखाने का, अपनी मर्दानगी का प्रमाण देने का, कहते थे वो प्यार के भाव हम नहीं, हम तो वो बलवान हैं जो किसी से डरे ही नहीं, कहते हैं वो भी सीना ठोक कर- कि मचलती हवा को कह दो कि ठहर जाएँ, इन बहती नदियों से बोल दो कि शांत हो जाएँ, ऐसा नहीं की प्रलय एक बार फिर आए, तुम सैलाब बनो या ना बनो, कहीं हम हैवान ना बन जाएँ, ऐसा ना हो खुद के काँटे खुद को ही चुभ जाएँ, अपने इस सैलाब में खुद की सांसे ही थम जाएँ।

डरी थोड़ी सी मगर सहमी नहीं, घबराई थोड़ी देर पर फिर उठ खड़ी हो गई। आखिर उसके लिए तो सपने ही बस उसके अपने थे, बुलंद आवाज़ थी और इरादे पक्के थे। जाने उसकी खुशी क्यों किसी को रास न आई, जाते जाते वो सामने तो आई पर उस बेजान काया से एक आवाज़ न आई।

उस हवा, उस नदी की आवाज़ से इस खामोशी तक, उस उमंग कि तरंग से इस सन्नाटे के कहर तक। इस बीच क्या हुआ कैसे हुआ किसी को मालूम नहीं, जिसे पता था वो हैवान तो किसी से डरे ही नहीं। वो ख़्वाब, वो इरादे बस यूँ ही मिट गए, खुली आंखों से देखे सपने गहरी नींद में सिमट गए, उस शहज़ादी कि कहानी समाज़ की सिलवटों तले छिप गई।





Akhil Dogra TE 4th year

### College Life

Stepping into a new life where One faces oneself.

Some consider everything a race And chase them all, While others find it difficult To even tie their shoe lace.

Many here care for you, But you care for a selected few.

Lots of pressure, lots of leisure, In the midst of which, some search for treasure.

The greatest invention being the headset,
Without which no one's heads are fit.
More sleep, less work, but still,
Feeling tired every other minute.
Sudden decisions, rare output,
Even don't care for taking next,
More dance, more wishes,
Many exams and tests.
Suddenly, when you look back,
The poster says 'The End'
The 35040 hours of these four years,
Are just like the three hours of a movie,
Passing by in the snap of your fingers,
Leaving behind many memories that linger.





Aditya Sharma ME 3rd year

### संदेश: एक युवा का

धर्म की परिभाषा को किनारे रखकर इस देश का विकास करो, निर्भय, निडर, निष्पक्ष तुम, एयर स्ट्राइक और सर्जिकल स्ट्राइक पर विश्वास करो। स्वप्न है यह मेरा, कि यह देश आज़ाद रहे, आबाद रहे, मेरे देश के किसान और जवान सदा ज़िंदाबाद रहे, ज़िंदाबाद रहे। छोटी बड़ी रियासतों, प्रदेशों के संयोग से बना है हमारा यह भारत देश, इसकी एकता, अखंडता और सम्मान सदा अभेद रहे यही है यारों मेरा संदेश। यही कहूँगा कि इस प्यारे देश को जयचंद, विभीषणों से बचाए रखना, आने वाली पीढ़ी को हमारे वीर सपूतों की गाथाओं से अवगत कराए रखना। "मैं मैं" कहने से कुछ नहीं होता, "मैं से हम" होकर ही हम जीत पाएंगे, हिंदुस्तान तभी बनेगा सबसे महान, आलीशान और बलवान जब सारे भारतवासी एक ही लक्ष्य को ठान कर कदम बढ़ाएंगे।





**Shagun Rana** TE 1st year

### A Woman

A woman is so powerful, that she can even conquer the world all alone. The only thing she needs is strength, that she already owns. Oh you girl! Why are you hiding your power? Reveal your confidence, now you are not a bud of flower. You are a human too, equal to a man. Of course you will go ahead, but when? The time is now, let's have a fight. with the stereotypes, spread around the world. Even if you lose, Don't leave the hope. If you are right, the world is a dope. Never forget, a woman is just as powerful as a man.





