Parshvanath Charitable Trust's
A. P. SHAH INSTITUTE OF TECHNOLOGY
(Approved by AICTE New Delhi & Govt. of Maharashtra, Affiliated to University of Mumbai)
(Religious Jain Minority)

Department of Civil Engineering

Academic year 2018-2019

nirmaan

(निर्माण)

The best way to predict future is to build it...

(Volume – II, Issue – I)

"THE BEST EMERGING ENGINEERING COLLEGE, 2018",

Awarded by - Radio City 91.1 City Icon Awards 2018

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Co-editor

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TE – A

1. **Mr. Rohan Shinde**
2. **Mr. Advait Relekar**

TE – B

1. **Ms. Nidhi Anchan**
2. **Mr. Siddharth Dhanawade**

BE

1. **Mr. Suyash Padhye**
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About APSIT

A. P. Shah Institute of Technology (APSIT) has started functioning with commitment of imparting state of art technical education so as to inculcate conceptual know-how, analyzing skills, decision making abilities and leadership qualities in the students. APSIT stands committed to the intellectual and moral growth of every student.

APSIT has experienced and proficient team which aspires to unlock the hidden potential in subconscious minds of students and to create competent Engineers with vision & social commitment.

Vision

APSIT aspires to be a premier institute producing globally competent engineering professionals to contribute towards socio-economic growth of India.

Mission

To provide conducive and collaborative environment to meet contemporary & future Engineering challenges by project based and value-added education with the support of trained faculty.

From Principal's Desk

It is my privilege to throw a light on our Institute, dedicated to the quality technical education with all round development of the students to be competent professional Engineers of tomorrows to serve the society. We have exemplary infrastructural facilities, well equipped laboratories, separate computer centre, the team of highly qualified faculty and the exhilarating atmosphere in the campus will surely take you to enviable heights in your capabilities and achievements.

We have research oriented, challenge seeking, well qualified and devoted faculty to train the students in quality technical education. The ultimate aim of our management and staff is to get higher percentage to our students and place them in multi-national companies. We conduct project based and value-added education with the support of trained faculty, Seminars, Workshops, STTP, National and International conferences to update the development in science technology.

I believe that the institute will continue to produce competent technocrats and managers who will make significant contribution to the corporate world and industries all over the world which will enable them to serve as global citizens.

I appreciate the editorial team for their sincere effort in bringing the Newsletter of Civil Engineering Department.

With best wishes

Dr. Uttam D. Kolekar

About the Department

Civil engineers apply engineering principles to balance the society with technical and economic feasibility. In view of this the department emphasizes on sustainability within the built environment through green engineering in our teaching and research activities. As we enter the 21st century we find ourselves in an increasingly digital world. With the advent of science and technology reaching meteoric heights, the importance of Civil Engineering has only increased. Now, more than ever, Civil Engineers are required to build the various giant infrastructure projects, which forms the basis for growth of world. Students studying under us are assured of the highest quality education buoyed by our state of the art laboratories and extensive field trips to industries in order to familiarize them with the practical aspects of their trade.

The Department of Civil Engineering was established in 2015-16 offering B.E program in Civil Engineering with a yearly intake of 60 students, which is now increased to 120 from the year 2017-18. A group of qualified faculty with adequate experience is strength of department. The department has qualified faculty members occupied with educating and research, having perfection in different fields. The faculty members are youthful, dynamic and prepared to meet the scholastic needs.

Vision

Civil Engineering department strives to produce globally adaptive professionals to ensure sustainable growth of society

Mission

1. To develop state-of–the-art facilities and advanced computational resources to integrate education and research.

2. To create proficient and ethically strong technocrats by exposing them to rigorous appraisals to make them realise, define and select their key competencies

3. To bridge the academic and industrial gap by imparting training through sound and conceptual foundation and ample field exposure.

From the HOD's desk

It gives me immense pleasure to acknowledge that, during last semester, various curricular and co-curricular activities were conducted successfully by the department. Through seminars, workshops, expert lectures and industrial visits, the students were equipped with technical knowledge, skills and creativity to excel in their engineering profession.

