MARATHWADA INSTITUTE OF TECHNOLOGY
AURANGABAD

MIT
Quest for Excellence

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MIT
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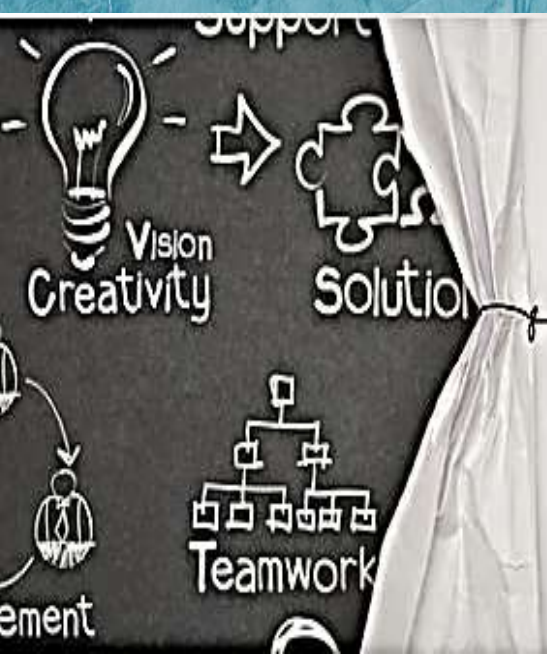
Towards ....Building a Sustainable Community

MARATHWADA INSTITUTE OF TECHNOLOGY, AURANGABAD

Publishing

MIT

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MIT
Quest for Excellence

Campus Chronicle……….

INNOVATION

CREATION

TECHNOLOGY

MIT

ACHIEVERS

SUCCESS

DESIGNERS

LEARNING

Engineer's Day…….

ENGINEER'S DAY
M. Visvesvaraya
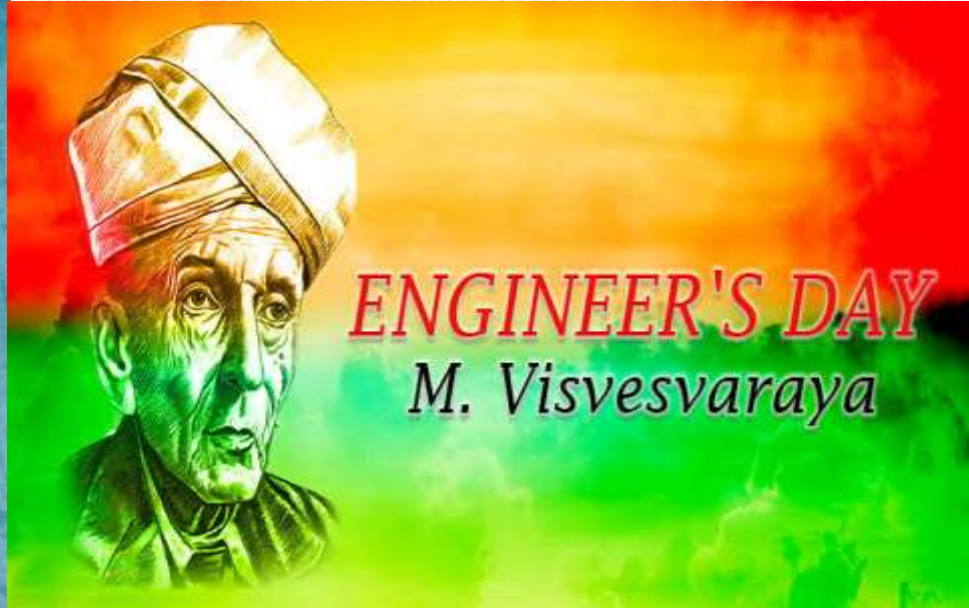
The **Engineering** Community across India is celebrating **Engineers Day** on 15 September every year as a remarkable tribute to the greatest Indian **Engineer Bharat Ratna M. Visvesvarayya**.

"**Engineering For Change**"

is the **theme** of **Engineers Day 2019**

Teachers Day Celebration ……..

Department of Mechanical Engineering

September 5, the birth anniversary of Dr. Sarvepalli Radhakrishnan is celebrated as teacher's day in order to honor teachers for their special contributions in a particular field area, or the community in general. On this occasion the students of all the Departments organized an event to celebrate and pay their respects to the teachers.

The program also included various cultural performances by students and various fun games for the faculties along with felicitation of all the faculty members.