**Kajol Sandhu** *ECE 2nd year* 

### Electronics की दुनिया

कहता था वो Physics मुझे कि तेरा साथ ना मैं छोडूंगा कभी, हां निभाना था उसको भी वादा अपना फिर आया मुझे Electronics का सपना, मैं क्या पहचानूँ, थी वो हकीकृत पर कर ली मैंने भी नसीहत. है वो दुनिया ऐसी जहां इंसान की जगह चलती है Waves, जहां ज़ुबान की जगह बोलता है Program, जहां आंखों की जगह देखता है Camera, जहां खाने की जगह ताकत देता है Charge, हां भाने लगा मुझे वो रस्ता फिर दिया मैंने भी यह वास्ता, कि बनाऊंगी कच्ची उम्र में पक्की पहचान रोज़ इलेक्ट्रॉनिक के नाम की पड़ूंगी अज़ान, पता नहीं कब तक वो छोटी सी I.C. मेरी दुनिया बन गई, फैला कर बाहें अपनी. कब मैं उस में सिमट गई, हां कहता था वह फ़िज़िक्स मुझे कि तेरा साथ ना मैं छोड़ंगा कभी।।





**Divyanshi Chaudhary** *CE 2nd year* 

### Fortress of My Happiness

Maybe it's not as simple as choosing to be happy or unhappy.

If it's true that I am the only master of my emotions,

Then why do I feel the world around me so sharply?

A simple raised voice: a disagreement,
An overhead conversation and the feeling.
All the things left unsaid, yet felt,
All added to the pile of unexpressed emotions.

Yes it's hard to block these things out of my carefully constructed fortress of happiness.

Besides, it's lonely in there and my ears ring in the silence.

So let the walls down, And rejoice the feeling.





Kalyani Jaswal ME 3rd year

### मेरा बंटा हुआ भारत

नफ़रत के ठेकेदारों ने एक परिवार बांट दिया। घर के हिस्से दो हुए कुछ वो ले गए, कुछ हमने छाँट लिया।

"धर्म तुम्हारा नीच है रहन तुम्हारा गलीच है।" इन बेबुनियादी बातों से, खेल गए व्यापारी हम सबके जज़्बातों से। कहानी एक, इतिहास की है, भारत के उपहास की है।

जहाँ ईद पर मंदिर सजते थे, दरगाह में नगाड़े बजते थे, उस भारत की जड़ें नोंच दी, अनेकता से एकता दबोच दी, पवित्र यह धरती खरोंच दी। वो भर जेबें गए चले हम दब गए विभाजन तले। नासूर वो आज भी दुखते हैं, जब जाबजों की

निशानियों पर सिर झुकते हैं। कोई पूछे अब उन गद्दारों से, उन धर्म के ठेकेदारों से "आज भी आज़ाद कहाँ हैं हम? सिपाहियों के जनाज़ों पर जिंदा हैं, वरना, आबाद कहाँ हैं हम?"





**Vaibhav Gupta** *CE 3rd year* 

### One Day We'll Meet

On a bright sunny day, when I'll be driving past the woods, you'll catch my attention lying in the middle of the road.

Lonely, timid, searching for a shelter, craving for love, I'll run towards you and hold you in my arms.

Maybe one day we'll meet.

When after a tiring day, I'll return back from college and open the door, you will come wagging your tail to play with my shoes, and melt away all the frustration and tiredness.

Maybe one day we'll meet.

When I'll never miss a chance to keep you warm, and make you feel at home.

I'll never let you fall sick and if you still get sick I'll provide you with the best of the treatment.

Maybe one day we'll meet.

When I'll understand your silence.

When I'll never keep you out in the freezing cold.

When you'll no more be a memory.

Maybe one day we'll meet again, and until then, I'll miss you.