The second half of 2018 has come to the end and the department is looking forward to a great year ahead, with plenty of planned activities lined up. Our students made us proud by excelling in academic and extra-curricular activities.

I congratulate and appreciate the efforts of Students and Faculty who have contributed to the continuous improvement of the department. I also appreciate and thank the editorial team for their sincere efforts in bringing this edition of the Newsletter.

I wish all our students and faculty attain great success in their future endeavours.

With best wishes

Prof. U. W. Mate

Faculty Training & Development

Sr No.	Name of the faculty	FDP/STTP/Training activities Attended	Venue & Date	Duration
1.	Prof. Mrunal Joshi	Orientation programme for Environmental Engineering subject	Vishwaniketan's Institute of Management Entrepreneurship and Engineering Technology, 06/07/2018	1 Day
2.	Prof. Mugdha Agarwadkar	Orientations on Applied Hydraulics	Vishwaniketan's Institute of Management Entrepreneurship and Engineering Technology, 06/07/2018	1 Day
3.	Prof. Pooja Rao	Orientation for Geotechnical Engineering-I	AIKTC, Panvel, 07/07/2018	1 Day
4.	Prof. Nithya. K	Orientation for Geotechnical Engineering	AIKTC, Panvel, 07/07/2018	1 Day
5.	Prof. Vivek Pagey	Orientation programme for Advanced Concrete Technology	AIKTC, Panvel, 07/07/2018	1 Day
6.	Prof. Umesh Vazurkar	Orientation Program on DLO-I: Building Services and Repairs	12/07/18	1 Day
7.	Prof. Pallavi Patil	Orientation program on transportation Engineering	Datta Meghe College of Engineering, 20/07/2018	1 Day
8.	Prof. Vivek Pagey	Corrosion Week-2018	Krishna Conchem Products Pvt. Ltd. Mahape 26/07/18	1 Day
9.	Prof. Umesh Vazurkar	Corrosion Week-2018	Krishna Conchem Products Pvt. Ltd. Mahape 26/07/18	1 Day
10.	Prof. Raksha Khandare	Orientation for Structural Analysis -II	Datta Meghe College of Engineering, 27/07/2018	1 Day
11.	Prof. Vishal Misal	Orientation for Structural Analysis -II	Datta Meghe College of Engineering, 27/07/2018	1 Day
12.	Prof. Komal Gujarati	Workshop on “Application of Remote Sensing in Civil Engineering”	New Horizon Institute of Technology & Management, Thane, 28/8/2018	1 Day
		Workshop on “River Hydraulics & Water Resource Management”	Shree Swami Atmanand Saraswati Institute of Technology, Surat 19, 20/10/2018	2 Days
13.	Prof. Pravin Jagtap	NPTEL Faculty Development Online Certificate course on “Advanced Concrete Technology”	IIT Chennai, October 2018	6 Months
14.	Prof. Pallavi Patil	Indo-US workshop on hazardous waste management	Sandip University, Nashik, 14, 15/11/2018	2 Days

Student Achievements

Toppers list

Congratulations to our students on their excellent exam results. We wish them to keep the same courage and confidence to face the challenges of life. May God bless them with success and abundant happiness.

May 2018

Semester	Name of Student	CGPA
IV	Anchan Nidhi	9.04
	Mestry Piyush	8.85
	Ingale Kajal	8.15
VI	Padhye Suyash Makarand	9.64
	Chand Manoj Mohan	9.32
	Savla Ayush	9.11
VIII	Salvi Nitesh Sunil	9.33
	Katare Ankita Anil	9.08
	Chhipa Aaditya Shyambihari	9.08

Sports Achievement

Umesh Sawant, student of B.E. Civil, ranked 13th in University of Mumbai Inter Collegiate Shooting Competition (Peep sight Air Rifle)

Technical Achievement

Avishkar Research Convention 2018-19 (District / Zonal level Research Project Competition).

