



G.K. Gujar Memorial Charitable Trust's  
**Dr. Ashok Gujar Technical Institute's,**  
**Dr. Daulatrao Aher College of Engineering, Karad.**  
Vidyanagar Ext. Banawadi, Tal. Karad 415124, Dist. Satara, Maharashtra INDIA

## **DEPARTMENT OF CIVIL ENGINEERING**

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### **Brief Report on Innovations of Drone Applications**

**Event Dates:** September 29-30, 2023

**Location:** Dr. Daulatrao Aher College of Engineering, Karad

**Organizer:** Department of Civil Engineering, Dr. Daulatrao Aher College of Engineering

#### **Objectives**

The primary objectives of the event were to:

1. **Showcase Innovations:** Present the latest advancements in drone technology and explore their applications in various sectors, particularly civil engineering, agriculture, and environmental monitoring.
2. **Foster Collaboration:** Create networking opportunities for industry professionals, researchers, and students to discuss potential collaborative projects involving drone technology.
3. **Enhance Knowledge:** Educate participants on regulatory frameworks, safety protocols, and best practices related to drone operations and applications.

#### **Activities Undertaken**

The event featured a diverse range of activities, including:

- **Keynote Address:**  
Prof. H.U. Mulay delivered an insightful keynote address that explored the transformative impact of drones in engineering. He emphasized the importance of integrating drone technology into traditional practices to improve efficiency, accuracy, and safety in construction and infrastructure management.
- **Workshops:**  
Hands-on workshops allowed participants to engage directly with drone technology. Attendees learned about:
  - Drone operation techniques, including flight planning and navigation.
  - Data collection methodologies for surveying and mapping applications.
  - Analysis of drone-acquired data using specialized software.
- **Panel Discussions:**  
Experts participated in dynamic panel discussions covering topics such as:
  - The future of drone technology and its implications for civil engineering.

- Ethical considerations and regulatory challenges in drone usage.
- Case studies demonstrating successful drone applications in real-world projects.
- **Demonstrations:**  
Live demonstrations showcased various drone models in action, illustrating their capabilities in:
  - Land surveying and mapping large areas.
  - Inspecting infrastructure such as bridges and buildings.
  - Environmental monitoring, including vegetation analysis and disaster response.
- **Networking Sessions:**  
Structured networking sessions provided opportunities for participants to connect with industry leaders, fostering potential collaborations and mentorship opportunities.

### **Acknowledgements**

Special thanks to Prof. V.P. Kumbhar and Prof. M.M. Kumthekar for their significant contributions in organizing the event through the Department of Civil Engineering. Their dedication and leadership were instrumental in coordinating logistics, inviting guest speakers, and ensuring the overall success of the event.

### **Conclusion**

The Innovations of Drone Applications event successfully highlighted the potential of drone technology to revolutionize various industries. It provided a valuable platform for knowledge exchange, skill development, and professional networking, setting the stage for future collaborations and advancements in the field.



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Program Name: Expert Lecture

Date:14/10/2023

DACOE/PRGM/COF-FRM- 02

Department: Department of Civil Engineering

COF-FRM-02- Rev. No: 0

### Activity Report

**Program/Activity Name: Expert Lecture on "Samruddhi Mahamarg (Nagpur -Mumbai Expressway "**

**Day and Date: Saturday ,14/10/2023**

**Duration : One day**

**Academic Year: 2023-24**

**Program type: Expert Lecture**

**Name and details of speaker: Mr S.K. Survase, Chief Engineer , MSRDC.**

**Objective of activity:Expert Lectures are a way of enhancing classroom learning by making real world connections.**

**Benefit in terms of learning/skill/knowledge obtained:Detail knowledge of Samruddhi Mahamarg.**

**Beneficiary: Students , Faculty**

**Outcome/Remark: Detail knowledge of Samruddhi Mahamarg. Design , construction, environmental sustainability and land acquisition difficulties regarding Samruddhi Mahamarg.**

#### **Brief of the event:**

The lecture was delivered by Mr. S.K.Survase, Chief Engineer MSRDC, who has extensive experience the construction of expressways . Shri S.K.Survase is the quintessential infrastructure technocrat who h multiple decades of experience in road and expressway development. Shri Survase, who had an extensive sti with NHAI, is widely credited with his role in development of three expressways – Mumbai to Pune expresswa Ahmedabad-Vadodara Expressway and Samriddhi Expressway.

The lecture began with a brief introduction to the Samruddhi Mahamarg and its importance. Mr. Surva explained that the The Mumbai Nagpur Expressway route connects a lot of major districts and villages. The rou is very beautiful as there are three wildlife sanctuaries too. There are numerous underpasses and overpasses. T Mumbai Nagpur Expressway will also feature the longest tunnel. The tunnel is at Kasara Ghat, Igatpuri. T Samruddhi Mahamarg also have a lot of other things.

These include: 33 bigger bridges, 274 smaller bridges, 6 tunnels & 65 flyovers.

