# KALEIDOSCOPE

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**VOLUME I** 

#### **VISION OF THE DEPARTMENT**

To be a centre of excellence by providing education consistent with overall progress in Civil Engineering for the upliftment of the society.

#### MISSION OF THE DEPARTMENT

- To prepare student to supervise and work as a team in multi-disciplinary projects.
- To impart updated knowledge about the modern approach in construction methodology.
- To install ethical values in Civil Engineering practice & its socio-cultural impact encompassing public utilities and services.
- To establish himself/herself as a proud citizen of the society in addition to technical competence.

# PROGRAM EDUCATIONAL OBJECTIVES OF THE DEPARTMENT

<u>PEO 1:</u> To apply the knowledge of Civil Engineering to solve problems of social & environmental relevance and for pursuing higher education

PEO 2: To prepare for successful careers in industry or to become entrepreneurs.

**PEO 3:** To work effectively as individuals and as team members in multi-purpose projects.

#### **CORE VALUES**

- COMPETENCY
- ETHICS
- ADAPTABILITY
- TEAM SPIRIT
- SOCIETAL CONCERN



# ABOUT CIVIL ENGINEERING DEPARTMENT

Assam Engineering Institute was founded on 16th January, 1948 as Assam Civil Engineering School with just one programme that is Diploma in Civil Engineering. The department, evolved over a span of 7 decades to what it stands today as the largest department of the Institute with a student's intake of 100 and more. The metamorphosis from slide rules to calculators, from black-board to smart board, from drawing boards to Auto-CAD, from input based education to output based education, from theory based education to skill based education has been a big one. Civil Engineering Department of Assam Engineering Institute with a team of highly proficient teachers subscribes to the view that engineering is not just about mathematics and science but also about understanding society's problems and finding solutions. It strives to give its graduates "WINGS TO FLY" with the right kind of technical knowledge and skills and "ROOTS TO STAY GROUNDED" with ethics and social values.

#### **WHAT'S INSIDE**

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#### **MESSAGE FROM THE PRINCIPAL**

I am very glad to know that the Civil Engineering department is bringing out the Newsletter named KALEIDOSCOPE.

I congratulate the faculty members, Students & other supporting staff for successful competition of the Newsletter.

I am sure that the newsletter will bring out the hidden talent of faculties, students and staff in the field of departmental activities and will also encourage the faculties and students to understand the different activities to be done for continuous improvement of the department.

PRINCIPAL ASSAM ENGINEERING INSTITUTE DR. HITESH TAHBILDAR

#### FROM THE HOD'S DESK

I am delighted that our departmental Newsletter - **KALEIDOSCOPE** is ready to be published. It is a platform to display all departmental activities along with showcasing all the technical and non-technical achievements of students and staffs which show their hidden talents. The success brought by our multitalented students under the able guidance of faculty members makes our department proud.

MRS. MANISHA SHARMA HOD



#### **EDITORS WORDS**

I am extremely delighted to be associated with the publishing of the 1st newsletter of Civil Engineering Department. Aptly christened, "Kaleidoscope" it chronicles not only events, achievements of students and teachers of civil engineering department but also showcases their creativity and latent skills. The creation of "Kaleidoscope" true to its name gave me the opportunity to look inside and discover the beauty of various patterns, thoughts and ideas that every student possesses. All that is required is for one to look inside to see the colors and patterns that makes them so beautiful. I am grateful to each one of the team members and many others who have contributed towards the making of the newsletter. Ms Roshanara Begum Lecturer (SG),

Lecturer (SG) AEI, Ghy.



# WORDS OF WISDOM FROM A RETIRED FACULTY

### NEED BASED TECHNICAL EDUCATION

India is the youngest country in globe at present. In the year 2023 our population has reached 142.8 crores out of which 65% are below 35 years of age group. Is this huge population being an asset or liability of our country? If we an use these huge human resources in a specific way than no-one can stop India reaching top in the globe.

At present China faces challenges because of shrinking work force, but India's workforce is growing.