Sanket Kolhe, Vishal Mali, Deepkumar Mehta and Sourabh Varun presented a Research Project titled – **'Cost effectiveness and Traffic Management by constructing underpass'**, under the guidance of Prof. P. S. Jagtap.

Utkarsh Shukla, Aditya Rampure, Saurabh Patil and Pranav Pilankar presented a Research Project titled – **'Design of Water Distribution System using EPANET Software – Case Study of Dudhani town'**, under the guidance of Prof. M. R. Mulay.

Participation was under **UG Level** category at the selection round of 13th Inter-Collegiate **Avishkar Convention 2018-19** held at Ramrao Adik Institute of Technology, Nerul, Navi Mumbai on 23rd December 2018 for Engineering Colleges of all Districts / Zones.

Departmental Activities

Site Visits

Site visits have their own importance in a career of a student who is pursuing a professional degree. It is considered as a part of college curriculum. The objective of an industrial visit is to provide us an insight regarding internal working of companies. We understand that theoretical knowledge is not enough for a successful professional career. With an aim to go beyond academics, industrial visit provides students a practical perspective of the work place. It provided us with an opportunity to learn practically through interaction, working methods and employment practices. Hence, following are the highlights of Industrial visits and Survey camp conducted in the academic year.

1) Sewage Treatment Plant, Airoli.

As per the curriculum of University of Mumbai, students of Final Year Civil Engineering having Environmental Engineering II subject required to visit a site as a part of their Termwork. A site visit was arranged to Sewage Treatment Plant, sector 15, Airoli, Navi Mumbai, on 31/08/2018.

About the Plant:

The present sewage treatment plant is designed for 800000 inhabitants. The waste water is treated before it islet into the sea. This sewage treatment plant has been designed for Airoli Node in Navi Mumbai with latest C-Tech (Advanced cyclic Activated Sludge Technology) process for an average 80 MLD capacity. In this site visit, students have got the knowledge regarding –

- How the treatment of waste water is done in actual practice?
- What are the various essential units of STP?
- Technical details of each unit with their working
- What are the various laboratory tests done on waste water?

Semester VII, Sewage Treatment Plant, Airoli.

2) Gargoti Museum, Nashik

As per the curriculum of University of Mumbai, students of second year of Civil Engineering having Engineering Geology subject required to visit a site as a part of their term work. A visit of 102 students (IInd year/ IIIrd semester) was arranged to Gargoti Museum, at Gargoti Museum, D-59, MIDC, Sinnar 422113, India on 01/09/2018.

About the visit:

Introductory lecture was delivered by the staff member of the museum. Student's knowledge was enhanced by studying the Siliceous minerals & other Igneous rocks of Maharashtra also, from all over the world. The special rocks from the Moon & Mars added the importance of museum.

Vision: To enhance a strong fundamental knowledge of students.

Mission: To make technically sound Engineers.

In this site visit, the students gained the knowledge of regarding:

- Detail procedure of how Siliceous minerals & Igneous rocks are formed.
- Implementation of these rocks in construction industry.
- What difficulties are faced during the construction and what precautions to be taken.

Semester III, Gargoti Museum.

3) Water Treatment Plant, Bhandup

As per the curriculum of University of Mumbai, students of Third Year Civil Engineering having Environmental Engineering 1, required to visit a site as a part of their term work. A site visit was arranged to Bhandup water Complex, Khinepada, Bhandup, Mumbai, Maharashtra 400709, on 05-09-2018 which is run by Bruhan Mumbai Municipal Corporation, Mumbai.

About the Plant:

Bhandup Water Treatment plant is established in 1980 is one of the biggest plants in Asia, run by Mumbai Municipal Corporation, in the state of Maharashtra, having capacity 2100 MLD. This 365-acre forest complex in Bhandup is bordered by the Borivli National Park and Yeoor Hills. Around 450 people work round-the-clock in shifts to ensure that over 12 million Mumbaikars receive a continuous supply of clean water from their taps each day.