Mr. Survase, then went on to discuss that Mumbai and Nagpur Expressway has reduced the travel tir significantly, the travel time is reduced to 8 hours. Moreover, the roads constructed are of international quali Such quality offers a safe and smooth drive. Government bodies are paying special attention to environmen sustainability. The Mumbai Nagpur Expressway is a Green Corridor Project. As per the plan, 12.86 lakh tre will be planted across the expressway. These trees will be a combination of shrubs and small plants. As part the National Gas Grid 2 , the Mumbai–Nagpur–Raipur–Angul Gas pipeline will run along the expressway. Bas on the Wildlife Institute of India (WII) suggestions, wildlife mitigation measures are planned, and necessa structures like cattle underpasses are built for uninterrupted wildlife movement. With Electric Vehicle chargi points proposed at prospecting locations along the expressway and solar plants planned to generate 47 MW energy, the Samruddhi Corridor aims to become a model of an energy-efficient corridor.

The project recorded the fastest land acquisition ever done in the country, i.e., 8,861.02 Hectares of land acro 10 districts within 18 months. This expressway includes an intelligent highway management system for traf surveillance along with CCTV cameras and free telephone booths installed at an approximate distance of 5 km the expressway for quick reporting of mishaps or emergencies. The total width of the expressway will be 1:



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## Department of Civil Engineering

### Objectives -

The main objective of a guest lecture is to get detailed information and knowledge of construction of Samruddhi Mahamarg.

- The objective of conducting a expert lecture for students is to reinforce experimental and contextual learning.
- Expert Lectures are a way of enhancing classroom learning by making real world connections.
- Evidence suggests that expert lectures stimulate students' reasoning skills.

### Outcomes of Activity-

After this session students able to-

- To gain huge practical experience and theoretical knowledge in different circumstances.
- To provides an opportunity to explore a student abilities, talent, and skills on different experiences.
- To generate and sustain student interest in the subject.

### Beneficiary-

Branch of Students.( Civil BTech students)



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## Activity Report

meters comprising 6 lanes (provision for 8 lanes in future). The expressway will pass through 10 districts, talukas, and 392 villages.

The lecture concluded with a question and answer session. Several students raised questions regarding the design & construction of Samruddhi Mahamarg, as well as its impact on the environment and the local communities. Mr. Survase provided insightful answers to the questions and gave examples of successful implementation of safety measures.

### Link of Event:

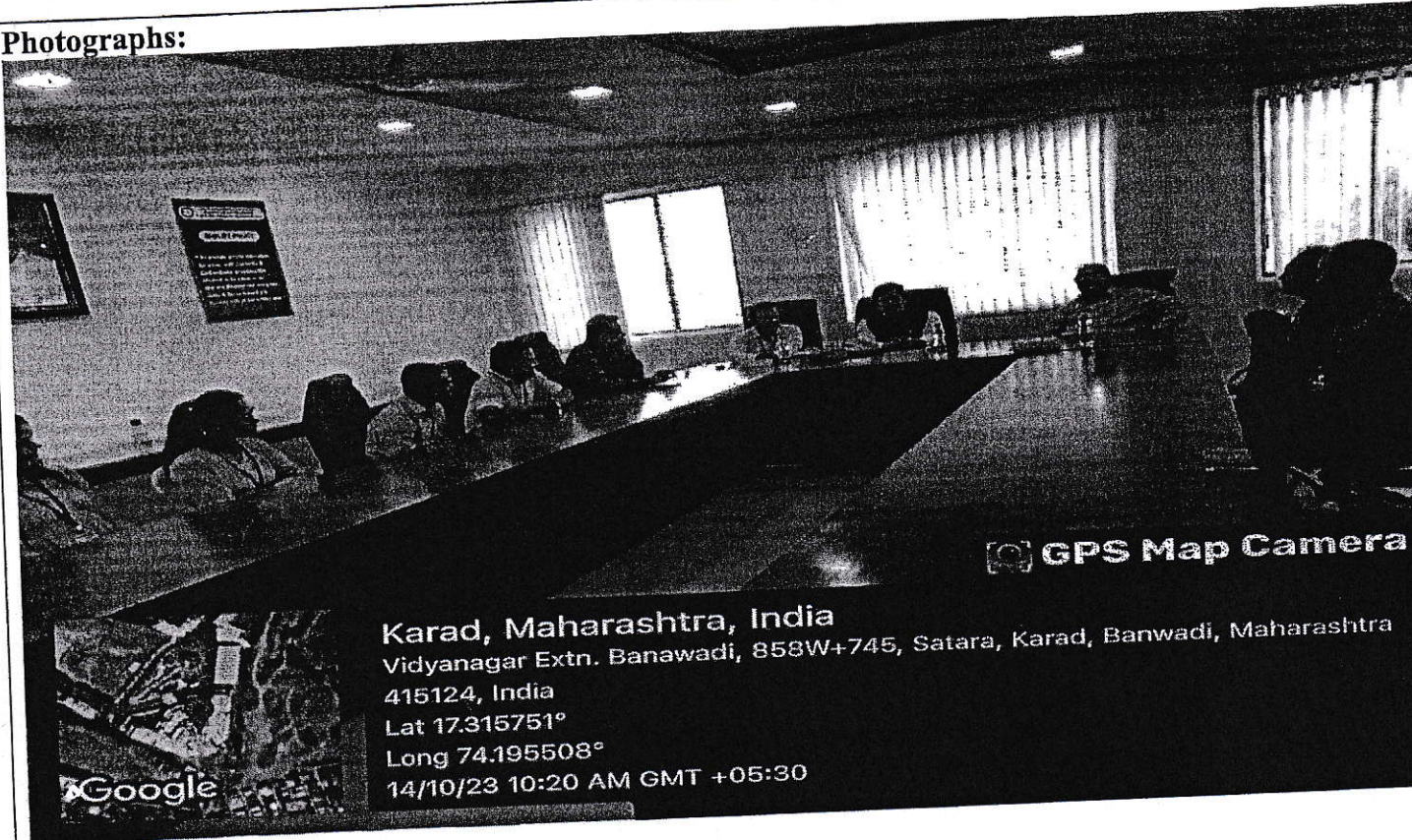
### Attendance Summary:

Number of Participants: 30

Number of students: 22

Number of Staff: 08

### Photographs:





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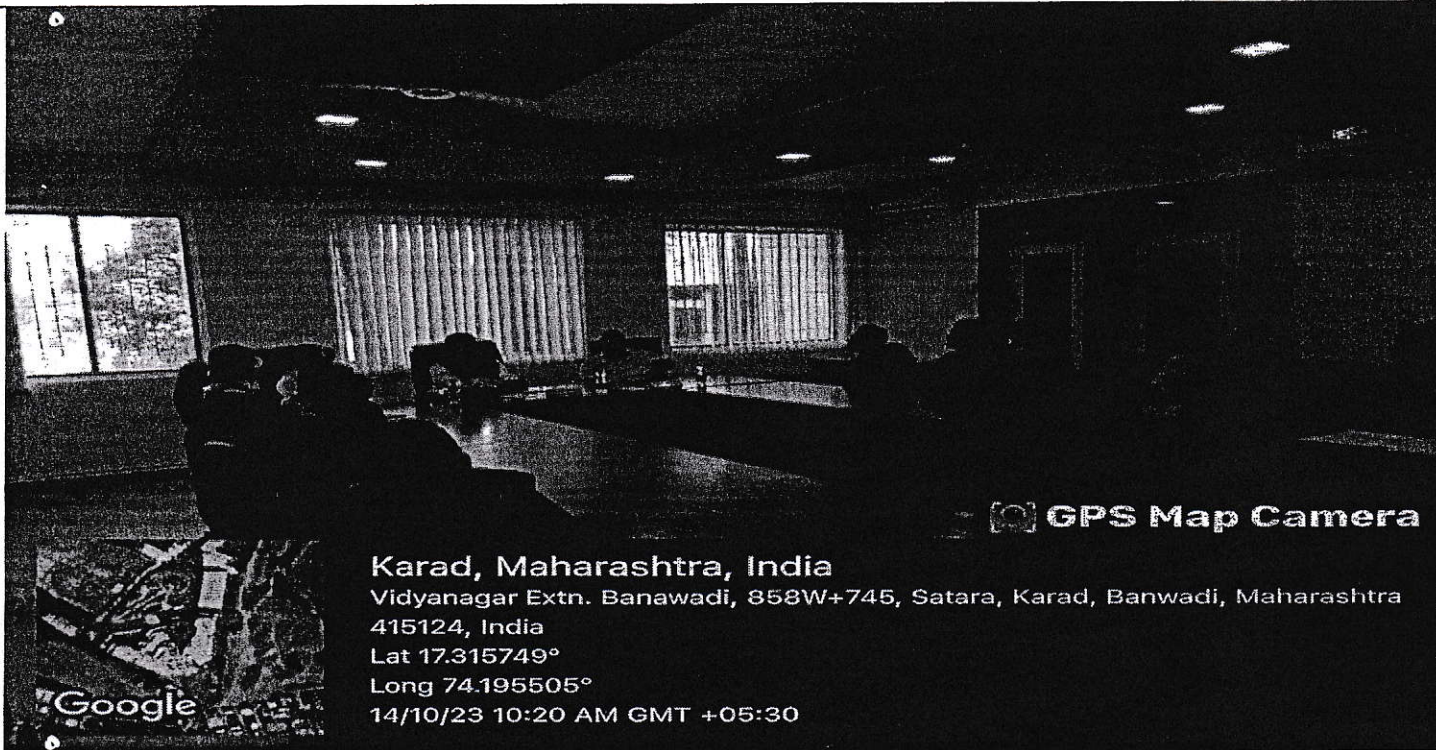
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Karad, Maharashtra, India

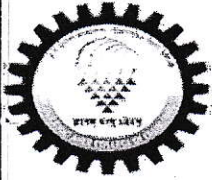
Vidyanagar Extn. Banawadi, 858W+745, Satara, Karad, Banwadi, Maharashtra  
415124, India

Lat 17.315749°

Long 74.195505°

14/10/23 10:20 AM GMT +05:30





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Vidyanagar Extn., Dist. Satara

Department of Civil Engineering

REPORT

On

“A Workshop on Entrepreneurship Skill, Attitude and behavior Development

Wednesday, 07/02/2024”

Department of Civil Engineering, DACOE Karad had organized One day Workshop on Entrepreneurship Skill, Attitude and Behavior Development on Wednesday, 07/02/2024. This workshop is organized for final year students for entrepreneurship skill development. Total 50 students & 04 faculty members were participated in this workshop. The basic intention of organizing this workshop was to give a platform to students about how to build entrepreneurship skills among them.

On Wednesday, 07/02/2024 at 01.30 pm all students & faculty members gather in seminar hall, Co-ordinator Mr. Chavan S. P. has started to introduce and felicitate the guest in front of students. After completion of these activities, the actual session has started by resource person.

