



MH - 58

# TULSIRAMJI GAIKWAD-PATIL COLLEGE OF ARCHITECTURE



2018-'19

# SKYLIGHT

# ABOUT MAGAZINE

Skylight is light transmitting fenestration. Lets get it clear by here "SKYLIGHT" is a light scattering device which in some way or the other will enlighten our career and our life. Clearly it takes a lot of effort to bring out a magazine. It takes a simultaneous workmanship on the team. It goes from contributing to editing to printing. Getting everyone to showcase their words, art and more of all inspiration. The name was chosen after an extreme excursion through words which will imply on an architects mind, language and fuction. Certainly it will have a spontanous response from its reader as it most likely has on its team.

# MAGAZINE THEME

CONNECTING THE DOTS...This has always been one of the most acknowledged games in any magazine, newspaper, comics, one that reveals the big picture hidden behind the dots.

To complete that game we go from 1 to 2 to 3 and further on.

That is the ultimate truth of life we move forward with the help of such dots. Any profession moves based on some rules, similarly we all move according to the dots to reach the bigger picture.

Students learn and conquer the obstacles and make them into opportunities to move forward.

# EDITORS DESK

Dear readers,

It gives us immense pleasure and pride to present the magazine of our college 'skylight'. In this fast changing world, every college needs a platform to showcase their work, research and achievements and 'skylight' is the great way to know about our institute, its success as well as the various events and competitions conducted. It also portrays outstanding achievements of students in various areas and hence encourages mass to bring forth their talent and take it to right direction with help of our mentors. We have divided this magazine into various sections like technical, cultural, sports and much more to explore.

We feel proud to declare that with the support and dedicated efforts of college authorities, we are able to issue our magazine 2018-19. I hope our readers will find this magazine informative and inspiring.

The valuable support and guidance we received from our chairperson Dr. Mohan Gaikwad, Principal Prof. Vandana Khante, Prof. Rukhsana Badar and other heads.

All of us in the editorial board enjoyed compiling this magazine immensely. Once you have read this magazine you are going to zeal for more..... Promised.

From :-

## **Team Magazine**

Anjali Gajbhiye

Anshuja Ninawe

Samiksha Khupse

Charusheela Pathrabe

Ashwini Bhagat

Ishwar Jangid

Mayuri Patil

Madhavi Kumar

Sakshi Dhanare

Pranali Neware

Prachi Katre

Sakshi Debudas

Snehal Urkude

Prutha Karanjekar

Samruddhi Kadoo

Shraddha Puranik

Vaishnavi Waghade

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MANAGEMENT DESK  
INSTITUTE PHILOSOPHY

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# MANAGEMENT DESK

# DR. MOHAN GAIKWAD

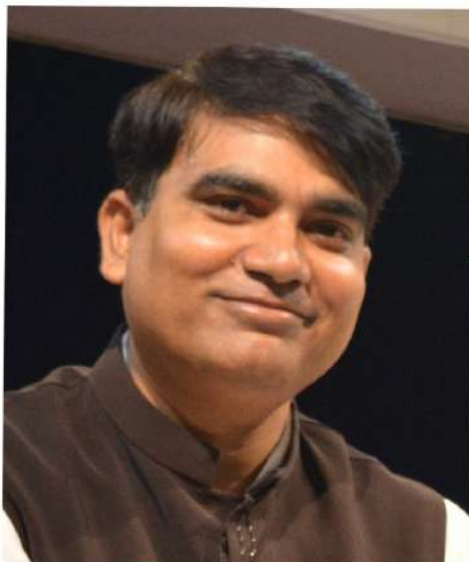
CHAIRMAN  
GAIKWAD -PATIL GROUP



Tulsiramji Gaikwad-Patil College of Architecture has come a long way, molding students to scale to greater heights every year. It is inspiring to see our students taking on challenges with enthusiasm and continuing to succeed in academic and extra-curricular activities.

The magazine "SKYLIGHT" showcases the achievements of our students, who have the ability to build a better tomorrow.