**Keshav** *CE 3rd year* 

### मिट्टी भारत की

धरा यह है वीरों की, है उनके बलिदान की। शौर्य से भरी है गाथा जिसकी, वो मिट्टी हिंदुस्तान की।।

ग़जब है इतिहास इसका, धर्मगुरु रहा विश्व का। ज्ञान दिया, सम्मान किया, फिर कुछ लोगों ने वार किया। सोने की चिड़िया थी जो, उसको दुश्मन ने लूट लिया।। उठ खड़ा हुआ यह, जन्मे कई योद्धा फिर से, कहानी यह उनके गुणगान की। शौर्य से भरी है गाथा जिसकी, वो मिट्टी हिंदुस्तान की।।

लाखों ने जब लहू बहाया, फिर से जग को था दिखलाया, हम सब के रहते धरा को, आँच ना आने पाएगी। यह छोटी सी चिंगारी इक दिन, ज्वाला बनकर आएगी।। जल उठे इरादे दुश्मन के, सुनकर बातें यह महान सी। शौर्य से भरी है गाथा जिसकी, वो मिट्टी हिंदुस्तान की।। प्यार से कहते भारत माता, शीश सभी झुकाते हैं। नित-दिन इसकी रक्षा करते, जान कई लुटाते हैं।। करें जो दुश्मन लाख कोशिशें, ध्वस्त हर इक हो जाएगी। हस्ती उसकी काल अंत तक, मिट्टी में मिल जाएगी।। याद रखना तुम हमेशा, यह कहानियाँ बलिदान की। शौर्य से भरी है गाथा जिसकी, वो मिट्टी हिंदुस्तान की।। जय हिन्द!





**Nishant Thakur** *ME 1st year* 

### A Street

It is a chilly evening with cold breeze, running past our faces. We are in a street park. A group of youngsters having a serious conversation on their goals, getting that dream job and striving towards a better life. Some children are also playing in the background. They belong to a slum nearby. In the cold weather, all they are wearing are torn pieces of clothes. They are bare footed and look really shabby. Still, they appear happy and so full of life, with no expectations. They are so unlike us. Are we wrong for striving towards a healthy life and not enjoying what we have? Or are they wrong to enjoy such a hard life? In my opinion, nobody is!





Manish Kumar CE 1st year

### घर से दूर

घर से दूर
बहुत ही मजबूर,
आना पड़ा घर से दूर।
आया घर से,
कई सवाल ले कर
जवाब अभी बाकी हैं।
निकल गए हैं घर से,
नाम बनाना अभी बाकी हैं।
दिन निकल रहे हैं,
अभी भी हाथ खाली हैं।
याद आती है घर की,
माँ की, पापा की,
आखिर बहुत समय बाद
निकला हूं मैं घर से दूर।।





Ritulesh Mohan CE 1st year

### Now

I have received my downfall, Now it's time to rise up. I am lagged far behind, Now it's time to gear up. I was lazy so far, Now it's time to wake up. I was being foolish so long, Now it's time to be wise. I was rude to myself all the time, Now it's time to be nice. I was crying all the time, Now it's time to smile. I was planning and thinking so long, Now it's time to work out. I have seen the world doing greatly, Now it's time to show up.





**Jagriti Arora**CE 1st year

### माँ

माँ तू तो जन्नत है, तेरे बिना हर एक चीज़ की किल्लत है। माँ तेरे साथ हर खुशी है, तू ही तो हर खुशी की वजह है, तेरे बिना जीना एक सज़ा है।

तेरे होने से ही हर घर में रौनक है, तेरे होने से ही हर घर में रौशनी, वरना हर घर में जैसे होगा अंधेरा, उसी तरह हमारी ज़िंदगी में भी तेरे बिना है अंधेरा। माँ तू तो जन्नत है, तेरे बिना हर चीज़ की किल्लत है।

