YASHODA SHIKSHAN PRASARAK MANDAL'S

YASHODA TECHNICAL CAMPUS, SATARA

DEPARTMENT OF CIVIL ENGINEERING

CONSTROMATIX

JULY - DECEMBER 2023

DEPARTMENT OF
CIVIL ENGINEERING

Yashoda Shikshan Prasarak Mandal's

Yashoda Technical Campus, Satara

Department of Civil Engineering

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PRESIDENT'S DESK

Founder,President

Hon. Prof. Dasharath B. Sagare

Welcome you to YSPM's Yashoda Technical Campus, Satara an Institution which inculcates true values while disseminating quality education for shaping the career of our students. All our institutes are approved by the concerned statutory bodies and fulfill all the norms and standards laid down by them. Our technical campus is located in a lush green, pollution free, picturesque environment. Our institutes have well qualified, experienced and student caring faculty members, well equipped laboratories, specious lecture hall and tutorial rooms, ICT tools enabled smart classrooms, Seminar halls, well maintained rich library, e-library, wi-fi enabled premises, computer center with internet facility, and a playground with sports facilities, separate gymnasium for Boys and Girls students. We emphasize on overall personality development of our students. Our faculty pays attention to each student to focus on their strength and to develop confidence. We provide students a platform to excel not only in academics but also in co-curricular and extracurricular activities. We encourage individual growth, team building, industry interaction and multi-disciplinary study culture. Amenities provided by our institutes include transport facility, hostel facility, reprographic facility, Cafeteria, STD/PCO, Medical Centre, Cooperative store etc. We are committed to impart value based quality education along with development of positive attitude, skills and abilities to apply knowledge in order to meet the challenge of future. I extend my best wishes for your bright and prosperous future.

PRINCIPAL'S DESK

Principal

Prof. Dr. Pravinkumar R. Badadapure

I am really honored and feel very privileged to function as the Principal of Yashoda Technical Campus (YTC), Satara. Let me take this opportunity to thank the Management, Yashoda Shikshan Prasarak Mandal (YSPM), Satara for giving me an opportunity to serve the community here in YSPM family. We believe that the existence, growth, survival and future of every Educational Institute will long lasting only if that Institute make and keep the students & parents and all the stakeholders of the Institute feel very happy and satisfied. The students & parents will be happy only if they get their expectations and dreams are fulfilled for which the student has taken an admission in the Institute. This can be achieved only if every entity in an Institute works with Academic Excellence, Research Excellence and Training & Placement Excellence, along with Overall Development of the Student to Serve the Society thereby excelling and ensuring EXCELLENCE IN TECHNICAL EDUCATION with OUTCOME BASED EDUCATION. Our Institute Growth lies in Institute Motto that is "PARENTS AND STUDENTS DREAMS ARE OUR INSTITUTE MISSIONS". Therefore I appeal everyone to join together in achieving the aim "A HAPPY STUDENT, A HAPPY PARENT, AND A HAPPY & MOST PREFERABLE INSTITUTE".

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HOD DESK

Head of Department

Prof. Chandrahas B. Patil

At YSPM's Civil Engineering Department through our rigorous academic programs, state-of-the-art, research initiatives, and hands-on experiential learning opportunities, we strive to provide our students with the knowledge, skills, and mindset necessary to excel in the dynamic field of civil engineering. Our esteemed faculty members, who are leaders in their respective areas of expertise, are dedicated to fostering an environment of innovation, critical thinking, and collaboration. Together, we aim to inspire creativity, drive excellence, and instill a strong sense of social responsibility in our students. As you navigate through our technical magazine, I encourage you to explore the myriad opportunities available to you, from cutting-edge research projects to industry partnerships and professional development resources. Whether you are a prospective student, a current student, alum, or a member of the broader engineering community, we are here to support you on your journey. I am immensely proud of the achievements of our students, faculty, and staff, and I am confident that together, we will continue to push the boundaries of what is possible in the field of civil engineering. Thank you for your interest in our department...!!