I wish to congratulate the entire team for their stringent efforts taken and wish them success in future endeavors.



# PROF. SANDEEP GAIKWAD

TREASURER  
GAIKWAD -PATIL GROUP

Everything that exists has a structure. Nature provides structure the elements it creates and evolves; everything has to be adequate and appropriate for its purpose to survive and thrive. The cons space and its envelope is an integral part of architecture. It combination of art ,aesthetic values ,technology ,application assembly, materials and their behavior ,that defines the defines the art of buldiBeing an important part of Tulsiramji Gaikwad -Patil Collage of Architectureas well as the faculty of structure since last four years.I have been experiencing various colors and shade of architecture education.

I congratulate the students and the faculty of architecture who came with the idea of initiating and annual college magazine with indeed an appropriate title, "SKYLIGHT".

In architecture ,Blueprint is the medium of communication for an

architect to express his ideas andn creation; I wish this maga-zine will convey our college philosophy to the world of

# PROF. VANDANA KHANTE

PRINCIPAL

TULSIRAMJI GAIKWAD-PATIL COLLEGE OF ARCHITECTURE



Providing ample opportunities in Architectural education is one of the most fundamental obligations. We owe to our students because in TGPCA we are driven by the belief that every student deserves a high-quality education. Skylight provides an intersection of great challenge and opportunity for the students to review their efforts and to analyze their achievements in Architectural education. The pages of Skylight tell the tale of all that have been a part of what is right about the education they get in TGPCA.

I wish it all success and hope that this tradition that has been set by the current students will be carried through by the following generation of students to come.

With blessing and warm wishes.



# PROF. RAVI KUMAR BHARGAVA

DESIGN HEAD

TULSIRAMJI GAIKWAD-PATIL COLLEGE OF ARCHITECTURE

Print media in any form has always played a vital role in bringing positive changes in society. Similarly College magazine is also an effective medium for students to explore their talents not only in academics but also in co-curricular and extra curricular activities. Building career of students is another way of building the nation and the informative contents of the magazine will certainly help in multifaceted development of the students. I congratulate students and faculty of TGPCA who have contributed directly and indirectly in bringing out '..... 2019' in such a beautiful form.

# INSTITUTE PHILOSOPHY

**Vision** – To project the college of architecture as a center of excellence by providing a center of the art infrastructure for developing in students the desired self – respect, sense of pride and inherit moral responsibility and confidence for self-entrepreneurship.

To make a strong guided attempt for fostering social upliftment of society in terms of spirit, goodness of physical and mental well-being in terms of spaces of built and unbuilt environment holistically. Integration of teaching and learning advancement of knowledge base through leadership in service.

Mission – to help prepare outstanding architects and to advance the architecture through research on teaching and learning.

These architects to meet the sustainable design trends through developed skills of creating functional aesthetic designs for green architecture for present demand of green buildings, on basis of nurtured skills through learning and creative designing on practical exposure to emerging art and technology of the past, present and future times. The product as architects from our institutions to be having enthusiasm and built with confidence based on practicalities and studies to achieve success in their endeavor.

With my professional experience in the field of architecture for more than 25 years where I have been contributing by designing and getting constructed various buildings eg. School buildings, religious buildings, commercial and residential structures.

Therefore due to the various practicalities I will pursue with the aim of developing more practical oriented architects with a confidence towards design from our institution TGPCA, attitude be successful in their endeavor as distinct professionals.



FACULTY  
ARTICLES



# PROF. RENUKA POTDAR

## RECIPE OF ARCHITECTURE

The relation between food and architecture is deep and surprising. Many existing similarities are mostly ignored because they are most impossible to articulate. The relationship between the two can to be identified not only in the construction of built form but also in the evolution of an architectural style. Feeling a need to explore this topic we decided to involve the best thinkers.

When we prepare a dish we begin by assembling the ingredients and then we mix them together according to the recipe. Similarly in architecture building materials are the ingredients, the dish to be prepared is decided by the client and the formulation is the technique or the construction process.