क्या-क्या नहीं करती तू हम सब के लिए, अपनी हर खुशी के बदले सिर्फ़ हमारी खुशी मांगती है। तू चाहती है अपने बच्चों की खुशी, तू अपने लिए कुछ नहीं मांगती है। हर बच्चे के दिल से निकलती है ये आस, कि उसकी माँ हमेशा रहे उसके पास। क्यूंकि माँ के बिना उसकी ज़िंदगी है खाली, उसे दूसरों की हर बात लगती है गाली।

तेरे होने से ही होती उसकी सुबह है, तू नहीं तो हर सुबह भी जैसे लगती अंधेरी रात है। तेरे होने से ही उसका जहान है, तू है तो सब कुछ उसके पास है।

माँ तू तो जन्नत है, तेरे बिना हर एक चीज़ की किल्लत है। तू है तो इस धरती में है रंग, तेरे बिना लगती है ये ज़िंदगी बेरंग। तू है तो भगवान भी उसके साथ है, तेरे बिना उसने छोड़ी खुद से आस है। तू है तो उसका खुद पर विश्वास है, तू है तो चलती उसकी साँस है।





Rohit Kumar CE 4th year

### जाने हम कब बदल गए

खामोशी के पन्नो पर बचपन की याद लिख दे, इन अनसुनी राहों पर आज कोई फ़रियाद लिख दे।

वो कोमल सी निष्पाप हँसी, वो खिलखिलाता सा मन, ना जाने इन यादों में, कैसे खो गया बचपन।

> पलट कर देख, वही महका समां है, यादों की करवटों में झूमता जहां हैं।

बचपन की डोर ने जाने कितने रिश्ते हैं बांधे, प्यार से मासूम गांठें है बाँधीं।

आज़ाद था मन, आज़ाद थे हम, दुःख, पीड़ा, ईर्ष्या, द्वेष, कहाँ जाने थे हम।

दोस्तों की बातें दिल की नजदीकियां बन जाती थीं, आपसी तकरार जीवन की नवनिधि बन जाती थी।

क्या थे वो दिन बस यूँ ही गुज़र गए, गुमनाम इन राहों में, जाने हम कब बदल गए।

> यादों का संचार है, जिन पर हमें अभिमान है।

इन यादों को आज मेरा सलाम है, जिन यादों में डूबता ये जहां हैं।







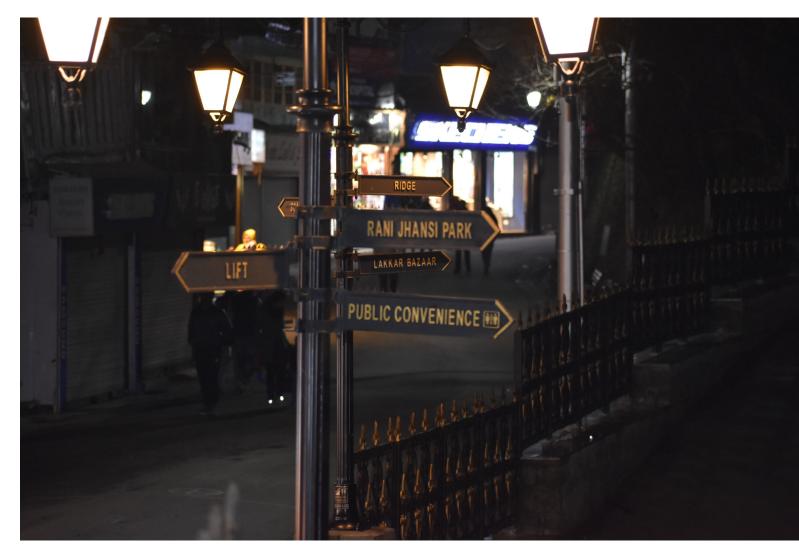
Shubham Thakur (ME 1st year)



Uday Bhushan (ME 3rd year)



Armaan Katoch (ME 2nd year)



Ajay Thakur (ME 3rd year)



Yash Karan Sodhi (ME 2nd year)



Aditya Sharma (ME 3rd year)



Aman Sethi (ME 2nd year)



## NCC

Promoting the sense of patriotic commitment, respect for knowledge, wisdom and power, NCC aims at building up the future of the youth. The first unit of this responsive, learning and continuously evolving organisation was established at JNGEC in the year 2016, and ever since, it has been working hard for the development of youth and society.