EDITORIAL DESK

Editor In Chief

Prof. Mrs Sayali S. Jadhav

On behalf of the Editorial Board, it is with great pride and sincere privilege that I am writing this message to present **Constromatix**, a biannually published technical magazine. Launching this magazine would not have been possible without the great and much appreciated contributions from the technical team. Our team expects similar sort of sincere dedication from the writers in near future. Civil the oldest branch as traced in the history of engineering has a huge potential and a wide scope to work in. Constromatix focuses not only the trending topics in civil engineering but also the achievements of students and staff which reflect the emerging talents of Civil Department. It has been and always will be a platform for the students to showcase their talent whether it be technical, cultural or sports field. Here students get the chance to post articles on their area of interest and also the trending topics in the field of Civil Engineering The only mission of Civil Department is to provide undergraduate students with quality technical knowledge in the field of civil engineering and build in them leadership and managerial skills along with social awareness and gratitude towards society.

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OVERVIEW OF DEPARTMENT

Welcome to the Department of Civil Engineering at YSPM's Yashoda Technical Campus, Satara. The department has been immensely successfully working from 2011 in the field of Professional Knowledge and advanced technical world. The department offers 4 years Bachelor of Technology in Civil Engineering.. The department undergoes several curricular and extra-curricular activities throughout the year. The department is having mixture of well experienced and young, enthusiastic faculty members who are involved in industry institute interaction besides their day to day teaching activities. The Department of Civil Engineering at Yashoda Technical Campus (YTC) delivers latest knowledge in Civil Engineering . It prepares students for careers in industry, academia, and also create young entrepreneurs.

STRENGTH OF DEPARTMENT

- Well Qualified, Experienced staff.
- Good infrastructure.
- Well-equipped laboratories.
- Excellent academic performance.
- Departmental Library facility for students.

Vision of the Department

To become a center of excellence by producing Civil engineers having research and development activity, sound technical knowledge, professional skills and social awareness to serve society.

Mission of the Department

M1: To impart quality technical education through interactive teaching learning methods.
M2: To promote research and development activity by encouraging creativity and exposure to real world problems.
M3: To mentor students for innovative thinking with relevance to entrepreneurship.
M4: To develop social awareness in graduates to serve society.

Program Educational Objectives (PEOs)

PEO1: Demonstrate technical expertise, leadership and ethical qualities to design & execute Civil Engineering Projects.
PEO2: Exhibit qualities of teamwork with effective communication, life long learning to address real world civil engineering problems.
PEO3: Develop sensitivity towards environment and society for sustainable development including disaster management.

Program Specific Outcomes (PSOs)

PSO-1 : The graduates will analyse and mitigate the natural disasters for the effective disaster management.
PSO-2 : The graduates will be able to acquire sound technical knowledge to analyse and work on critical civil engineering issues.
PSO-3 : The graduates will be enhancing professional abilities to meet industrial need.