In the same way, all the subjects we study in architecture are like the ingredients of a recipe. Students are introduced to different design problems with their unique design briefs introducing various constraints at different levels. Sometimes climate response is introduced as the design objective and sometimes byelaw compliance. Accordingly the ingredients and process varies.

Another similarity noticed in food and architecture is the way they are altered to suit place and people. For example, the Chinese food we eat in India is a lot different than in China. It is the result of a successful fusion of cooking styles. This process of fusion is observed in architecture too. The Mughal style in India is the fusion of Persian design elements and technique with Hindu architectural style made by Hindu craftsmen. This synthesis gave rise to the uniquely beautiful Indo-saracenic style with its poetic use of red sandstone and white marble.

In conclusion to this, it is noted that for food to be delicious it is necessary that it be prepared by an experienced cook working with good ingredients and it be served graciously in an amiable environment. Similarly a building that is properly designed, technically constructed with the best quality materials and polished finishing is greatly appreciated. So making a pulao in design studio is completely justified!



# PROF. VAISHALI CHAVAN

“You can’t connect the dots looking forward; you can only connect them looking backwards. So, you have to trust that the dots will somehow connect in your future.” – Steve Jobs

As we move forward with better technologies and advanced construction, it has become imperative for us to look back also to our roots. The making of good buildings and cities rests on our understanding of our past symbiosis with nature. You can’t build or design a good building without understanding their relationship with the natural systems and the surrounding environment. Architects need to make buildings that are to environment friendly and more green which can be adaptable to the surroundings. In other words, they need to create buildings that are energy efficient, like green buildings or sustainable buildings which are designed to reduce the overall impact of the built environment on human health and nature. Architects and designers have control over our built environment; by changing the way we design cities and buildings to connect to rather than disconnect from nature, we can change our proximity to nature and shift our physical relationship to the environment

While built form is designed to protect occupants from the forces of nature, it is also designed to harmonize and connect occupants with nature. For this reason, it is important to more deeply explore the connection between architecture and nature – to better understand what other opportunities reside between these two extremes. When considering whether it is possible to design for protection from and connection with nature simultaneously, one needs to see nature, in all its patterns, as an educational tool from which architects can learn.

The conduits through which people perceive their surroundings are the senses, which shape attitudes and activities. Architecture, the design of the physical environment, has a major role in forming these perceptions. The purpose of architecture is primarily as shelter, which in term is a major influence towards a single individual, a group of societies as well as on the environment. As such, it has a responsibility to provide more than the basic function of shelter. Architecture must address social, individual, emotional, mental, physical, and spiritual needs. These contains the need for community and the need for interconnection with natural and built environment. These must be taken into consideration at all scales of design and through various means of perception via engagement of senses. Architecture should create a link between people and the natural environment, an innate connection that has lost it’s potency in society. This calls for an integration of nature into architecture through the systems and organization of the built environment. New constructions should minimize their impact on the ecosystem, for example by displacing rather than destroying nature through the use of green roofs and living walls, thus contributing to the environment rather than draining and dominating the environment. Somehow appreciation has to do with a connection with the cosmos, with time, with history & the future with feeling, with caring about the world about the relationship with man and nature.



# PROF. ATUL LALSARE

ASSOCIATE PROFESSOR

Man-made world demands on water for its creation and then it demands on water for its survival. Extensive and neglected use of water resource has brought day zero situations to lot of cities. This article is intended to have an angle of looking towards value of goods in terms of embedded water footprint of construction material; currently value is dealt in currency.

Use of water for construction can be categorised into two ; In-situ and Ex-situ.

They can be named as Real water and virtual water.

By definition, Real water is water used on site during complete process of construction, while virtual water is the water embedded in a product, i.e. the water consumed during its process of production. Thus water cost of built form is total of water consumed during both process. In this Article we have calculated virtual water behind one brick.