On Wednesday, 07/02/2024 at 01.40 pm guest Mr. Manish Kasar Sir has started his session in front of students. He said that Entrepreneurship skills are essential in positioning entrepreneurs to identify opportunities, make effective decisions, turn their ideas into reality, overcome challenges, and properly allocate resources to achieve goals and succeed. Entrepreneurs don't just start a business from scratch and generate profits for themselves. They also significantly impact society and the economy by creating employment and products or services that can improve the quality of life for many. But not everyone can take on the risk of their venture or the magnitude of such a responsibility. He also said that Business management skills are essential for entrepreneurs to effectively plan, organize, direct, and control the resources of an organization. These skills can build credibility, improve efficiency, manage risks, implement effective strategies, create a positive company culture, and grow a business. The business management skills include leadership, strategic thinking, effective communication, budget management etc. After this we all students & Faculty members took their breakfast at 03.30 pm then at sharp 04:00 pm physical activities have started till 05:30 pm which are directly involving the each and every student under this workshop. Students also enjoyed these activities. For organizing this workshop we got a valuable guidance & strong support from our HOD, Prof. M. B. Kumthekar. So, at the end of this report, as a coordinator I express my sincere thanks to our HOD, to all students & to all faculty members those who helped for making this workshop as a successful one.

Workshop Co-ordinator

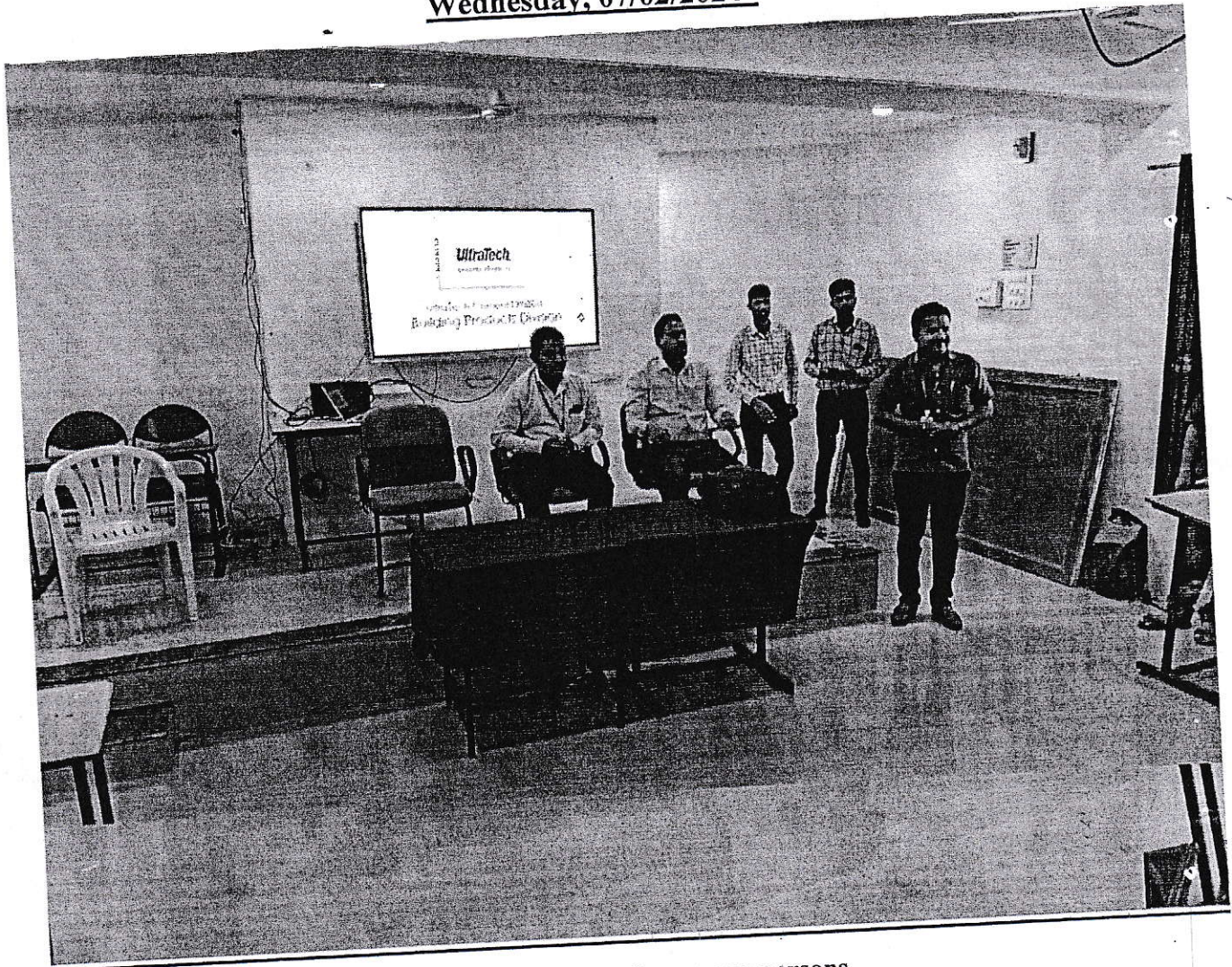


HOD



G.K. Gujar Memorial Charitable Trust's  
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Vidyanagar Extn., Dist. Satara  
Department of Civil Engineering