Teachers Day Celebration ……..

Department of Electrical Engineering

Students Association Electrical Engineering Departments has organized Teachers Day on 05th September at Dr.APJ Abdul Kalam Seminar Hall. In this program students expressed their gratitude towards all the faculty members of EED trough various activities.

In the program Prof.R.P.Dahad. In her speech Prof.R.P.Dahad and Prof.A.H.Kardile addressed all the students. Where they pointed the qualities of good students and their importance in development of teachers .There was dance performance by TY student Aishwarya Sonawane which was appreciated by everyone

Students also organized fun games like Pyramid Making, Dum Sheraj, Memory Games which were enjoyed by faculty members.. Finally students presented beautiful gifts to all faculties.

Department of Electrical Engineering

Induction Program for "Direct Second Year Year Electrical Engineering" students

Induction program for student who had admitted to Direct Second Year of Electrical Engineering was conducted on 14th September 2019 at Department of Electrical Engineering.

The objective of the Induction Program is to familiarize newly admitted students at EED..

In this program Honorable HOD Dr.S.M.Badave addressed the students. In her address she introduced students about the journey of the department and different activities run by department to overall growth of the students.

SY Class teacher Prof.G.D.Karanjgaokar also addressed students and gave the different instructions regarding smooth conduction of academics.

Department of Architecture

An Expert Talk was organized by Department of Architecture at MIT on **13th SEPT 2019** by **10:00am till 11:00 am**. 40 students attended the talk from Third .yr. dept of Architecture.

The Speaker for the Expert Talk session was Er. Rahul Deshpande.
The session started by the Introduction of the guest Speaker Er.Rahul Deshpande proceded by his felicitation by the HOD, Department of Architecture, Prof. Kuldeep Kaur Bhatia by presenting the college memento .
Mr. Rahul Deshpande began the session with explaining the basics of electrical services and clarified the basic concepts of the students. He then elaborated on the technicalities of Electrical Services with latest up gradations in the field and the Rules & Regulations for the same.
The session was very useful for the students as it covered all the topics of the subject Electrical Services included in their syllabus.

Workshop…..

Department of Architecture

A Two days "BRICKS Model Making Workshop" was organized in the Department of Architecture at MIT, Aurangabad on **13th & 14th September 2019**. 46 students from First. yr, Second . yr & Third .yr .attended the Workshop .

The Workshop was conducted by **Prof.Vikas Shimpi** who is a renowned Model Maker from Nasik with the experience of conducting 79 workshops throughout the Country in different colleges.

The Workshop Program started by welcoming the Guest with the college Memento by the HoD, Dept of Architecture Prof. Kuldeep Kaur Bhatia followed by his Introduction.

Department of Architecture

Prof. Vikas Shimpi than took over the session. Sir ,briefed out the students regarding the 2 days program. He then divided the students in groups. Each group was given a different task.

By sharp 9:00am all students with assigned faculties moved to the Workshop Venue i.e the Model Making Room of the Dept. Sir explained the characteristics, uses, varieties and manufacturing of bricks available in market. He also explained various famous structures made in bricks and the essence of brick as a construction material.

Sir followed a very unique methodology to teach Brick construction techniques . He made available miniature bricks at a scale of 1:05 which are made out of clay, plaster of Paris and red sand . As all the structures were to be made on the given scale of 1:05.

Workshop ....

Department of Architecture

Site Visit (Bani Begum Bagh)…..

Department of Architecture

The study tour at Bani Begum Bagh was organized as the part of curriculum for the subjects AD-III & HA-III of Second. yr. B.arch. The study tour was conducted under the guidance of three faculty members, **Ar. Ajay Kulkarni, Ar. Leena Aphale, and Ar. Manasi Joshi.**

The tour was conducted in three sessions. The First session began in the morning by **7:30am & continued till 12:00pm** for the subject AD-III (Site :Daultabad t-point) in which students completed the site analysis and then proceded for lunch.

After lunch Second session began by **1:15pm and continued till 3:45pm** for the subject HA-III(Site: Bani Begam Bagh).