To calculate water value of a brick two brick kilns within 30 km radius of the city were selected. These brick kilns were of almost same size and had similar way of production. Size of stack was fixed to 50,000 bricks and total water requirement for it was calculated, Water required for preparation of clay for molding was real water which was almost 23-25% of volume of clay. It was calculated as number of water tankers required for preparing dry clay bricks. Additional virtual water required for labor and husk used for burning of stack is calculated from other secondary sources. Thus it is found that embedded water footprint in a brick is around 8 liters.

	VMV Bricks, Bhandara Road, Nagpur.	Anil Bricks Co. , Kamptee road, Nagpur.	Average
Total water Required for 50,000 Brick soil preparation	90,000 lt	100,000 lt	95,000 Lt
Water Required for labors @70 LPCD	4X15 days =4200 lt	10X5 days=3500 lt	3850 lt
Water associated with rice husk <sup>1</sup>	1Ton X300= 300000 lt	1Ton X300= 300000 lt	300,000 lt
Total water Req.	3,94,200 lt	4,03,500 lt	3,98,850 lt
Per Brick water Value			7.98 Liter



**PROF. NITESH JIBHKATE**  
ASSOCIATE PROFESSOR

## ROLE OF ARCHITECTURE IN CIVIL ENGINEERING

Civil Engineers and Architects complement each other's works. Architect takes care of the design and shape of a building whereas a civil engineer takes care of the technical nitty-gritty like the strength of the building. Architecture is art; civil engineering is more about physics.

The primary focus of the architect remains on the aesthetic appearance of a building. Architecture is closely related to civil engineering and recently as a few decades ago, there was no separate profession for an architect at all. Probably implemented concepts of architecture ensure that a building is not just strong, but also looks good and takes care of comfort of the inhabitants as well. A civil engineer need not bother about the looks, design, in-house lighting, greenery and other things when an architect is around. That leaves him with the primary job of making a building stable and strong. Other than mastering the concept of architecture, an architect is supposed to have a basic knowledge of structural engineering as well.

An architect is just not a helping hand to a civil engineer, but much more than that. The planning and designing of any construction project is incomplete without the impact of an architect. The establishment of buildings and land with reference to functional and aesthetic requirements is a primary function of an architect.

Architectural science has become a vast subject. Urban architecture, ruler architecture, contemporary architecture, and modern architecture are some of the styles that are studied across the globe. The inclusion of software tools like 3D max, Maya, AutoCAD, Photoshop has made things easier for both the civil engineers and architects because graphical presentation of any kind of work always add efficiency and better understanding.



## PROF. KASHIF ALI

Teaching methodology comprises of the principles and methods used for instruction. Commonly used teaching methods may include class participation, demonstration, recitation, memorization or combinations of these.

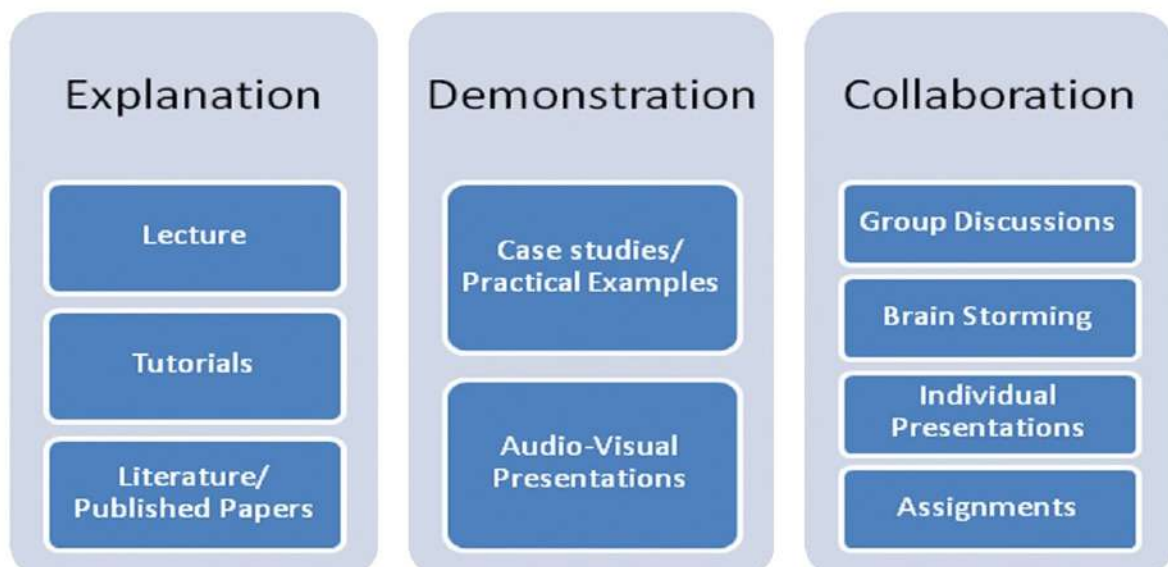
The choice of an appropriate teaching method depends largely on the information or skill that is being taught, and is greatly influenced by the aptitude and enthusiasm of the students, which is greatly summed up by a great pedagogue as follows;