**PHOTOGRAPHS**  
**Of**  
**“A Workshop on Entrepreneurship Skill, Attitude and behavior Development**  
**Wednesday, 07/02/2024”**



Introduction to all resource persons







Banwadi, Maharashtra, India  
858V+8WM, Banavadi Rd, Banwadi, Karad, Maharashtra 415124, India  
Lat 17.315885°  
Long 74.195002°  
07/02/24 01:29 PM GMT +05:30

Felicitation ceremony



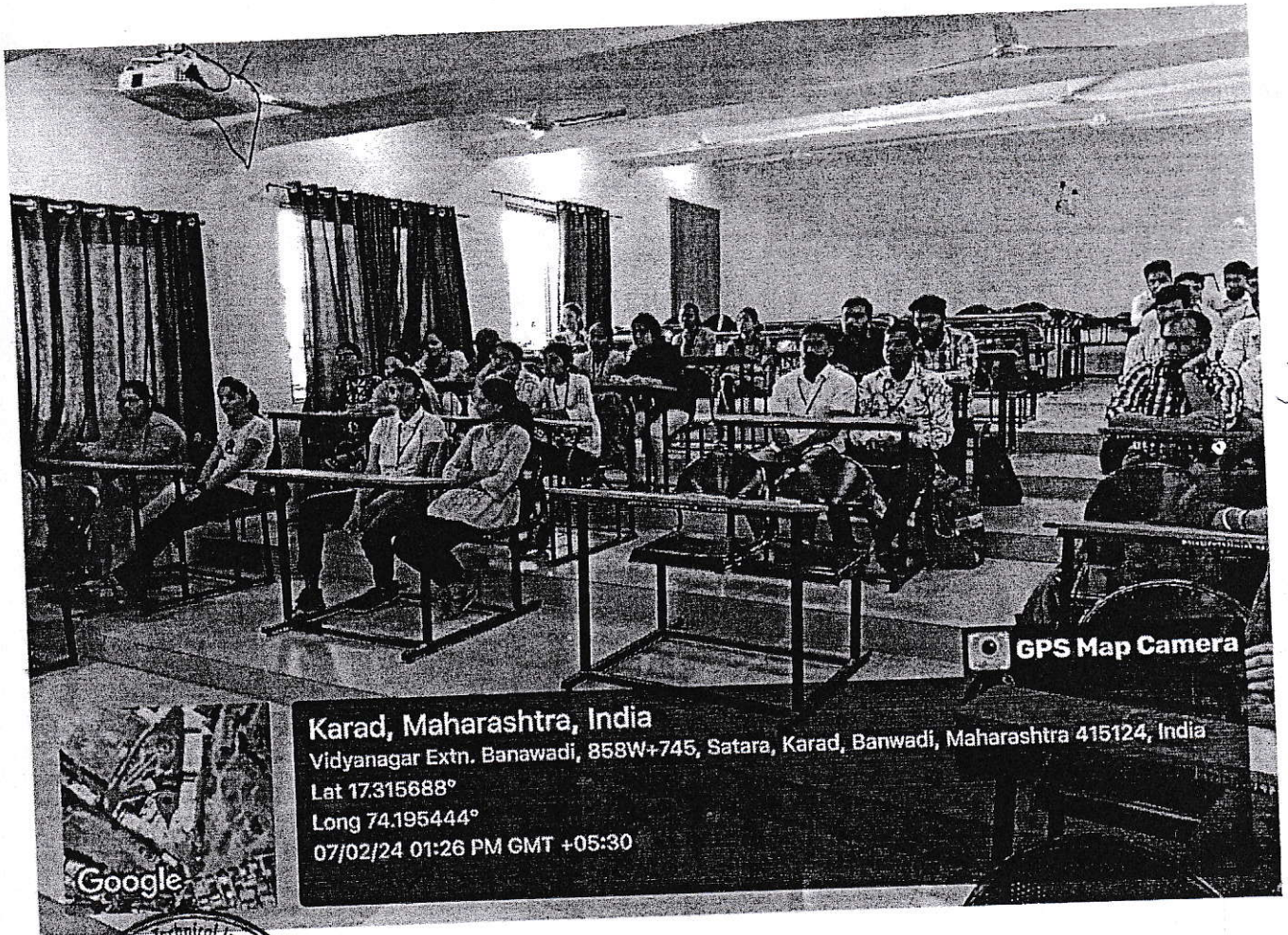
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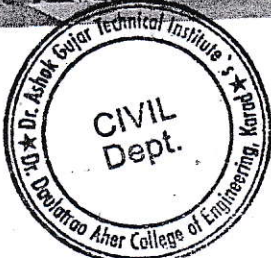