To fulfil the dreams of reaching top, the NEP 2020 was approved by the Union Cabinet in July 2020 by replacing the NEP 1986. The motto of NEP 2020 is Educate, Encourage, Enlighten. The aim of the policy is to prepare the children of India with 21st century skills. So, in our diploma education we have to emphasize on the skill-based laboratory education in continuation to the theory-based education system. Proper practical training on masonry skills, plumbing skill

MR. KAMAL KATAKI Retired Faculty

etc. will help a student to work confidently, independently just after completion of the Civil Engineering diploma in the field of building construction etc. An electrical diploma student must have skills related to Electric vehicles which has now come to the Indian market. A computer or electronic diploma student must acquire skill on the Artificial Intelligence which is the future of the latest changed technology in the globe. Skill based different training courses is the solution to our unemployment problem also.

So, keeping an eye on reaching the top in the globe, India has to adopt a rigorous skill-based education system to increase the Gross Enrolment Ration (GER) in higher education to 50% by 2035. If we can't do this, these 65% young population will become a burden for our country. So, our technical education must adopt a need-based approach for the growth of our country.

# Message from the Student editor

Creating the first newsletter for the Civil Engineering branch, aptly named "Kaleidoscope," was a journey filled with memorable moments. From brainstorming content ideas that mirrored the diverse facets of civil engineering to meticulously crafting each article, it was a collaborative effort that brought together the vibrant spectrum of talents within our branch. Just as a kaleidoscope reveals intricate patterns through the arrangement of its pieces, our newsletter highlighted the student accomplishments, achievements, aptitudes and insights within the field. The process was a testament to how a collective of minds can come together to create something truly remarkable and ever-changing, much like the experience of looking through a kaleidoscope itself. Researching and compiling information on recent student accomplishments, and upcoming events was an enriching experience that exposed us to various aspects of communication, teamwork, and content creation.

Coordinating with contributors necessitated effective communication and organization. We learned how to manage timelines, provide clear guidelines, and address concerns promptly. This experience honed our interpersonal skills, as we collaborated with diverse individuals, accommodating their perspectives while maintaining a cohesive narrative.

The process of designing the layout and visuals was an exercise in creativity and aesthetics. Selecting appropriate fonts, colours, and images to enhance readability and engagement was a meticulous task. Balancing the visual elements with the content ensured that the newsletter was not only informative but also visually appealing.

In essence, crafting the newsletter for our Civil branch offered an experience that not only enhanced our skill set but also fostered a deeper connection with the academic community and its achievements.

SONIA DAS (AEI/20/CV/002) SEMIM AZMA (AEI/20/CV/009)



STUDENT EDITOR -SONIA DAS



STUDENT EDITOR -





### MEET THE DEPARTMENT

**STANDING FROM LEFT:** Roshanara Begum, Dilip Kumar Baishya, Ajanta Das, Pradip Kalita, Bornali Roy Choudhury, Mokaddes Hussain, Dhriti Khaund, Anjan Barman

<u>SITTING FROM LEFT:</u> Rajlakshmi Dutta Goswami, Manisha Sharma, Bandana Sarma, Anita Saikia

THE HOLD BY

Estd. 1948



# VISIT AND INTERACTIONS



Paver Block Industry, Pamohi

The visit to the paver block factory provided an overview of the production process, highlighting advanced machinery and quality control. It offered valuable insights into the efficient operations behind manufacturing durable paving blocks.





#### Dr. Bhupen hazarika Samadhi Kshetra, Guwahati

The visit to the Dr. Bhupen Hazarika Samadhi Kshetra construction site offered an overview of ongoing work, highlighting structural progress and design features. It provided valuable insights into the construction techniques and dedication involved in creating this significant memorial.

#### Railway Bridge, near Deepor Beel

The visit to the railway bridge near Deepor Beel provided an overview of its construction progress, emphasizing engineering techniques and environmental considerations. It offered valuable insights into the project's impact on the surrounding ecosystem and infrastructure development.

## STUDENTS PARTICIPATION IN VARIOUS EVENTS

#### **INSTITUTE WEEK**









Every Year Assam Engineering Institute celebrates the Institute Week with great pomp and show. It gets flagged off with a cultural march to celebrate a week full of events wherein students showcase their talent, creativity, celebrate culture and sports for becoming a Rounded Individual.