**"Effective learning in the classroom depends on the teacher's ability ...  
to maintain the interest that brought students to the course in the first place"**  
Ericksen

Teaching according to me is a technical art which demands firstly on a beautiful and interesting pedagogy and secondly on an active dialogue between the learner and the learned. Dialogue or continuous reciprocal communication is the Elixir of teaching, the notion which forms the basis of my teaching pedagogy, evolved from self appraisal which beautifully applies to every student class, stated as follows;

**Tell me....I forget,  
Show me....I remember,  
Involve me....I understand.**

### Schematic Presentation of Teaching Methodology:



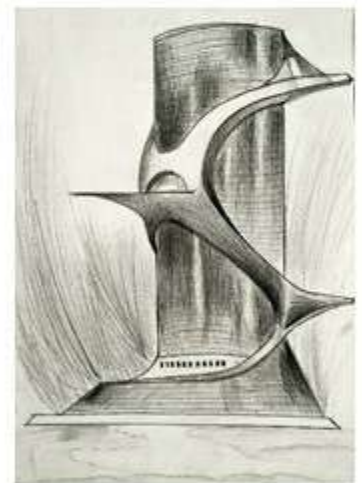


**EXTRA  
CURRICULAR**

# SKETCHES

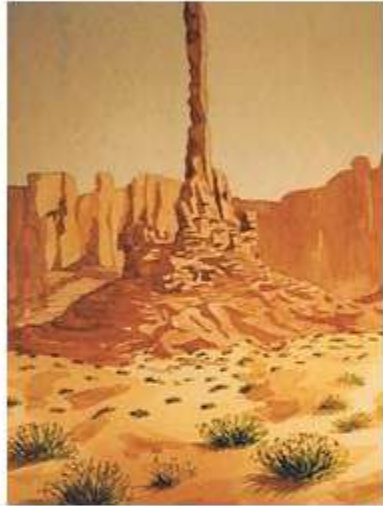
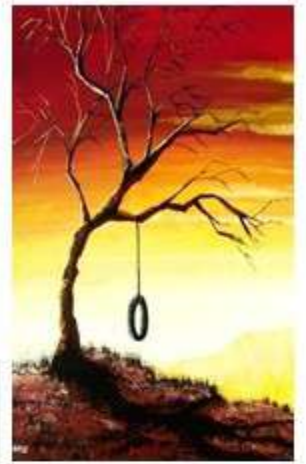
## SKETCHES

Sketching Is A Continuing Source Of Learning  
Rather Than A String Of Performances.



# PAINTINGS

**PAINTING**  
is a silent poetry.



# PHOTOGRAPHY

## PHOTOGRAPHY

HELPS  
PEOPLE  
TO SEE



# MODEL MAKING

## MODEL MAKING

Brings the imagination to life and beauty is created.