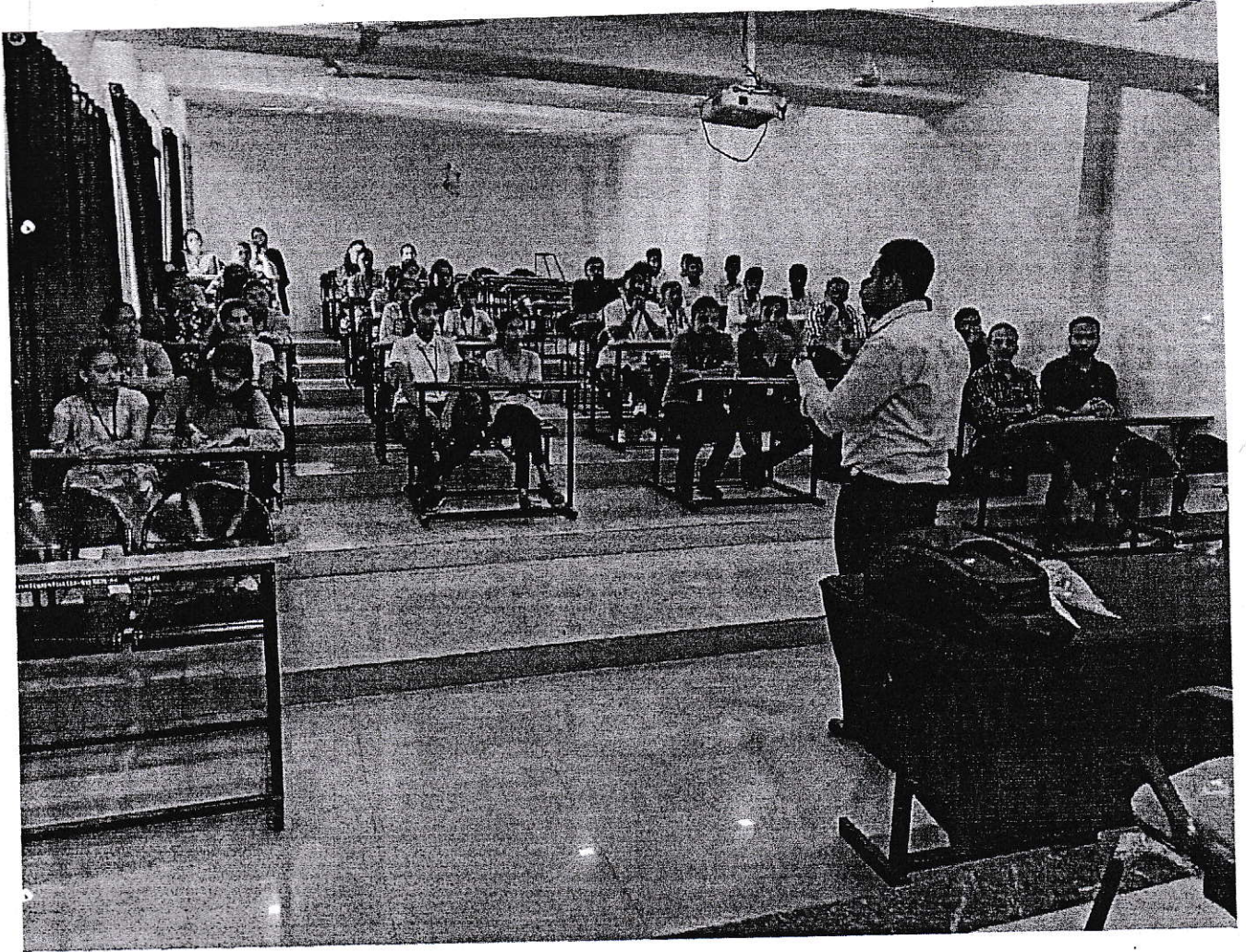


Felicitation ceremony



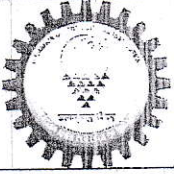
Participated Students and Faculties





Actual discussion of guest with students and faculties





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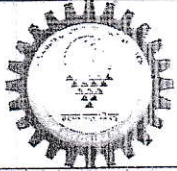
Program Name: Expert Talk	Date:05/01/2024	DACOE/PRGM/COF-FRM- 02
Department: Department of Civil Engineering		COF-FRM-02- Rev. No: 0
<b>Activity Report</b>		

### Self Driven Activity

HC Year 6.0 (Quarter-II)

### National Startup Day

<b>Program/Activity Name:</b> Expert Talk on National Startup Day .
<b>Day and Date:</b> Friday ,05/01/2024
<b>Duration :</b> One day
<b>Academic Year:</b> 2023-24
<b>Program type:</b> Expert Talk on National Startup Day.
<b>Name and details of speaker:</b> Smt Jyoti Singh, Regional HR, Maharashtra.
<b>Objective of activity:</b> It strives with the objective of supporting entrepreneurs, building a robust startup ecosystem and transforming India into a country of job creators instead of job seekers.
<b>Benefit in terms of learning/skill/knowledge obtained:</b> The day is observed in order to give startup business owners a forum to talk about innovation for India's youth and their contribution to the economy.
<b>Beneficiary:</b> Students , Faculty
<b>Outcome/Remark:</b> This initiative also has the goal of encouraging young people to pursue entrepreneurship as their primary career option.
<b>Brief of the event:</b> <b>Introduction:</b> DACOE, Karad recently hosted a <b>Expert Talk on National Startup Day</b> , led by Smt. Jyoti Singh, Ultratech Cement, Regional Head, Pune , Maharashtra. The lecture was delivered by Smt. Jyoti Singh, Ultratech Cement, Regional Head, Pune , Maharashtra and her colleague Smt Saloni Raghuvanshi, TR, Maharashtra. Smt. Jyoti Singh has significant experience in acquisitions and integration. She has been exceptional in his networking and relationship building skills with customers and other stakeholders and has built a strong franchise for the business She has been a capable team builder and has strong people skills. The lecture began with a brief introduction about National Startup Day. That is Prime Minister Narendra Modi had earlier declared January 16 as 'National Startup Day' which recognizes the extraordinary growth and contributions of the startup community to the Indian economy. It strives with the objective of supporting entrepreneurs, building a robust startup ecosystem and transforming India into a country of job creators instead of job seekers. Smt. Jyoti Singh , then went on to discuss that The construction industry is an evergreen field. Many new developments are taking place in the construction & real estate industry. Thus starting a business related to construction sounds highly profitable. The construction industry is not only limited to the building of the house and the construction of offices. There is a wide range of activities in the construction industry like renovation, interior, and repair. "Business ideas" in the construction sector can range from traditional building and renovation services to more innovative concepts like modular construction and energy-efficient design.