The Cultural Drama Competition, forte of Civil engineering students create history once again winning nine times in a row.



<u>CULTURAL DRAMA</u>- Civil department won the best prize in Cultural drama following one another in uninterrupted succession from the last 8 years.

<u>PERSONALITY CONTEST</u>-Personality tests can boost confidence because they are designed to reveal your strengths so you can leverage them to transform your life. Tinu Pegu of 4th semester student got the title of Miss AEI in 2021-22 contest.

<u>WALL MAGAZINE</u>-"Talent wins games, but teamwork and intelligence wins championships." Civil branch again got the 1st position in the competition.

<u>FOOTBALL</u>- Civil branch again registered themselves to be the most hardworking batch by winning the 1st position in the match.

**CRICKET**- Civil branch secured the 2nd position in the match.

<u>VOLLEYBALL</u>- Again the branch had acquired the 2nd position creating a position environment for the civil department.

**BADMINTON-** Minmoy Pratim of 6th semester won the 1st position in the competition.

QUIZ- Krishna Jyoti Hazarika scoured the 1st prize in the quiz competition.

NEWSPAPER READING- Satabdi Atreya got the 1st position.

POEM RECITATION - Satabdi Atreya got the 2nd position.

<u>KABBADI (GIRLS)</u>- 6th semester students registered its consecutive win at the college week 2021-22 defending all the other branches in the college.

ARM WRESTLING (GIRLS)- Satabdi Atreya got the 2nd position.

ARM WRESTLING (BOYS)- AMLAN DEORI got the 2nd position.











## **Student Project Reports**

The importance of student project reports cannot be overstated, as they play a crucial role in academic and personal development. These reports allow students to apply theoretical knowledge to practical problems, enhancing critical thinking and problem-solving skills. Furthermore, project reports foster creativity, research abilities, and discipline, preparing students for future professional challenges. They also provide a platform for demonstrating individual innovation and teamwork, contributing significantly to a well-rounded education

## PO's & PSO's Covered

The student projects are assigned to them considering both their interest as well as assuring that their projects align with at least one of the various PO's (Program outcomes) or PSO's (Program specific outcomes) to ensure that at the end of their 3 year course they have at least achived one of the various PO's and PSO's of the department

- PO1
- PO2
- PO3
- PO4
- PO5
- PO6
- PO7
- PSO1
- PSO2

#### **PROJECTS**

- Study & analysis of water samples collected from different surfaces and ground water sources of Guwahati City to determine the quality of water for drinking purpose
- Road subgrade Clay soil
  Stabilization and pavement design
- Planning estimating and valuation of a R.C.C residential building
- A project report on rainwater harvesting and ground water recharge
- Strength of concrete with partial replacement of sand with stone dust
- Mix proportion of different grades of concrete
- Effect of admixtures on soil stabilization
- Planning designing of a green resort
- Hume pipe culvert and box type culvert

### TREE PLANTATION DRIVE

# ASHIRVAAD A SOCIAL CAUSE



#### **CAMPUS CAMPUS**



#### **SWACHH BHARAT ABHIYAN**



#### **COMMUNITY SERVICE**

The students of the Civil Engineering Department have always been active in academics as well as social causes such as plantation drive, donation drive, awareness programs etc.

These activities ensure that every individual student is nurtured into a strong independent individual with rich social values as to become an ideal citizen.