Students left the premise around 3:45 pm to proceed for the social initiative of premise cleaning and. It was a very informative session for the students.
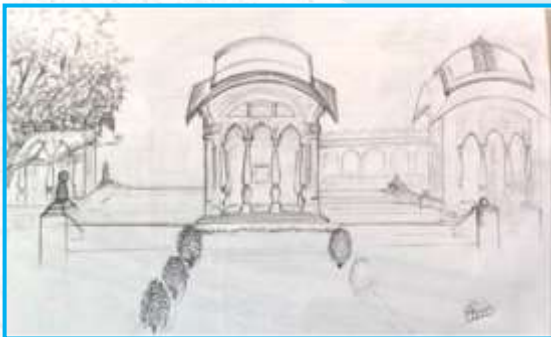
Site Visit (Bani Begum Bagh)…..

Department of Architecture

SKETCHING WORKSHOP AT BANI BEGUM BAGH

Sketching Workshop was organized for First Yr. B.Arch students At Bani Begum Bagh on 21st Sept 2019 at 12:30 pm

Department of Architecture

PUBLIC AWARENESS PROGRAMME FOR "DRY GARBAGE COLLECTION AND DISPOSAL" AT KHULTABAD

Department of Architecture organized an activity as a social initiative towards '**Garbage collection and disposal in public area'** at Khultabad, Bhadra Maruti-Worship Place.

The Teachers and students of Second Year Architecture, Collected dry Garbage of Tea cups, Water Bottles, tobacco Rappers, Polythene Bags, Disposable plates etc. and disposed it to the garbage dump yard for further procedure.The Social Initiative program was conducted under the guidance of two faculty members, Ar. Leena Aphale, and Ar. Manasi Joshi.

Field Visit......

Department of Electrical Engineering

Field Visit to "MIT-125 kVA Diesel Generator Power Plant"

To get the practical knowledge of Diesel Engine Power Plant, the field visit of TY Electrical Engineering Students was organized to MIT 125kVA Diesel Generating Station on 07th September 2019.

In this field visit the detailed knowledge and working of each component of Diesel Generator Set was given by the control room technician Mr. Jaybhaye. The course co-ordinator Mr. A.H.Kardile had given the detailed knowledge of different technical specifications of Diesel Generator Set to all the students.

Students enjoyed the field visit and demanded to conduct such visits in future.

Site Visit.......(ABC –East Business Centre)

Department of Architecture

Live Case study visit for project ABS(East) was scheduled on **19TH SEPT 2019** at **8:15am to 12:00 pm**   for the subject **ARHITECTURAL DESIGN –IV**. Project is located at **MIDC Industrial Area, Chikhalthana, Besides Prozone Mall, Aurangabad**.

43 students and 3 Faculty members.
Subject: Architectural Design-IV
Class: Third Year Architecture.

Purpose of case study was to understand the planning of business centre with respect to the design aspects like location of the project, zoning, circulation pattern, etc.
Major emphasis was given to Services provided like Plumbing , Fire Fighting, , Electrical, Parking floor layout ,Energy Efficient Design Strategies etc .Students also studied the Facade treatments in terms of Materials and Construction Techniques .
The innovative use of construction materials with color scheme made the ABC (East) Complex aesthetically appealing.

Students were made to understand the project thoroughly by discussion with Ar. Sameer Ausekar and ABC (East) staff. It was very informative visit for students to understand all the aspects of designing a Business centre.

Campus Diary……. Visit …..

Creative Buzz………

52ⁿᵈ Engineers Day….

Bharat Ratna Sir M.Visvesvaraya

Theme:
"Engineering for Change"

September 15 is celebrated every year in the country since 1967 as "Engineers' Day" to commemorate the birthday of the legendary engineer Sir Mokshagundam Visvesvaraya. Sir Visvesvaraya, an eminent Indian engineer and statesman was born in a remote village of Karnataka, the State that is incidentally now the Hi-tech State of the country. Due to his outstanding contribution to the society, Government of India conferred "Bharat Ratna" on this legend in the year 1955. He was also called the precursor of economic planning in India. His learned discourse on economic planning in India, Planned Economy for India and Reconstructing India, was the first available document on the planning effort of the country and it is still held as the parent source matter for economic planners. A

theme of national importance is chosen every year by the Council of the Institution and deliberated at its various State/Local Centres to educate the engineering fraternity in general and the society in particular. This year the 52nd Engineers' Day will be celebrated all over the country and the Council of the Institution has selected the theme as "Engineering for Change" to mark the occasion

Engineers Day……..