Raw water from four lakes viz. Tansa, Bhatsa, Vaitarna and Upper Vaitarna arrives through trunk mains and into the inlet bay of the Bhandup complex. To supply safe drinking water is the responsibility of any water utility. In Water Treatment Plant plant the raw water is treated for physical, chemical and biological standards to achieve the required drinking water standards.

At the water-testing laboratory inside the complex, Various tests are performed at every stage every day. There are 20 different sampling pipelines which continuously bring treated water at various stages of the process into the laboratory. Every day, three to four tonnes of chlorine is used to treat water.

In this site visit, students got the knowledge regarding –

- Functioning of water treatment Plant in actual practice.
- Various essential units of WTP
- Technical details of each unit with their working

Semester – V, Water Treatment Plant, Bhandup.

4) Model Room of College of Military Engineering, Pune.

Industrial visit was arranged for 56 students at Model Room of College of Military Engineering, Pune, on 12th October, 2018. It had been guided by - Prof. Suryawanshi V. K, Prof. Kalburgi. P. S, Prof. Misal V. M. and Prof. Vazurkar. U. V.

CME is a premier technical and tactical training institution of the Indian army corps of engineering of the Indian army. Here students studied the models of all engineering related subjects.

- Students studied structural models like reinforcement of column, beam, footing, slab, and staircases.
- Students studied models related to transportation engineering, highway engineering, building material and concrete technology related models, Environmental Engineering and different types of arches, bonds, doors, windows.
- Students got practical knowledge and Civil Engineering applications of the subjects they studied in theory.

Semester VII, Model Room of College of Military Engineering, Pune.

Expert Lectures

Lectures delivered by expert and talented speakers can be highly stimulating and beneficial to students pursuing technical courses. They expose students to real-world life experiences from the position of someone who has been there. Students get to see the insight and perspective of the guest speaker's particular field.

1) Field Applications of Geotechnical Engineering in Large Infrastructure Projects.

The department of Civil Engineering organised a lecture of Industry expert Er. Anil D. Londhe on the topic **'Field Applications of Geotechnical Engineering in Large Infrastructure Projects'**, for our TE and BE students in the second half of 21st September 2018.The timing of this lecture was 4:30 pm -6:00 pm.

The venue for the lecture was Seminar Hall of our college. The lecture was delivered in the gracious presence of Head of the Department Prof. U.W. Mate and all faculty members of the department. The student members of CESA were the volunteers for making the necessary arrangements for the lecture.

The program started by the welcome of the speaker by the HOD. The introduction of the speaker was given by Siddharth Dhanavade. Er. Londhe covered the important topics in soil mechanics and their application in large projects and marine structures. His presentation was focussed on theoretical and practical aspects of Geotechnical Engineering.

This lecture proved to be useful for our students in enhancing the knowledge, practical understanding and to bridge the gap in the curriculum. The vote of thanks was proposed by Chinmay Sapre.

Semester V and VII, Lecture delivered by Industry expert Er. Anil D. Londhe on the topic 'Field Applications of Geotechnical Engineering in Large Infrastructure Projects'.

2) Structural Audit

The Department of Civil Engineering organized an Expert lecture on “Structural Audit” on October 3, 2018, at Seminar Hall, A.P. Shah Institute of Technology. It was organized by APSIT under continuous teaching learning process and invited Expert Speaker - Er. Aditya Deshmukh.

The T. E students (75 nos.) are presently studying the analysis of structures and in the coming semesters will be moving on to design of steel and reinforced concrete structures. As structural engineers, it becomes important to design structures considering the safety and economy. These structures are standing for so many years and there comes a stage when knowing the real status of old structures becomes important.

To make students aware of what practices are followed in the industrial sector to know the exact status of standing structure, an expert lecture was organised on “Structural Audit”.

The lecture covered the following points:

- Introduction to topic.
- Need for Structural Audit.
- Data Required.
- Various testing to be carried out.

The topic was covered in a systematic manner and at the end of the lecture, the expert shared some of his field and live examples with students. The lecture ended with question and answer session and vote of thanks.