#### **BLOOD DONATION CAMP**



#### ALUMNI SPEAKES

#### মাৰফৎ অসম অভিযান্ত্ৰিক প্ৰতিস্থান

প্রতি,

মোৰ জীৱনৰ কিছু উৎজ্জ্বল সময় ,

আশা কৰো ভালে আছা ! আজিও আছা চাগে গৌৰৱৰ শিখৰত জিলিকি ! চান্দমাৰী ফ্লাই অভাৰৰ পৰা দেখি থাকো তোমাক । কেৱল কৰ্মৰ তাগিদাত তোমাৰ পদধূলি লৱলৈ অলপ সময়ৰ নাটনি হৈছে । তুমিতো জানাই এজন Engineer ৰ Lifeৰ কথা । ৰাতিপূৱা দেৰিকৈ সাৰ পাওঁ, কাৰণ ৰাতি ঘূৰি পকি কামৰ টনা আজোৰাত ঘৰ পাওঁ দোভাগ ৰাতি । ততাতৈয়াকৈ ভাত পানী মূখত গুজি বিছনাত আকৌ mobile টোৰ লগত খেল ধেমালি কৰি টোপনি অহালৈ Good Morning এ দিৱ পৰা হয়গৈ । তোমাৰ বোকোছাত থাকোতে অভ্যাস ভালদৰে হৈ গৈছে । ওৰে ৰাতি T scale, Set square ৰ লগত খেলি খেলি ৰাতি কাঠপেঞ্চিলেৰে ঘহণি খুওৱাঁ বগা চাৰ্ট পেপাৰ খন ৰাতিপুৱা ততাতৈয়াকৈ Ma'am Sir হতৰ আগত জমা দি A+ লোৱা অভ্যাসটো এতিয়াও যোৱা নাই । এতিয়া কেৱল সেই কাঠপেঞ্চিল ভাল নাই , চাৰ্ট পেপাৰৰ নামত A4 Page, এতিয়াটো Computer ৰ Key Board খনতে হাতৰ আঙুলি কেইটা ক্ষয় যায় ।

অহঃ আপোনালোকক মোৰ উৎজ্জ্বল সময়খিনি চিনাকি কৰি দিয়াই হোৱা নাই নহয়। জীৱনৰ তুলুং ভূতুং কৰি থকা মোৰ নাওঁ খন CEE চিট নোপোৱাৰ পাছত বঠা নোহোৱা নাওঁৰ দৰে হৈ আছিল। তেনেকৈ থাকোতেই কোনোৱা এজনে মোৰ নাওঁ খনক সহাৰি দি অলপ পাৰলৈ থেলি দিয়া যেন পালো। এনেয়ে Form fill UP কৰি থোৱা PAT EXAM ত চিট পাই মোৰ জীৱনৰ নতুন Turning Point টিৰ আৰম্ভ কৰিলো। BRANCH ললো CIVIL ENGINEERING। প্ৰথমতে কিনো আৰু HS ত পঢ়াখিনিকে পঢ়ি থাকিলো। অবশ্যে ENGINEERING DRAWING আৰু ENGINEERING MECHANICS এ অলপ যে JUNIOR ENGINEERING পঢ়িব যে আহিছো তেনে এটা FEEL কৰালে। কিন্তু সঁছা কথা কবলৈ গলে তেতিয়ালৈ মোৰ মনটো বেয়াই আছিল। কাৰণ বহুত দিনীয়া CEE ৰ সপোন টো যে ভাগি থাকিছিল। কিন্তু যেতিয়াৰ পৰা BRANCH ত উঠিলো মন পৰিবৰ্তন হল, সময়েও মোক নতুন পোহৰৰ সন্ধান দিলে। মনৰ কথাৰ লগতে দেহৰ প্ৰত্যেক অংগ প্ৰত্যংগওঁ আৰম্ভ কৰিলে নিজৰ সময় খিনি উদজ্জাপন কৰিবলৈ।

তোমাৰ চৰণত শৰণাপন্য হোৱাৰ পিছৰ সময়খিনি আছিল যেন এক নতুনত্বৰ আলোৰণ, মণত আহিছিল এক নতুন উদ্দিপনা। আজিৰ এই পৰিবেশ আৰু মোৰ এই জীৱনধাৰা যেন তোমাৰেই উপহাৰ। মণত যেনেকৈ হাজাৰ হাজাৰ সপোন লৈ তোমাৰ কাষ চাপিছিলো তুমিও মোক তেনেকৈয়ে আকোৱালি লৈছিলা , হিয়া উজাৰি দিছিলা অলেশ মৰম আৰু অজুত স্মৃতি। Canteen ৰ আদ্দা, হোষ্টেলৰ কিৰিলী, Auditoriumৰ হেলনীয়া ফেনৰ কিৰ কিৰণী, নাথ দাৰ লাল চাহ অহঃ কি মধূৰ স্মৃতি। সেয়া আছিল ASSAM ENGINEERING INSTITUTE।