'Change' is the most important challenge faced by the engineers of a developing India. They are further being challenged by the changing climate and ever carried out in all engineering disciplines to cope with such emerging challenges. Information and communication technology and Electronics are playing a key role in several initiatives such as Digital India, Make in India, Start- up India and Smart Cities. Keeping in view of the rapid transformation and innovation at international level, engineers of our country should be prepared to cope-up with the changes. The complexity further increases due to environmental concerns and actions needed for sustainable development. Engineers now cannot restrict themselves to a particular discipline. Good understanding of interdisciplinary innovations, design, planning and undertaking of researches and projects on that is the need of the hour.

Renewable energy has become the key notion of all Electrical as well as Environmental engineers as we have to move away from fossil fuel to save the environment. Wind energy and solar PV energy are now finding place amidst the conventional energy supply of the nation and interconnectivity of those with the main grid is being looked into. To facilitate the mobility of the huge population of our country, 'Green transport' is required to be implemented for all mass transport system. Therefore the theme "Engineers for Change" calls upon the engineers to be the harbinger for the change by exploring the disruptive technologies in all engineering sectors to enable India to lead the crusade of mitigation of climate change.

The theme 'Engineering for Change' is chosen for Engineer's Day 2019 celebrations to address all these aspects.

Source: https://www.ieindia.org/webui/ajax/Downloads/WebUI_PDF/Activity_Pdf/Write-up_ED_2019.pdf?V20190802.1

Data Science and Its Growing Importance

(Author: Dr. Arti Mohanpurkar, Associate Professor, Department of Computer Engineering, Marathwada Institute of Technology, Aurangabad)

An interdisciplinary field, data science deals with processes and systems that are used to extract knowledge or insights from large amounts of data.

Data Mining, Data Analytics, Machine Learning, Artificial Intelligence are encompassed under the umbrella of Data Science.

Need of data science

In this era of technology and high connectedness it is seen that there are enormous varied sources of data generation, like social media, business and government enterprises, news and advertising, live streaming, healthcare industry etc. A voluminous data is generated with great velocity and diversity in formats which are structured and unstructured or even multi-structured at times which needs to be well organized for future utilization. Some data is volatile while the other is persistent which is totally at the discretion of the governing organization while accuracy and value are other important features. The perpetual connectivity of mobile, ceaseless social interactions, need of any data anytime, anywhere on any device using the cloud technology is a gigantic task.

Storing, handling and further intelligently managing this data altogether stand up to be as challenging as finding a needle in the haystack. Relational database management systems and data warehousing systems are advancing to provide suitable support for handling the large amounts of complex data.

Data science, or data-driven science, combines different fields of work in statistics and computation in order to interpret data for the purpose of decision making. Data science is about solving business problems.

More generally, a data scientist is someone who knows how to extract meaning from and interpret data, which requires both tools and methods from statistics and machine learning, as well as being human. She spends a lot of time in the process of collecting, cleaning, and munging data, because data is never clean.

This process requires persistence, statistics, and software engineering skills—skills that are also necessary for understanding biases in the data, and for debugging, logging output from code.

Specific tasks of data scientists include:

- Identifying the data-analytics problems that offer the greatest opportunities to the organization
- Determining the correct data sets and variables
- Collecting large sets of structured and unstructured data from disparate sources
- Cleaning and validating the data to ensure accuracy, completeness, and uniformity

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- Devising and applying models and algorithms to mine the stores of big data
- Analyzing the data to identify patterns and trends
- Interpreting the data to discover solutions and opportunities, communicating findings to stakeholders using visualization and other means.

Data Science Is Helping the Future

Data science enables retailers to influence our purchasing habits, but the importance of gathering data extends much further.
Data science can improve public health through wearable trackers that motivate individuals to adopt healthier habits and can alert people to potentially critical health issues.

Data can also improve diagnostic accuracy, accelerate finding cures for specific diseases, or even stop the spread of a virus. When the Ebola virus outbreak hit West Africa in 2014, scientists were able to track the spread of the disease and predict the areas most vulnerable to the illness. This data helped health officials get in front of the outbreak and prevent it from becoming a worldwide epidemic.

Data science has critical applications across most industries. For example, data is used by farmers for efficient food growth and delivery, by food suppliers to cut down on food waste, and by nonprofit organizations to boost fundraising efforts and predict funding needs.

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Pursuing a career in data science is a smart move, not just because it is trendy and pays well, but because data very well may be the pivot point on which the entire economy turns.

In-Demand Data Science Careers

Data science experts are needed in virtually every job sector—not just in technology. The five biggest tech companies are Google, Amazon, Apple, Microsoft, and Facebook.
Here are some of the leading data science careers one can break into with an advanced degree in data science.