Motto of NCC: Unity and Discipline

Capt. H.S. Rana NCC Commanding Officer at JNGEC, Sundernagar

Unit: 2HP BN NCC Mandi
Total Number of Students Enrolled: 50

Boys: 37 Girls: 13

NCC Commanding Officer at JNGEC Campus: Capt. H.S. Rana

Senior Under Officer: Aman Dhiman (ME 3rd year)

**Under Officer: Abhay Pratap Singh (CE 3rd year)** 

Sergeants: Shashwat Kapoor (CE 3rd year) and Harshita (ECE 3rd year)

BEE Certificate passed in year 2019: 15
CEE Certificate passed in year 2019: 16

### Camps:

Combined Annual Training Camp in Joginder Nagar: 20 Cadets

Advanced Leadership Camp (National Level) in Malot, Punjab: 2 Cadets

















### NSS

National service scheme (NSS) is a voluntary association of young people in schools, colleges, and universities. It is an Indian government-sponsored public service program conducted by the Ministry of Youth Affairs and Sports of the Government of India.

The motto of NSS "Not Me But You", reflects the essence of democratic living and upholds the need for selfless service.

2017 witnessed the start of the first official NSS unit of JNGEC. Ever since, various activities have been performed by the students, as well as the faculty members for the welfare of society and nature. Some main highlights include Blood Donation, Tree Plantation, Cleanliness Drives, etc.











# twa sk

26th April 2019, A beautiful one day techno-cultural fest--Twask 2k19 was organised in Jawaharlal Nehru Govt. Engg. College, Sundernagar.

With the theme "Technology with Heart", Twask was accompanied by different kind of events such as cultural, technical, literary, general etc. Several cultural performances such as Bhangra, Nati, Drama, Qawali, etc. were presented. In the literary event, an open mic competition was organised where students presented their spoken words. The students of the college participated in various events like Roadies, Mr. & Ms. Ardent, Student of the Year, etc, with full zeal and enthusiasm. The events unified the entire college and helped students to explore their hidden talents. At the end of the event, a the whole college danced to the beats and drops of DJ Axt..

Sh. Ajay Kapoor (Director of MLSM college) and Sh. Ajay Bisht (General Manager, Power Corporation) were the Chief Guests of this event.













JAWAHAH



# Chakravyuh 2019

Sports and athletics were probably the first methods of entertainment devised by human society. From Chariot racing to Gladiator combats, from Buzkashi to Polo, sports served the dual purpose of entertaining as well as keeping people fit. Swami Vivekananda while explaining the importance of sports and teamwork once said-