আকৌ ৰবক ! মোক বা মোৰ সময় খিনিয়ে মনত ৰাখিলেনে নাই। আকৌ এবাৰ নিজৰ চিনাকিটো দি দিছো। মই মনোজ। 2014 BATCH ৰ CIVIL ENGINEERING প্ৰাক্তন ছাত্ৰ। এতিয়া District disaster management Authority ত কৰ্মৰত। নতুন সময়ৰ মাজতো কেতিয়াবা আগৰ সময়লৈ মই উভতি যাওঁ বাৰু। উভতনি যাত্ৰাৰ মাজতো কেতিয়াবা আগত এৰি অহা নাওঁ খনত উঠোগৈ institute week ৰ নামত।

নতুনকৈ এই সময়ৰ লগত যাত্ৰা কৰা সকলক এটি শুভ-বাৰ্তা নিদিলে এই চিঠি খন কিবা আধৰুৱা যেন লাগিব । সেয়েহে ঠিক উপদেশ নহয়, শুভকামনা হিচাপে অলপ কথা নতুনকৈ অহা কেইজনকো কওঁ ।

সেয়া 2021 চনৰ কথা । গোটেই পৃথিবীত কৰ'না মহামাৰীয়ে আতংকৰ সৃষ্টি কৰে । মই District disaster management Authority এজন staff হিচাপে মোকো Duty দিয়ে প্ৰথমতে সৰুসজাইত COVID CARE CENTREত আৰু তাৰ পিছত লোকপ্ৰিয় গোপিনাথ বৰদলৈ এয়াৰপৰ্টত Testing Center ত । আমি যে পঢ়ি আহিছিলো IME (industrial management and entrepreneurship) তেতিয়া ভাবিছিলো এজন Engineer ক এই Subject টোৰ কি প্ৰয়োজন । কিন্তু সেই মহামাৰীৰ সময়ত বুজিলো যে আমাৰ Syllabus তেনেকুৱা Subject ৰ এনেয়ে সন্নিবিষ্ট কৰা নাই, যাৰ প্ৰয়োজনীয়তা সেইসিনি সময়ত যথেষ্ঠ বুলি অনুভৱ হৈছিল । AEIত পঢ়া বহুত অভিজ্ঞতাই মোক সেই মহামাৰীৰ সময়ত প্ৰতিদিনে 4000 বা 5000 মানুহক কেনেকৈ Handle কৰিব পাৰি তাৰ সমল দিছিল।

সেয়েহে অনূজসকল কোনো subject কম পঢ়িব লগীয়া আৰু কোনো Subject বেছিকৈ পঢ়িব লগীয়া নহয় । সকলোকে সমান গুৰুত্ব দি পঢ়াৰ লগতে নিজক সকলো পৰিস্থিতিতে খাপ খুৱাব পৰাকৈ গঢ় দি আগুৱাই যোৱা, মোৰ এৰি থৈ অহা সোণালী সময়বোৰে তোমালোককো পোহৰাই তোলক তাৰে কামনাৰে আজিলৈ এৰিছোঁ । আকৌ ভৱিষ্যতে লগ পোৱাৰ আশাৰে ।

> প্রাক্তন শিকাৰু মনোজ দাস অসম অভিযান্ত্রিক প্রতিস্থান ২০১৪-২০১৭ বর্ষ



# Farewell to two esteemed faculties on retirement from service



On January 31, 2021, the department bid farewell to two of its esteemed and beloved faculty members, Kamal Chandra Kataki sir and Dr. Mukuta Goswami Sir. Both teachers and students alike expresses' their utmost gratitude for their unwavering dedication and service.



## NOTE OF THANK'S

We are grateful for the opportunity to make this newsletter and support the Civil Engineering Department. It is a privilege to be part of this project, our commitment is to provide our utmost best. Thank you for this wonderful opportunity given to us by our teachers.

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Special thanks to editorial team: Sonia Das Sonjukta Sharma **Dhiman Deori** 

Semim Azma **Juwel Borugh Koushik Sutradhar** For their contributions to the making of the Kaleidoscope.