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CONTRIBUTORS

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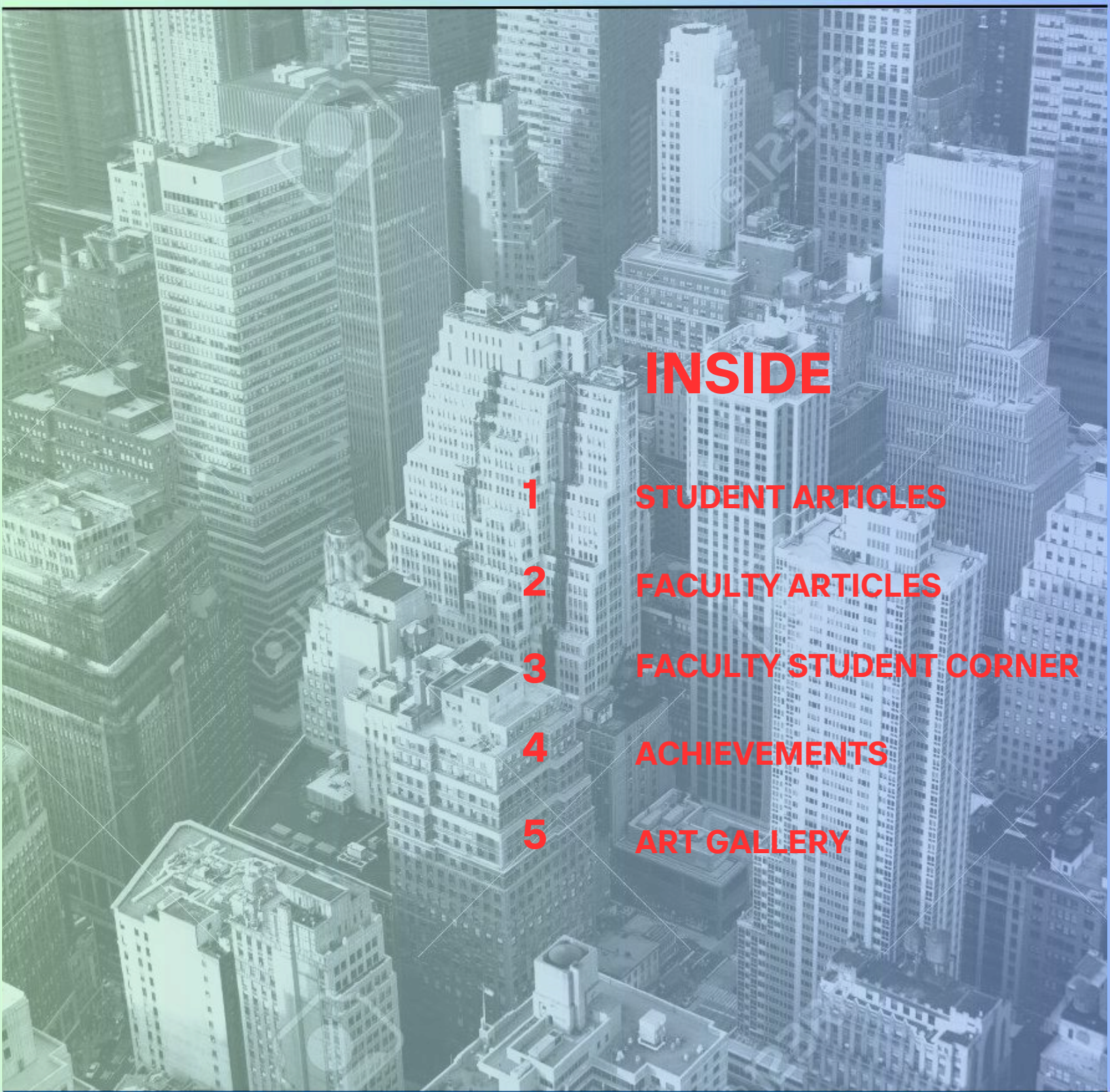

INSIDE

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THE STONE CHARIOT HAMPI

The Stone Chariot is a shrine in the form of a chariot located in front of the Vijaya Vittala Temple in Hampi, Karnataka. It was built in the 16th century by King Krishnadevaraya of the Vijayanagara Empire and is dedicated to Garuda, the official vehicle of Lord Vishnu. The chariot is one of three famous stone chariots in India, along with the Konark chariot in Odisha and the Mahabalipuram chariot in Tamil Nadu. The Stone Chariot is a Dravidian-style structure with carvings depicting mythical battle scenes. The Stone Chariot is located along the central axis of the temple, facing the main sanctum. It is situated on a platform that is about a foot high. The chariot is a secondary shrine and is considered to be the most fascinating sculptural achievement of the Vijayanagara era. The Stone Chariot is a huge attraction for tourists and is often considered by the visitors as the highlight of their Hampi trail. The Vijaya Vittala Temple complex is open between 8.30 AM and 5 PM on all days. The nearest railway station is Hospet, which is at a distance of 10 km from Hampi and has good connectivity in and around Karnataka. Some say the Stone Chariot is useful for history enthusiasts, and that it represents India's rich art and culture. Others say it is a beautiful place that helped them understand how Indian emperors ruled. Stone Chariot is an iconic monument located in front of Vijaya Vittala Temple in Hampi, central Karnataka. Hampi is a UNESCO World Heritage Site. Stone Chariot is a shrine dedicated to Garuda, the official vehicle of Lord Vishnu. Stone Chariot in Hampi is one of the three most popular stone chariots in India.