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### Activity Report

#### Self Driven Activity

#### IIC Year 6.0 (Quarter-II)

#### National Startup Day

She also gave the information about the working of Ultratech Cement Plant, Kolhapur and New ultratech cement plant of Pune which is wholly managed by women team.

Lastly, she said that "successful construction business models" often combine effective project management, skilled labor, and strong client relationships. Adopting new technologies, staying abreast of market trends, and maintaining high-quality standards are also key components of successful construction businesses

The lecture concluded with a question and answer session. Several students raised questions regarding the construction business ideas in India, as well as job opportunities and skills required. Smt. Jyoti Singh provided insightful answers to the questions.

#### Attendance Summary:

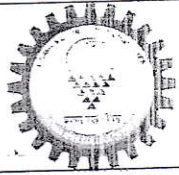
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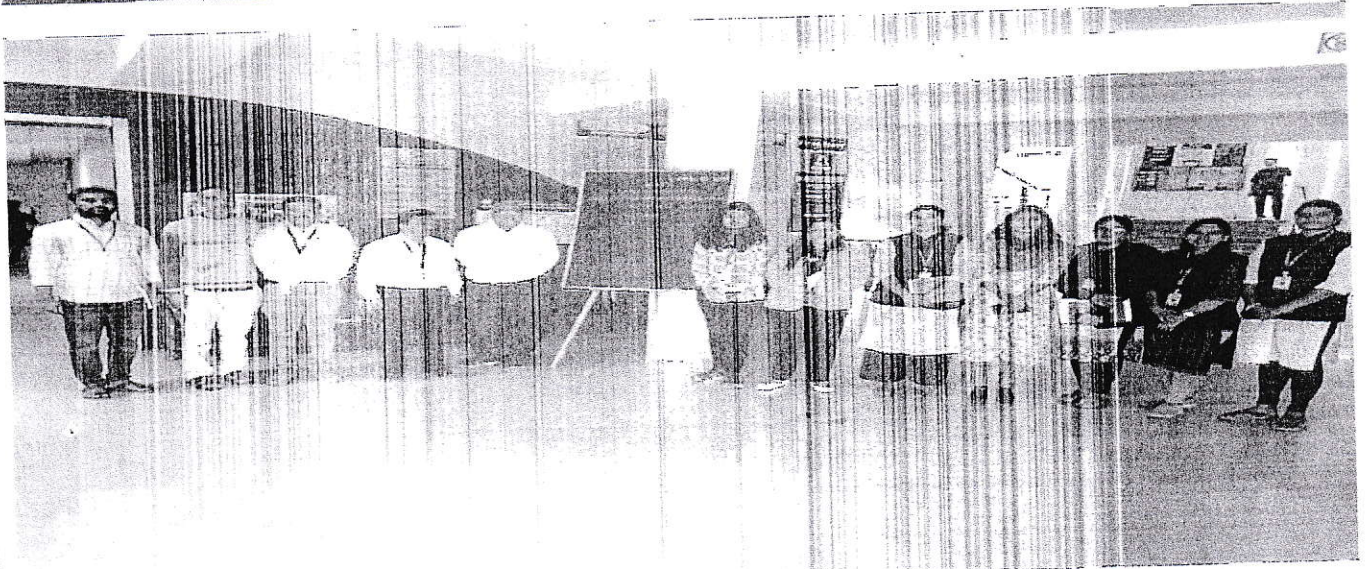
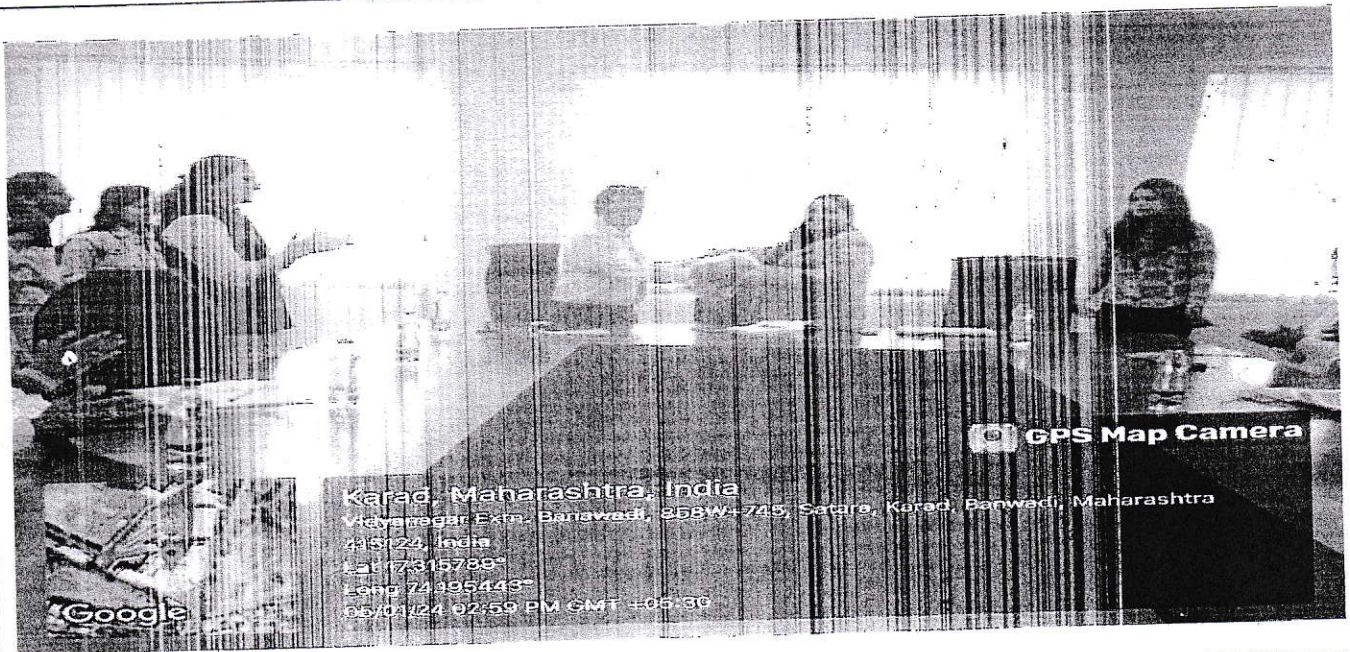
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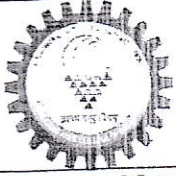
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#### Self Driven Activity