# WORKSHOPS AND SITE VISITS

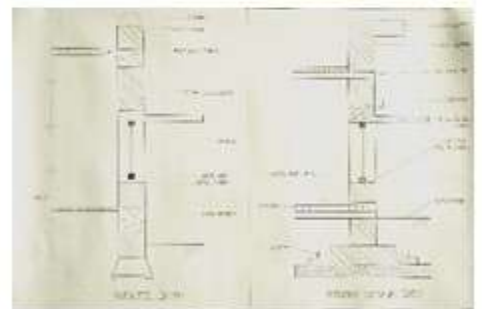
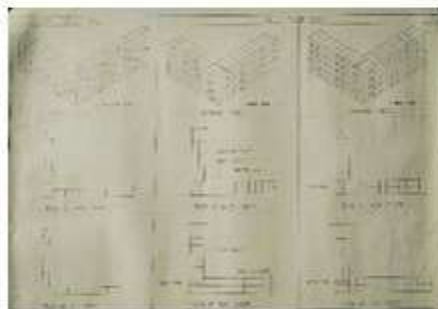
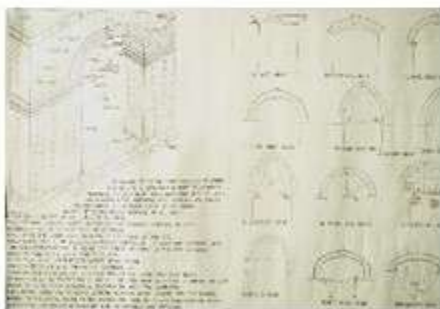


## SITE VISIT AND WORKSHOP



ACADEMICS

# FIRST YEAR



# SECOND YEAR

**LAURIE BAKER**

**INTRODUCTION:**

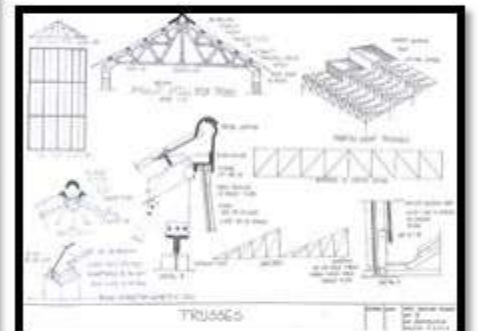
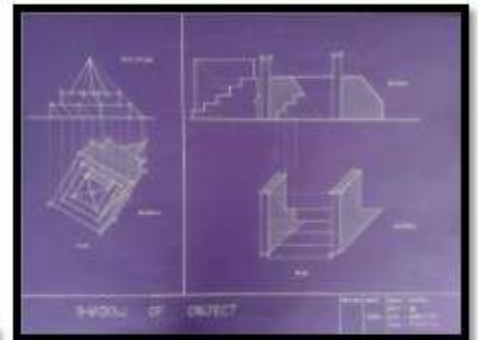
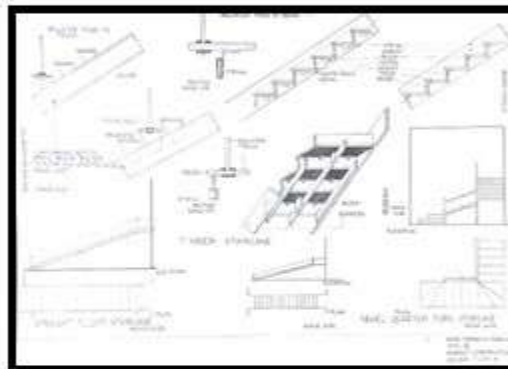
- BORN: (1878-1958)
- EDUCATION: (1900)
- OCCUPATION: (1900)

**SPECIALITY:**

- The construction of the...
- The design of the...
- The design of the...