Miss Sahyadri V. Ghadage (T. Y. Civil)

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RAJIV GANDHI (BANDRA WARLI) SEA LINK

The Bandra-Worli Sea Link (officially known as Rajiv Gandhi Sea Link) is a 5.6 km long, 8-lane wide cable-stayed bridge that links Bandra in the Western Suburbs of Mumbai with Worli in South Mumbai. It is the longest sea bridge, as well as the 5th longest bridge in India. It contains pre-stressed concrete-steel viaducts on either side. It was planned as a part of the proposed Western Freeway that would link the Western Suburbs to Nariman Point in Mumbai's main business district, but is now planned to become part of the Coastal Road to Kandivali. The sea-link reduces travel time between Bandra and Worli during peak hours from 20 - 30 minutes to 10 minutes. As of 2018, BWSL had an average daily traffic of around 32,312 vehicles. BWSL was designed as the first cable-stayed bridge to be constructed in open seas in India. BWSL was designed as the first cable-stayed bridge to be constructed in open seas in India. BWSL consists of twin continuous concrete box girder bridge sections for traffic in each direction. Each bridge section, except at the cable-stayed portion, is supported on piers typically spaced 50 metres (160 ft) apart. Each section is designed to support four lanes of traffic with break-down lanes and concrete barriers. Sections also provide for service side-walks on one side. The bridge alignment is defined with vertical and horizontal curves. The bridge consists of three distinct parts: the north end viaduct, the central cable-stayed spans and the south end viaduct. Both the viaducts used precast segmental construction. The pre-cast yard was located on reclaimed land.

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USE OF PLASTIC FOR ROAD CONSTRUCTION

India consumes an estimated 16.5 million tons, as per this June 2018 report of Down to Earth. Additionally, according to industry body FICCI, 43 per cent of India's plastics are used in packaging and are single-use plastic. Consequently almost 80 per cent of total plastic waste produced in India is discarded. Some of it is either burnt leading to air pollution, ends up in landfills or clogs drains. It chokes animals who eat plastic bags, etc. Plastics found in fields blocks germination and prevent rainwater absorption..

Since 2001, the plastic man of India R. Vasudevan, Dean, Thiagarajar College of Engineering, Madurai, and his team at the Centre for Studies on Solid Waste Management (CSSWM) have been researching on feasibility of using Plastics in construction of roads. Laboratory results of mixing waste plastic with heated bitumen and coating the mixture over stone proved positive and he implemented the use of plastic waste on a road constructed inside the premises of his college in 2002. In 2006, the Thiagarajar College of Engineering received the patent for this technology. Later, a performance appraisal by the Central Pollution Control Board (CPCB) showed that plastic roads did not develop familiar defects: potholes, rutting, ravelling or edge flaw, even after four years.

The process of using plastics for road construction gained momentum in 2015, when Union government issued guidelines on plastic use with hot mixes for bitumen roads around urban areas. The Ministry of Road Transport and Highways has issued guidelines for use of plastic waste in wearing course of National Highways on pilot basis. The plastic waste has been used in the state of Tamil Nadu for about 11 Km length and about 1 Km length in the state of Kerala. Subsequently, India has built one lakh kilometers of roads in at least 11 states using discarded plastic. The front runners have been following cities: Chennai, Pune, Surat, Indore

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REVOLUTIONIZING CIVIL ENGINEERING: THE IMPACT OF AI

In recent years, Artificial Intelligence (AI) has emerged as a transformative force across various industries, and civil engineering is no exception. With its ability to process vast amounts of data, optimize complex systems, and automate repetitive tasks, AI is revolutionizing the way civil engineers plan, design, construct, and manage infrastructure projects. Let's explore how AI is reshaping the landscape of civil engineering.