Business Intelligence (BI) Developer

BI developers design and develop strategies to assist business users in quickly finding the information they need to make better business decisions. Extremely data-savvy, they use BI tools or develop custom BI analytic applications to facilitate the end-users' understanding of their systems.

Data Architect

Ensure data solutions are built for performance and design analytics applications for multiple platforms.

Applications Architect

Track the behavior of applications used within a business and how they interact with each other and with users.

Infrastructure Architect
Oversee that all business systems are working at optimally and can support the development of new technologies and system requirements.

Enterprise Architect
An enterprise architect works closely with stakeholders, including management and subject matter experts (SME), to develop a view of an organization's strategy, information, processes and IT assets.

Data Scientist
Find, clean, and organize data for companies. Data scientists will need to be able to analyze large amounts of complex raw and processed information to find patterns that will benefit an organization and help drive strategic business decisions. Compared to data analysts, data scientists are much more technical.

Data Analyst
Transform and manipulate large data sets to suit the desired analysis for companies.

Data Engineer
Perform batch processing or real-time processing on gathered and stored data. Make data readable for data scientists.

Machine Learning Scientist
Research new data approaches and algorithms.

Data Analyst
Transform and manipulate large data sets to suit the desired analysis for companies.

Data Engineer
Perform batch processing or real-time processing on gathered and stored data. Make data readable for data scientists.

Machine Learning Scientist
Research new data approaches and algorithms.

Statistician
Interpret, analyze, and report statistical information, such as formulas and data for business purposes.

Data Scientists Are in Constant Demand

Experts say that while some data science work will likely be automated within the next 10 years, "there is a clear need for professionals who understand a business need, can devise a data-oriented solution, and then implement that solution."

Data science experts are needed in almost every field, from government security to dating apps. Millions of businesses and government departments rely on big data to succeed and better serve their customers. Data science careers are in high-demand and this trend will not be slowing down any time soon, if ever.
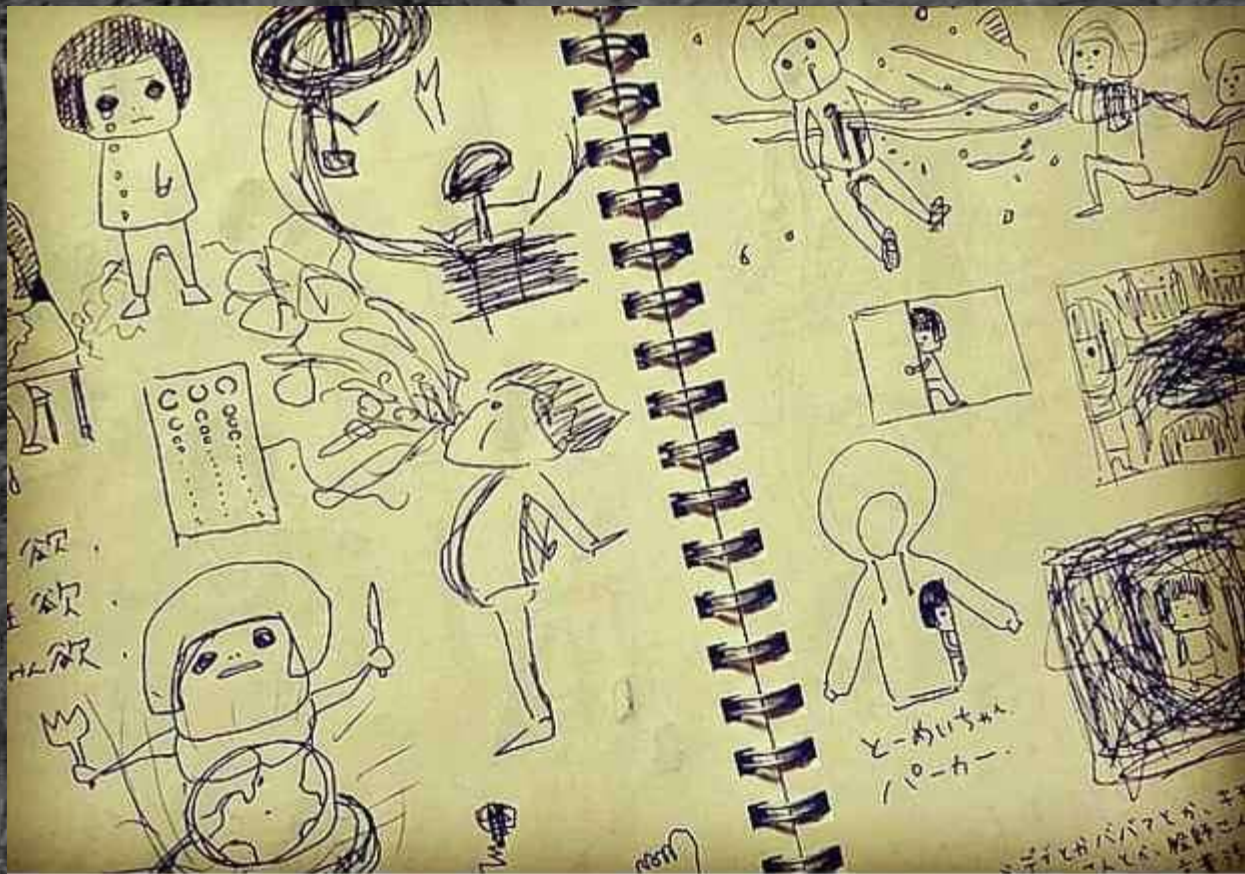
Pritesh Jain (Third. Yr.B.Arch , 2019-20)