Semester V, Lecture delivered by Er. Aditya Deshmukh on ‘Structural audit’.

3) Building Repairs

The department of Civil Engineering organised a lecture of industry expert Er. Anil Kunte on the topic ‘Building Repairs’, for our TE and BE students in the second half of 5th October 2018. The timing of this lecture was 11:00 am -12:00 pm.

The venue for the lecture was Seminar Hall of our college. The lecture was delivered in the gracious presence of Head of the Department Prof., U.W. Mate and all faculty members of the department. The student members of CESA were the volunteers for making the necessary arrangements for the lecture.

The program started by the welcome of the speaker by the CESA student. The introduction of the speaker was given by Mr. Vedant Kulkarni.

Er. Anil Kunte covered the important topics in Cracks in Concrete Structures and some remedial measures to avoid those. Further he covered some aspects of building repairs. In this seminar we had a sudden guest as Mr. Suhas Kulkarni, working as Technical advisor also delivered a seminar on structural and non-structural cracks with their repairs.

This lecture proved to be useful for our students in enhancing the knowledge, practical understanding and to bridge the gap in the curriculum. The vote of thanks was given by CESA student Mr. Siddharth Dhanawade.

Semester V and VII, Lecture delivered by Industry Expert Er. Anil Kunte and Mr. Suhas Kulkarni on the topic ‘Building Repairs’.

4) Role of Transit Oriented Development in Indian Infrastructure Industry

The department of Civil Engineering organised a lecture of expert Amol Shimpi on the topic “Role of Transit Oriented Development in Indian Infrastructure Industry”, for our TE and BE students in the first half of 11st October 2018. The timing of this lecture was 10:30 am - 12:00 noon. The venue for the lecture was Class Room No. 101 of our college. The lecture was delivered in the gracious presence of Head of the Department Prof., U.W. Mate and all faculty members of the department. The student members of CESA were the volunteers for making the necessary arrangements for the lecture.

The program started by the welcome of the speaker by the HOD. The introduction of the speaker was given by Nidhi Anchan. Mr. Shimpi covered the important topics in transit oriented development and its application in large projecs and railway structures. His presentation was focussed on theoretical and practical aspects modern infrastructure projects.

This lecture proved to be useful for our students in enhancing the knowledge, practical understanding and to bridge the gap in the curriculum. The vote of thanks was proposed by Shubham Mane.

Semester V and VII Lecture delivered by Expert Amol Shimpi on the topic ‘Role of Transit Oriented Development in Indian Infrastructure Industry’.

Seminars

The students have to always keep their eyes on what new things are arriving day by day. This is where the seminars are of great importance. Seminars are capable of keeping the students updated with the technologies. Seminars provide latest information about the things which are happening in science and technology.

1) Industry involvement for meeting the challenges of tomorrow.

The Department of Civil Engineering, in association with CESA organized a one-day seminar on **"Industry involvement for meeting the challenges of tomorrow"** on 9th March 2018, at CR 103 & Seminar Hall, Ground floor, APSIT. The event was attended by more than 100 students from SE, TE & B.E and 15 faculty members of Civil Engineering Department. We were fortunate to evident eminent speakers like - Er. Hemant Vadalkar (Consulting Engineer at Vadalkar & associates), Mr. Taskar (Ex CEO), Mr. Vinay Deshpande (Retired Deputy Chief Engineer-BMC).

Benefits:

- Interaction with field experts.
- Importance of Designing and Detailing in Earthquake Engineering.
- Scope of Tunnel Engineering.

The event made students aware about designing details, details of tunnel Engineering and importance of arbitration in Civil Engineering. Vote of Thanks by CESA Student in-charge.

Seminar on "Industry involvement for meeting the challenges of tomorrow" by Er. Hemant Vadalkar (Consulting Engineer at Vadalkar & associates), Mr. Taskar (Ex CEO) and Mr. Vinay Deshpande (Retired Deputy Chief Engineer-BMC) for all students.