1. Design and Planning: AI algorithms can analyze geological data, survey reports, and historical project data to assist engineers in designing infrastructure that is both efficient and resilient. Machine learning models can predict potential risks and optimize designs for factors such as cost, energy efficiency, and environmental impact.

2. Construction Management: AI-powered tools are streamlining construction processes by optimizing resource allocation, scheduling, and workflow management. Construction companies are using drones equipped with AI algorithms to monitor construction sites in real-time, identify safety hazards, and track progress.

3. Structural Health Monitoring: AI plays a crucial role in monitoring the health and integrity of infrastructure assets such as bridges, buildings, and dams. Sensors embedded within structures collect data on factors such as temperature, vibration, and strain. AI algorithms then analyze this data to detect anomalies and identify potential maintenance issues before they escalate into costly repairs

4. Traffic Management and Urban Planning: AI algorithms are revolutionizing traffic management systems by optimizing traffic flow, reducing congestion, and improving safety. Smart traffic lights equipped with AI can dynamically adjust signal timings based on real-time traffic conditions, minimizing delays and improving efficiency.

5. Environmental Sustainability: AI is playing a vital role in promoting environmental sustainability in civil engineering projects. Machine learning algorithms can analyze environmental data to optimize the design and operation of green infrastructure such as storm water management systems and renewable energy facilities.

In conclusion, AI is transforming the field of civil engineering by enabling engineers to design smarter, more efficient, and more resilient infrastructure. From optimizing design and planning processes to enhancing construction management and structural health monitoring, AI-driven technologies are revolutionizing every aspect of civil engineering practice

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CUPOLA SLAG

Cupola slag is by-product of cast iron manufacturing unit it is produced during the separation of the molten steel from impurities in cupola furnaces. The slag occurs as a molten liquid melt solidifies upon cooling. Complex solution of silicates and oxides is generally found in a lump which solidifies upon cooling. About 5-7% of waste is generated in cupola furnaces while production of cast iron. Industry produces 50-3000 Tons of C.I. depending upon furnace size and requirements. About 3000 furnaces are running Gujarat at present. Due to that larger amount of waste is generated which is presently going to land filling only, polluting environment. At present Industrialists are paying for disposal of this waste.

For the development of various infrastructure, the main constituent is concrete with a typical density of 2400 kg/m3. This means for the given volume; concrete will weigh more than any other construction material. Concrete is a composite material that contains of cement, water, and aggregates in the unit volume of concrete aggregates hold up to 50-60% of volume.

The main source of aggregates in construction industry is from mining the mountains with the help of stone crusher. Which can have environmental impact, both in terms of immediate effects as well as the long-term effect on the ecosystem. Extraction of aggregates from mountains can cause soil erosion, deforestation & habitat destruction which can harm the biodiversity of the area. Cupola slag is thought to be considered as coarse replaced. research and testing work was going on. If this works out critical job of waste disposal of steel industries will reduce considerably.

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SMART CITIES IN INDIA

- **What is a smart city?**

A smart city is an urban area that uses intelligent technology to manage city resources and infrastructure more efficiently. This includes reducing traffic congestion, waste management, improving public safety, and providing better access to healthcare and education.

- **What are the benefits of living in a smart city?**

If your city has intelligent technology that manages city resources and infrastructure more efficiently, it is considered a smart city

- **What are the challenges of living in a smart city?**

The challenges of living in a smart city include the cost of implementing the technology and the potential for privacy concerns.

According to the World Bank, a smart city is a well-connected city with high Internet access and the potential to develop into a world-class city. The World Bank's definition of a smart city is based on five criteria:

- Smart Transportation Systems
- Resilient Waste Management Systems
- Robust Electronic Information Systems
- Fully Equipped Infrastructure
- Smart City Infrastructure

Smart City Infrastructure plays a significant role in a city's ability to attract investors and generate growth. According to a recent survey, it is regarded as an indicator of success. Hence, its impact on a city's economy can be enormous.