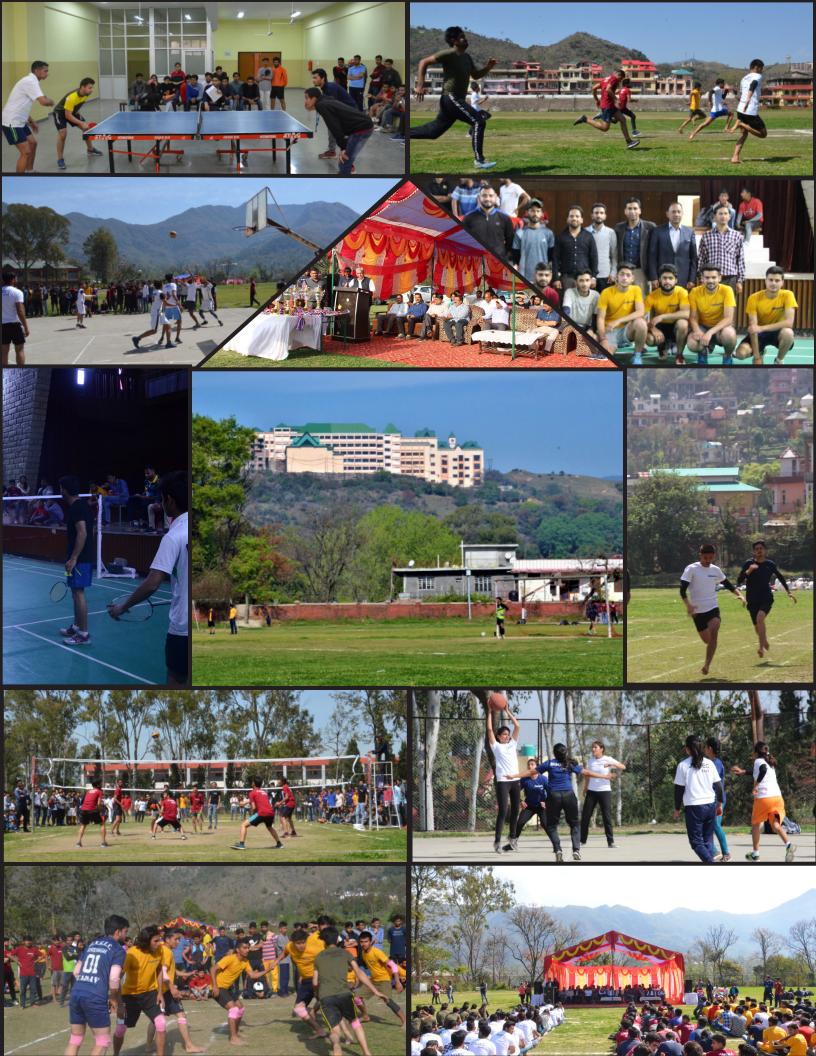
"You will be nearer to the heaven through football than through the study of the Gita"

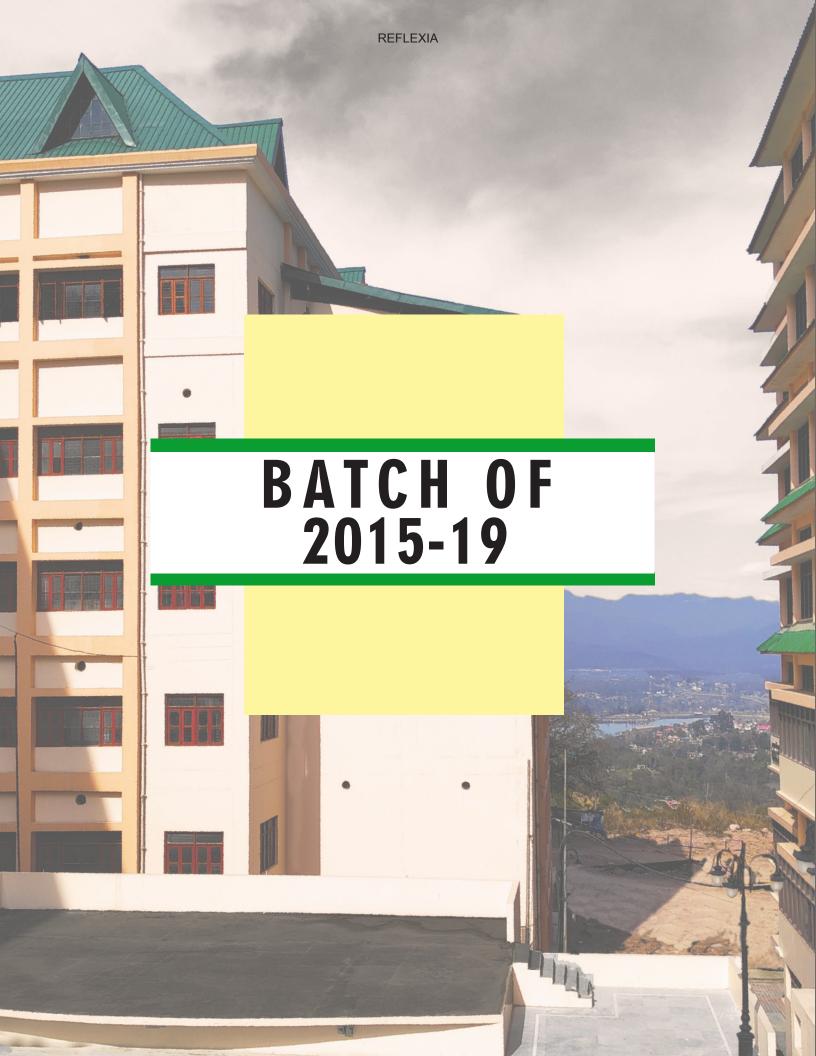
Keeping this in mind, a two day sports fest "Chakravyuh" was conducted in Government Polytechnic Ground, Sundernagar from 28th to 29th March, 2019. Students from both, Jawaharlal Nehru Government Engineering College and Mahatma Gandhi Government Engineering College participated to represent their respective colleges and branches.