2) Role of Mechanical and Civil Engineers in Sales and Marketing in today's era

A seminar for BE Civil was organized by CESA in collaboration with MESA on 14th August, 2018 at A. P. Shah Institute of Technology, pertaining to the field of 'Sales and Marketing after an Engineering degree for Civil and Mechanical'. The guest speaker, Mr Rakesh Dave, was working with Praxiar India Pvt Ltd as their Sales Director. The main motto behind this seminar was to eradicate the reluctance of engineers in entering a sales career after engineering.

The seminar begun on a high note addressing various natural qualities of an engineer and their requirement in the sales industry. Having climbed the ladder of success for reaching that position, Mr Rakesh Dave was eloquent in sharing his 24 years of experience with the budding engineers. He gave a detailed presentation answering various questions viz. Why Engineers, Qualities of an engineer, can engineers sell, what is Sales, Why Sales, Perks and Incentives, etc.

The seminar ended on an informative note regarding the basic steps involved in the process of entering the job market viz. preparing a CV, preparing for an interview, writing a statement of purpose, etc.

Seminar on 'Role of Mechanical and Civil Engineers in Sales and Marketing in today's era' by Mr Rakesh Dave, for students of Mechanical and Civil Engineering.

Cultural Events

1) Guru Purnima

Guru Purnima is an eastern spiritual tradition dedicated to spiritual and academic teachers, who are evolved or enlightened humans, ready to share their wisdom, with very little or no monetary expectation, based on Karma Yoga. This festival is traditionally observed by Hindus, Buddhists and Jains to revere their chosen spiritual teachers / leaders and express their gratitude. The festival is celebrated on the full moon day (Purnima) in the Hindu month of Ashadha (June–July) as it is known in the Hindu calendar of India and Nepal. This day marks the first peak of the lunar cycle after the peak of the solar cycle.

On this, occasion CESA welcomed all Civil Engineering faculty and felicitates with flowers and sweets on 27/7/2018 at 10.30 am, Seminar Hall. Some of the faculties shared their feelings and blessed to students. Vote of thanks was given by Mr. Suyash Padhye (B.E Civil).

Celebrating Guru Purnima at Seminar Hall, Organized by CESA.