- Criteria for ranking the top 10 smart cities in India
- Mineral resources
- Human behavioral change
- Daily commuting
- Climate changes
- Physical activity
- Light pollution Traffic congestion Corporations doing environmental conservation
- Running water supply
- Colorful buildings
- Cyber connectivity
- Uniform transport system
- Cooperative agriculture
- Electricity
- Zoo
- Internet

The top 12 smart cities in India 2022 list

1. Ahmedabad	2. Amritsar
3. Rajkot	4. Coimbatore
5. Hyderabad	6. Chennai
7. Indore	8. Bhopal
9. Nagpur	10. Pune
11. Thane	12. Mumbai

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THE FUTURE OF ROADS: LIQUID SPEED BUMPS

Speed bumps, also called sleeping policemen, are popular traffic calming measures that many people see around them regularly. They are installed to slow down speeding vehicles to prevent road accidents, to make drivers follow stop-sign and create a secure walker environment. Their popular construction materials are plastic, rubber, steel, asphalt, and concrete. The conventional speed brakers are very heavy and, once in place, are typically permanent fixtures on the roadway. In order to remove conventional speed brakers, the speed brakers must be broken up Also Speed brakers are often cause of aggravate chronic backache & spinal damage due to the constant shocks suffered while traversing the speed brakers. Vehicle wear and tear and noise problems are also some of least thought of problems but need attention. "Non-Newtonian fluid speed braker" aims to overcome all these short comings of the conventional speed control devices.

A non-Newtonian fluid is a fluid that does not obey Newton's law of viscosity, i.e. viscosity is independent of stress. The commonly used materials include Acrylic, oobleck, Kevlar etc. Here container filled with selected non-Newtonian fluid is placed to form the obstacle, which hardens under a sufficient enough impact, triggering at a given speed. By varying the quantity and chemical make-up of the fluid you can control at what speed the hardening provides the resistance required to encourage drivers to slow down. Any vehicle travelling below this set speed can cross over them without slowing down as the fluid stays in its liquid state, but as soon as it suffers a greater impact by a vehicle travelling at a higher speed it functions as a normal speed bump.

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PERVIOUS CONCRETE

Permeable or pervious concrete is a type of concrete that allows water to flow through it, reducing runoff and promoting water infiltration into the ground. Unlike traditional concrete, which is dense and impervious, pervious concrete has a high porosity due to its composition of coarse aggregates, water, and a small amount of cement paste. This structure creates void spaces within the mix that enable water to pass through. As a result, pervious concrete is commonly used in applications such as parking lots, walkways, driveways, and stormwater management systems, where reducing surface water runoff is a priority.

The environmental benefits of pervious concrete are significant, particularly in urban areas where stormwater management can be a challenge. By allowing rainwater to seep through the concrete, pervious surfaces help replenish groundwater supplies, mitigate flooding, and reduce the heat island effect by promoting evaporation and cooling. Additionally, pervious concrete can improve water quality by filtering out pollutants as rainwater passes through the material. However, its installation requires proper design to ensure the underlying soil is suitable for infiltration, and regular maintenance is necessary to prevent clogging of the pores over time.

RCC structures offer several advantages, including fire resistance, durability, and adaptability to different architectural designs. However, proper design, construction, and maintenance are crucial to ensure the long-term performance of RCC structures. Engineers and builders follow established codes and standards to design and construct RCC elements with the required strength and durability to meet specific project requirements.