**EXAMPLES OF FAMOUS WORK OF LAURIE BAKER**

INDIAN INSTITUTE OF TECHNOLOGY BOMBAY



**BRICKS**

**DEFINITION:**

**CHARACTERISTICS:**

**BUILDING MATERIAL**

**Theory of Staircase**

**STAIRS**

Handwritten notes and diagrams explaining the theory of staircase design, including a central illustration of a staircase.

**Theory of Staircase**

**STAIRS**

Handwritten notes and diagrams explaining the theory of staircase design, including a central illustration of a staircase.

**ROOFING**

**DEFINITION:**

**CHARACTERISTICS:**



**LANDSCAPE ARCHITECTURE**

**DEFINITION:**

**CHARACTERISTICS:**

**CONCRETE**

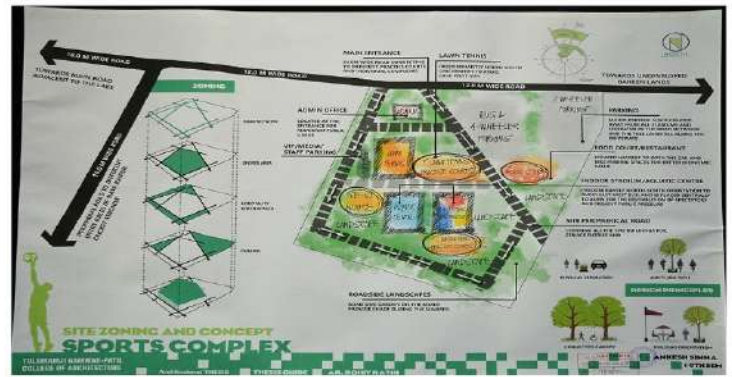
**DEFINITION:**

**CHARACTERISTICS:**





# FIFTH YEAR



The background of the entire page is a dark green, heavily blurred photograph of a group of people. The individuals are indistinct due to the low resolution and blur, but their general shapes and positions suggest a group setting. The text is overlaid on the bottom portion of this image.