#### IIC Year 6.0 (Quarter-II)

#### National Startup Day





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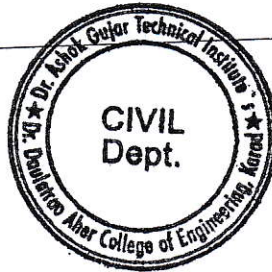
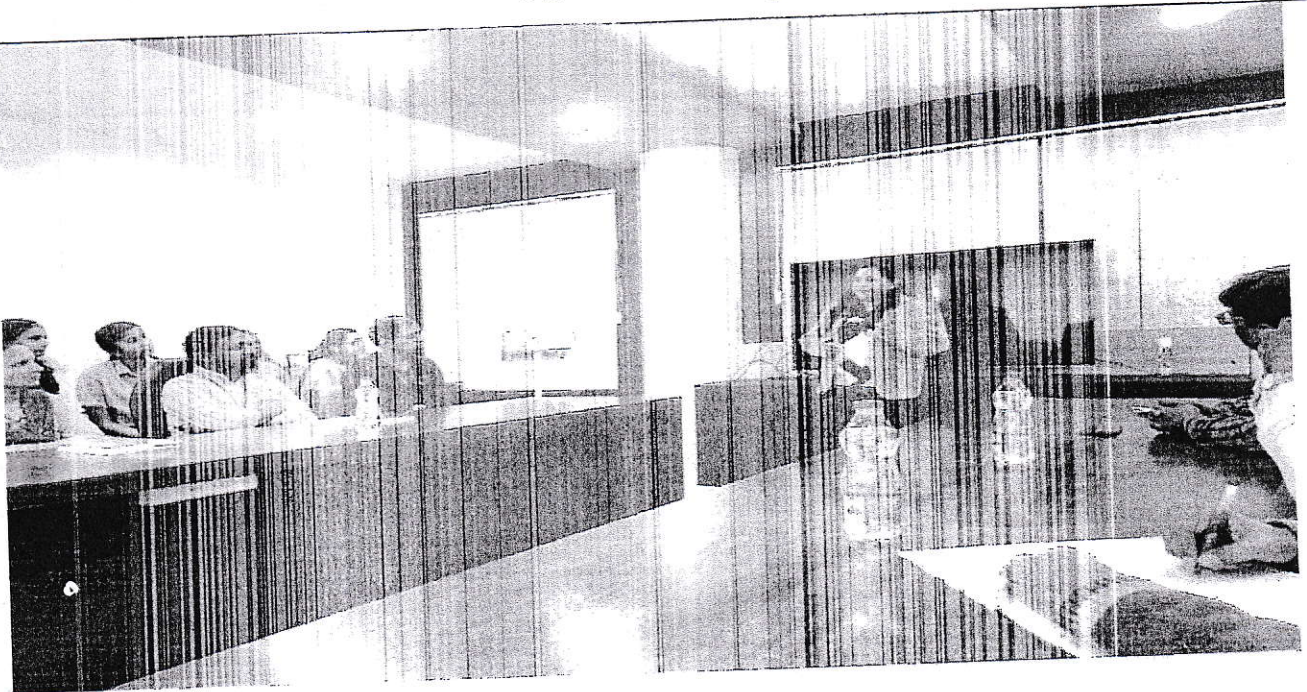
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#### Self Driven Activity

#### IIC Year 6.0 (Quarter-II)

#### National Startup Day



*[Signature]*  
Program Coordinator

*[Signature]*  
HoD Head  
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