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UNDERSTANDING THE EFFECTS OF FIRE ON CONCRETE STRUCTURES

Concrete has long been celebrated for its durability and fire-resistant properties, making it a preferred choice for construction in areas where fire safety is a concern. However, while concrete does offer a degree of protection against fire, it is not entirely immune to its effects. Understanding how fire affects concrete structures is crucial for ensuring their safety and longevity. When exposed to high temperatures, concrete undergoes several changes that can compromise its structural integrity. One of the primary effects of fire on concrete is the loss of moisture content. Concrete contains water within its pores, which helps to regulate its temperature and prevent cracking. As the temperature rises during a fire, this water begins to evaporate, leading to a loss of strength and an increase in the likelihood of spalling, where chunks of concrete break off from the surface. Additionally, the high temperatures of a fire can cause the concrete to expand rapidly, leading to thermal cracking. These cracks weaken the structure and can allow flames to penetrate deeper into the concrete, exacerbating the damage. In severe cases, prolonged exposure to fire can cause concrete to lose its structural integrity entirely, resulting in collapse. The severity of the effects of fire on a concrete structure depends on several factors, including the duration and intensity of the fire, the composition of the concrete mix, and the presence of any additional reinforcing materials, such as steel bars. High-strength concrete mixes with lower water- to-cement ratios tend to fare better in fire conditions than weaker mixes.

To mitigate the effects of fire on concrete structures, various measures can be implemented during the design and construction phases. One common approach is to incorporate fire-resistant additives, such as fibers or chemical retardants, into the concrete mix. These additives can help improve the concrete's ability to withstand high temperatures and reduce the risk of spalling and cracking.

In addition to using fire-resistant materials, it is essential to incorporate fire protection measures into the design of concrete structures. This may include the installation of fire-rated barriers, such as fire doors or fireproof coatings, to contain the spread of flames and limit the exposure of the concrete to heat.

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BUILDING INFORMATION MODELING (BIM)

Building Information Modeling (BIM) is a digital representation of physical and functional characteristics of places. It's a process that involves creating and managing digital representations of physical and functional characteristics of places. These digital representations become shared knowledge resources to support decision-making about a place. BIM is often associated with architecture, engineering, and construction (AEC) industries, but its applications extend to various other domains, such as urban planning, infrastructure management, and facility management.

Key aspects of BIM include:

- 3D Modeling: BIM models typically start with 3D geometric representations of buildings or infrastructure. These models can be enriched with additional information. Data Integration: BIM
- integrates various types of data beyond geometric information, such as spatial relationships, geographic information, quantities, and properties of building components. Collaboration and
- Coordination: BIM facilitates collaboration among different stakeholders involved in a project, including architects, engineers, contractors, and facility managers. It allows them to work on a shared digital platform, reducing conflicts and errors. Simulation and Analysis: BIM software
- enables simulation and analysis of various aspects of a building or infrastructure project, such as structural integrity, energy performance, lighting, and HVAC (heating, ventilation, and air conditioning) systems. Lifecycle Management: BIM supports the entire lifecycle of a building or
- infrastructure project, from initial design and construction to operation and maintenance. This helps in making informed decisions throughout the project lifecycle, leading to improved efficiency and reduced costs. Interoperability: BIM promotes interoperability among different software tools
- and systems used by various stakeholders. This ensures smooth exchange of data and information throughout the project lifecycle.

BIM has significantly transformed the AEC industry by improving collaboration, efficiency, and decision-making processes. It helps in delivering projects more effectively, reducing errors and rework, and enhancing the overall quality of built environments.