# GROUP PHOTOS



Faculty



1<sup>st</sup> Year



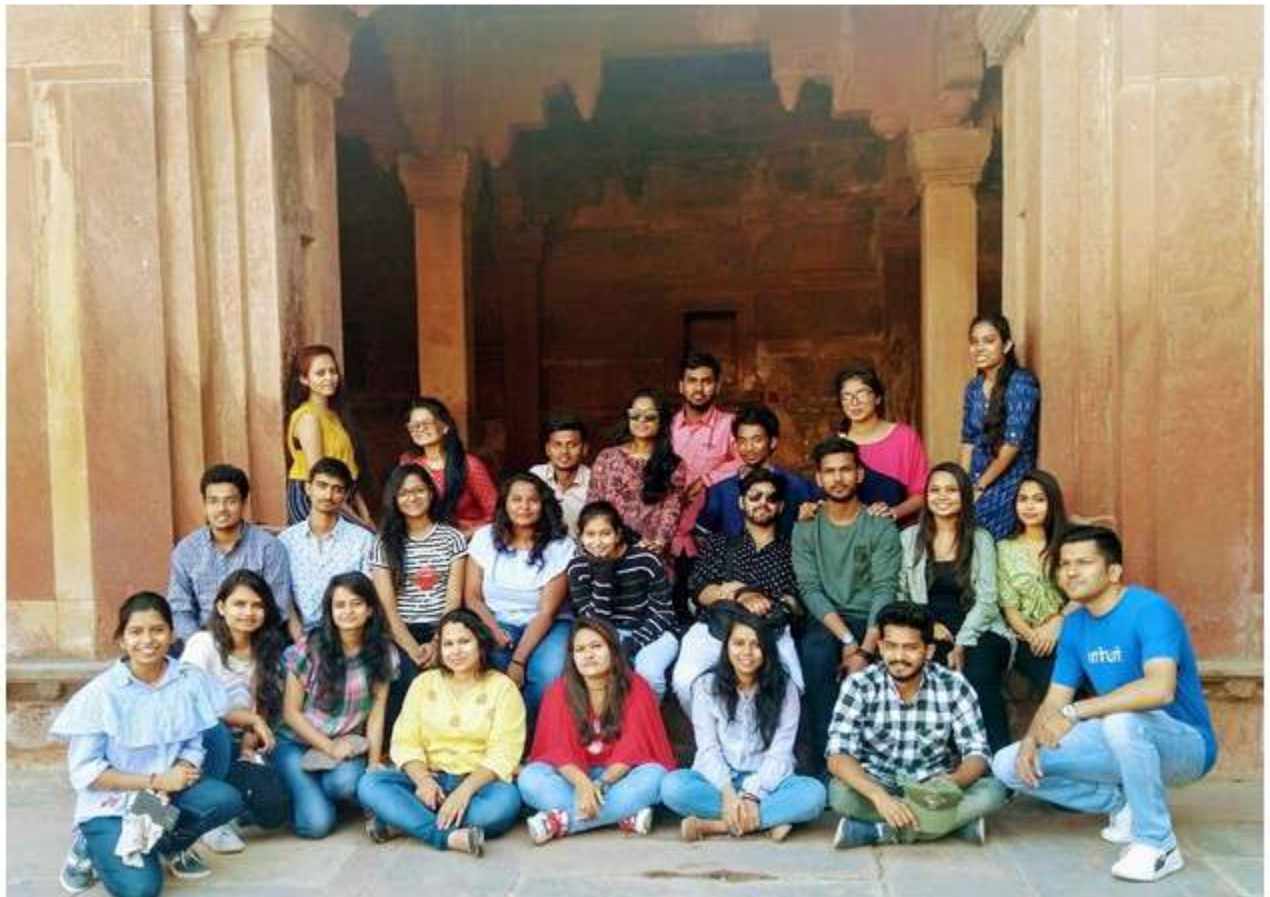
2<sup>nd</sup> Year



3<sup>rd</sup> Year



4<sup>th</sup> Year



5<sup>th</sup> Year

# ROTARACT CLUB



Rotary Club of Nagpur, like the Rotary International, was conceived in the month of February. It was in February 1944 that on behalf of some enthusiastic persons in Nagpur, Rtn K.K Mankeshwar sent a telegram to Rotraian Bryant who was the chief of Rotary Organisation in the 'East', based at Bombay, requesting him to visit Nagpur on his way back from Jabalpur to start Rotary at Nagpur.

## Installation of ROTARACT CLUB

Each year new members for the club are elected to work and coordinate under Rotary.

Rotaract focuses on the development of young adults as leaders in their communities and workplaces. Clubs around the world also take part in international service projects, in a global effort to bring peace and international understanding to the world. The aim is to develop personalities and contribute to the society as individuals hence the Rotaract club of TGPCA have conducted events like organ donation rally, traffic survey, nirmalya collection, RYLA(camping for youth to learn and explore strengths), cyclothon, walkathon, marathons, blood donation, etc.



Rotract President Anshuja Neware on her acceptance spech showed her commitment to work and thanked all the teachers for showing faith and giving this opportunity to her. President in his speech congratulated the team and explained them about rotary and its work, motivated students for community service, told them about the theme of rotary.



## NIRMALAYA COLLECTION

Nirmalya collection successfully completed to keep the city clean and to promote swach bharata abhiyan.

# Vidarbha Bahu-uddesthiya Shikshan Sanstha's

Other institutes/Projects under the group:

- Tulsiramji Gaikwad-Patil College of Engineering & Technology
- Abha Gaikwad-Patil College of Engineering
- 'Elegance', The Gaikwad-Patil finishing School
- Gaikwad-Patil Academy
- Gaikwad-Patil International school
- GPG Infotech
- Anjali Builders & Developers
- Akash Construction Company



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**GAIKWAD-PATIL**  
GROUP OF INSTITUTIONS

**TULSIRAMJI GAIKWAD-PATIL  
COLLEGE OF ARCHITECTURE**

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