From notebook to Canvas……

Artist: Parabhjyot Kaur Kaushal
Class: SY (EE)
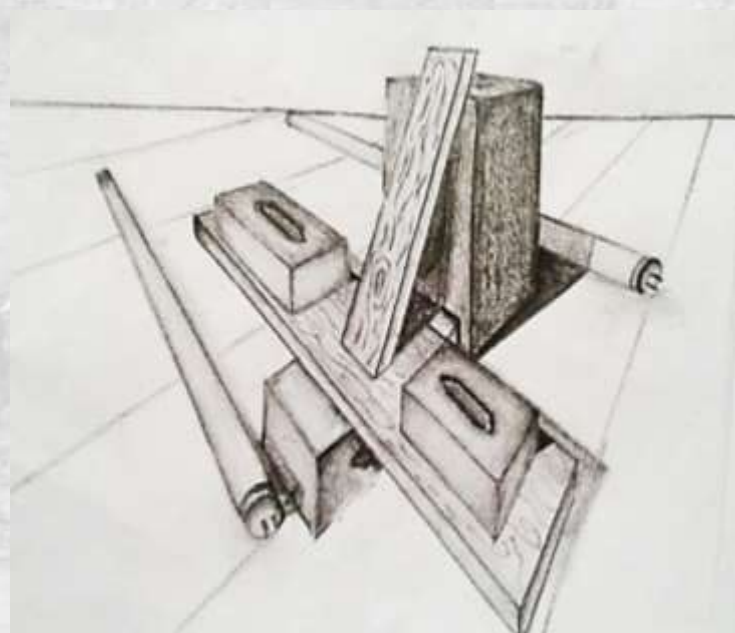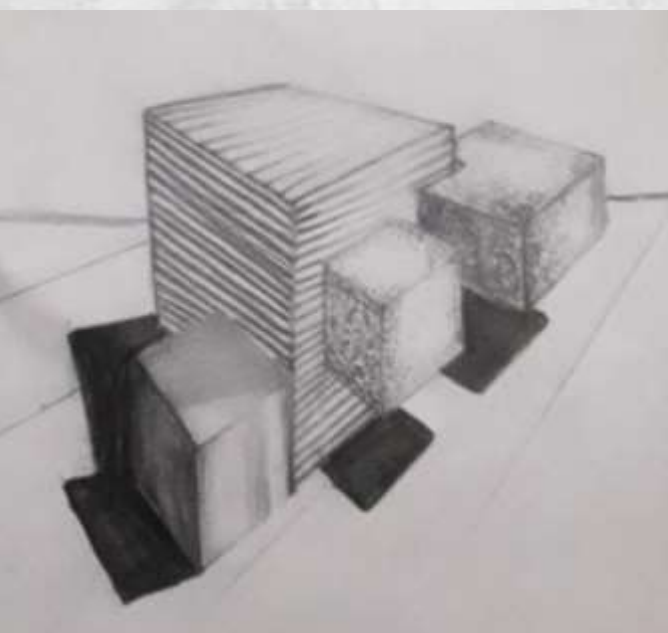
Artist: Parabhjyot Kaur Kaushal
Class: SY (EE)

Wall Painting

Life @ MIT...........the candid moments

Life @ MIT............the candid moments

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