The energy in the participants as well as the spectators was all time high.

Our respected Director, Dr. Vinod Kumar, was the Chief Guest of the occasion who acquainted the students about the benefits.







# Department of Mechanical Engineering



Row 1 (Top): Sachin, Nikhil, Pankaj, Abhishek, Arvind, Shivam, Amrit, Rahul.

Row 2: Rahul, Avinash, Rishikant, Pankaj, Parminder, Shubham, Nikshunj, Tanuj, Akshay, Yugal.

Row 3: Vikram, Gaurav, Gitesh, Vikas, Sahil, Vishal, R.B. Pankaj, Neeraj, Akshay, Rajesh, Rajat.

Row 4: Mr. Amit Deor, Mr. Aman Sharma, Mr. Chetan Sharma, Mr. Gaurav Mahajan, Mr. Ajay Kumar, Dr. Vinod Kumar, Dr. Rajeev Khanduja, Dr. Ritesh Kaundal, Mr. Rohit Bhardwaj, Mr. Karun Singh, Mr. Tijender.

# Department of Textile Engineering



- Row 1: Nishant, Nitish, Ajay, Sumit.
- Row 2: Ajay, Shubham, Sahil, Himanshu, Nikhil, Sumit, Akhil, Rishabh, Manish.
- Row 3: Vineet, Binshu, Tarun, Vaibhav, Jatin, Saurabh, Gagan, Mohit, Atul, Abhishek, Ashutosh.
- Row 4: Sneh, Bharti, Kanchan, Ankita, Nikita, Aditi, Gulshan, Balbir, Shehnaz, Deepika.
- Row 5: Mr. Vivek Sharma, Mr. Gaurav Grover, Mr. Ajay Daroch, Mr. Amit Kumar, Mr. Praveen Kumar, Dr. Vinod Kumar, Mrs. Priya Jaswal, Mrs. Urvashi Malhotra, Mrs. Preeti Gautam, Mr. Ankush Sharma, Mr. Dinesh Bhatia.

# Department of Electronics & Communication Engineering



- Row 1: Vinay, Rubin, Jasvinder, Pramod, Aman, Vyomkesh.
- Row 2: Shubham, Swapnil, Shubham, Tamesh, Nitin, Shiv, Mohit, Dhananjai, Ankit.
- Row 3: Ankush, Yakshesh, Vikram, Anshul, Shubham, Rohit, Neha, Priyanka, Shweta, Shivani, Divya.
- Row 4: Mr. Avinash, Kshitij, Jatin, Shaina, Rashi, Deepa, Sonika, Maneesha, Aanchal, Varsha, Alka, Aditi, Shifalee, Mrinal.
- Dr. Manjeet Singh, Mr. Manish Bhardwaj, Mrs. Preeti Goel, Ms. Pooja Sharma, Mr. Yakub Mohammed, Mr. Ankit Sharma. Row 5: Mr. Raj Kumar, Mr. K.K. Sharma, Dr. Vicky, Mr. Ankush Kapoor, Dr. Himanshu Monga, Dr. Vinod Kumar,