2) Dussehra

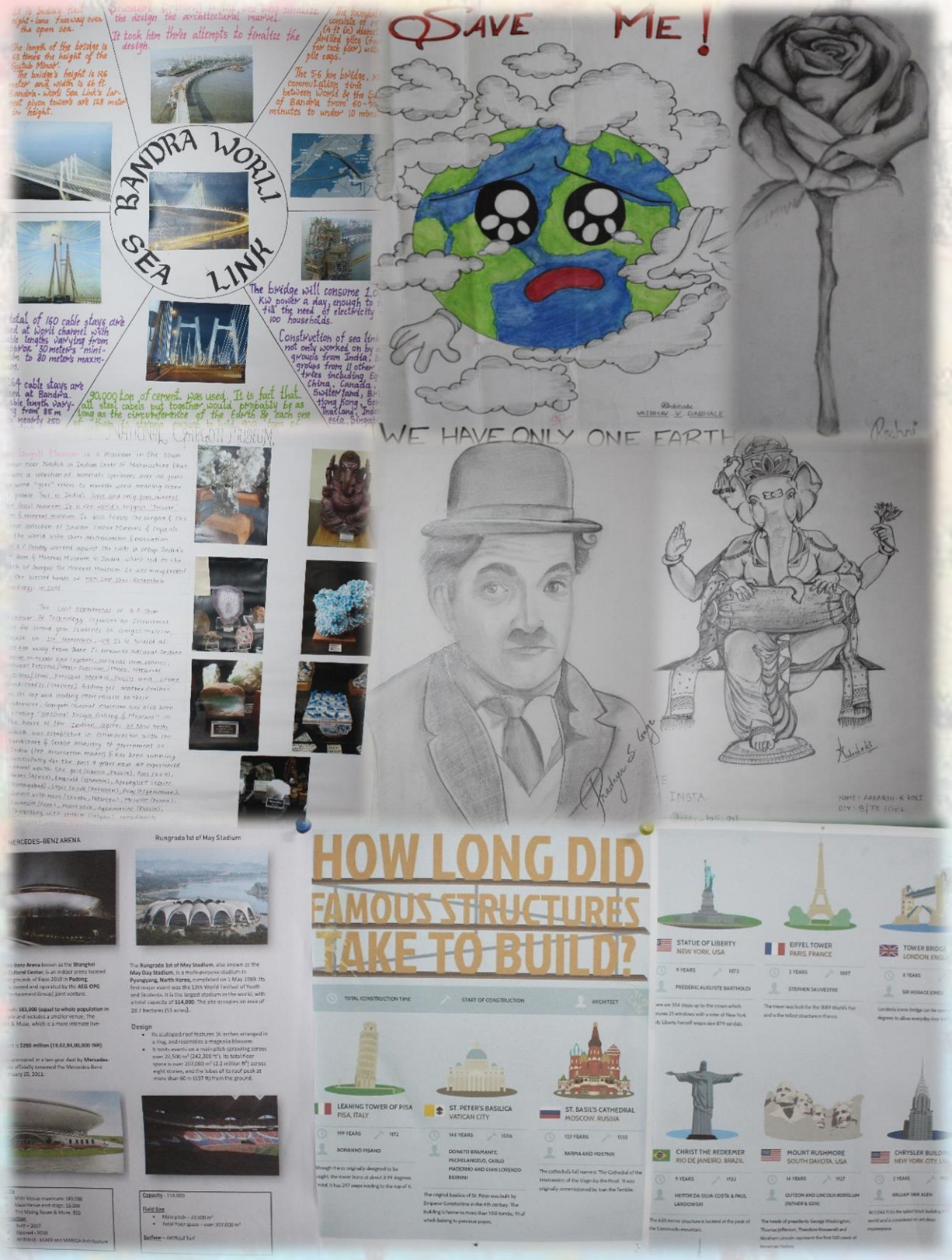
Dussehra (Vijaya Dashami or Dasara) is a Hindu festival that celebrates the victory of good over evil. It is a gazetted holiday in India, which is marked on the 10th day of the bright half (Shukla Paksha) of the month of Ashvin (Ashwayuja), according to the Hindu calendar.

On this auspicious occasion, the Civil Engineering Department decorated and all the faculties gathered in room number 219 at 11.00 am on 17/10/2018. Goddess Saraswati and all equipment / machineries of various laboratories were worshipped on this occasion.

Celebrating Dussehra at Department of Civil Engineering.

CESA TEAM:

- **Co-ordinator – Prof. Vishal Misal**
- President – Suyash Padhye
- Secretary – Chinmay Sapre
- Vice-President – Shubham Mane
- Assistant Secretary – Nidhi Anchan
- Treasurer – Sidhharth Dhanawade
- Discipline Head – Govindraj Patil
- Volunteers:
    - Urval Shah
    - Sidhhesh Mali
    - Vedant Kulkarni
    - Aayush Savla
    - Aditya Rampure
    - Nayan Kadam
    - Omkar More



Art work by: Roshni, Raveena, Parin, Vaibhav, Pradnya and Aadarsh.

Program Educational Objectives

PEO 1 Preparation: To prepare students for successful careers in industry, research and institutions of higher learning with social sense and responsibility.

PEO 2 Core Competence: The graduating professionals from Civil Engineering will have a wide spread background of sciences, mathematics and fundamentals of Civil Engineering to solve ever-changing universal industrial problems.

PEO 3 Breadth: To create environment for students to aspire them to make competitive and innovative solutions to Civil Engineering problems

PEO 4 Professionalism: To enrich students with leadership qualities, professional ethics and entrepreneurial skills through various devised programs.

PEO 5 Life Long Learning: To promote students' awareness and commitment to lifelong learning for professional engagement to benefit society at large.

Department of Civil Engineering.

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