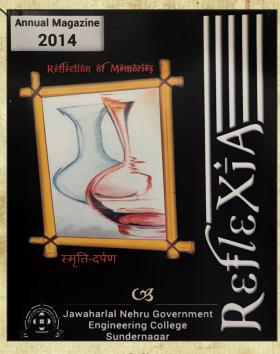
# Department of Civil Engineering



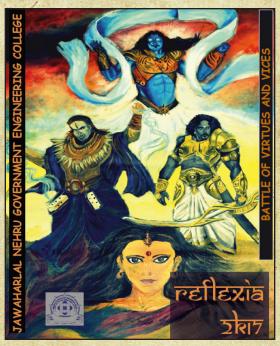
- Row 1: Arun, Puneet, Jatin, Puneet, Hitesh, Ishant, Pankaj, Milind, Abhishek, Nishant, Aditya, Shubham.
- Row 2: Navneet, Vinay, Pankaj, Mayank, Rishav, Puneet, Rajat, Natansh, Pushkar, Ajay, Akshay, Keshav.
- Row 3: Robin, Abhishek, Vishal, Pradeep, Harish, Manish, Chandraj, Chandrajeet, Rohit, Akhil, Kartik, Gaurav, Dimple.
- Row 4: Akash, Shubham, Shalini, Shyamli, Romani, Himani, Pallavi, Harshita, Aditi, Shivani, Preetika, Preeti, Yogitrika, Neeraj.
- Row 5: Mr. Het Ram, Mrs. Kiran, Mrs. Cheena Chadda, Mrs. Bedatrayee Saha, Ms. Madhu Sharma, Dr. Vinod Kumar, Dr. S.P. Guleria, Mr. Vivek Chauhan, Ms. Surabhi Sharma, Mr. Kapil Dev Patyal.

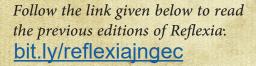
## Reflexia over the Years

REFLEXI



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### Team Reflexia

Chief Editor



Aanchal Sharma (ECE 4th yr.)

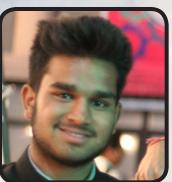
Chief Editor



Akhil Sharma (CE 4th yr.)

**Executive Editor**cum-Designer

Manik Choudhary (ME 3rd yr.)



**Executive Editor** 

Aditya Sharma (ME 3rd yr.)

Executive Designer

Yash Karan Sodhi (ME 2nd yr.)





**Executive Editor** 

Anshul Angira (ME 2nd yr.)

**Executive Member** 



Aarti Rangray (CE 1st yr.)

**Executive Editor** 



Jasmine Kaur (TE 2nd yr.)

### **Executive Member**



Aakanksha (CE 1st yr.)

# Thank You

We are cordially thankful to all the students, alumni, and the members of faculty for their immense cooperation, without which, the compilation of Reflexia 2019 would not have been possible. We are also thankful to all the Class Representatives for coordinating with us and helping us advertise and gather entries from their respective classes.

"Photography takes an instant out of time, altering life by holding it still." This statement by American photographer Dorothea Lange truly captures the essence of photography. We would like to extend our gratitude to the J.N.G.E.C. Photography Club for providing us with the very photographs required to aestheticise Reflexia 2019.

Lastly, the team is humbly thankful to the proofreaders of Reflexia 2019—Er. Surabhi Sharma (A.P. Department of Civil Engineering), and Er. Mridul Sharma (A.P. Department of Mechanical Engineering), who hunted down and eliminated the minutest of mistakes that had skipped our editors' eyes.

Although there has been a great effort to keep the magazine error free, but as they say-"to err is human", so, we apologize for any unforeseen mistake encountered by you in this edition of Reflexia.

~Team Reflexia