Mrs. Vijaya P. Pawar

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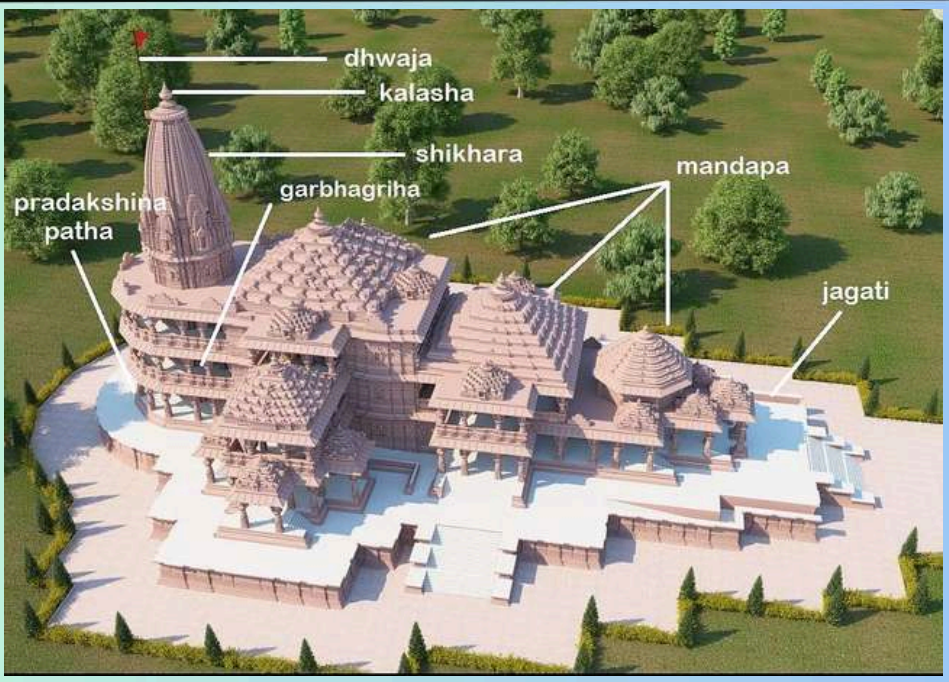
RAM MANDIR AYODHYA



The design of the Ram Mandir in Ayodhya is a blend of traditional Indian temple architecture and modern engineering techniques. The temple is being constructed on the site believed to be the birthplace of Lord Ram, following years of legal and political discussions. The architecture reflects the classical Nagara style, which is prominent in Northern India. The temple features intricate carvings, with sculpted images of Hindu deities and scenes from the Ramayana, creating a spiritual and artistic atmosphere. The temple's main sanctum, where the idol of Lord Ram will be placed, is designed to provide a serene and sanctified space for devotees.

The temple structure is planned to be constructed using stone, specifically sandstone, which gives it a traditional yet durable aesthetic. The design emphasizes grandeur, with towering spires (Shikhars) reaching into the sky, symbolizing the divine connection between the earthly and the celestial. The overall layout includes spacious courtyards and pathways, ensuring a smooth flow of visitors while maintaining a sense of tranquility and reverence. Additionally, the design incorporates modern safety measures and environmental considerations, making the temple not only a symbol of faith but also an architectural marvel.

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KARL VON TERZAGHI : FATHER OF SOIL MECHANICS

Karl von Terzaghi (October 2, 1883 – October 25, 1963) was an Austrian mechanical engineer, geotechnical engineer, and geologist known as the "father of soil mechanics and geotechnical engineering". In 1883, He was an excellent student, especially in geometry and mathematics, and graduated with honors at 17. In 1900, Terzaghi entered the Technical University in Graz to study mechanical engineering, where he also developed an interest in theoretical mechanics. Combined the study of geology with courses on subjects such as highway and railway engineering. Shortly afterward, he published his first academic paper on the geology of terraces in southern Styria

By 1908, he was managing a construction site, workers, and the design and construction of steel-reinforced structures. The American Society of Civil Engineers established in 1960 the Karl Terzaghi Award to an "author of outstanding contributions to knowledge in the fields of soil mechanics, subsurface and earthwork engineering, and subsurface and earthwork construction. The Terzaghi and Peck Library, which is managed by the Norwegian Geotechnical Institute, in Oslo, Norway, holds an extensive collection of his papers. The Mission Dam in British Columbia, Canada, was renamed in his honor as the Terzaghi Dam in 1965. As Professor Goodman describes him, Karl Terzaghi was a remarkable man and an impassioned engineer

Prof. Prashant G. Borate.

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ACHIEVEMENTS

Portfolio	Name of Activity	Name of Coordinator	Remark
Resourse Person (Master Trainer)	YEWS Program, organized by Govt. of Maharashtra, Department of Higher and Technical Education, UNICEF, ACWA Dam, CEE, Why Waste?	Mr. P.G.Borate	At Govt. Polytechnic, Karad
Patents Registered for	"BRICK QUALITY EVALUATING MACHINE"	Prof. P. G. Borate	Patent office, Government of India
	"FOOTSTEP-POWERED ENERGY GENERATION DEVICE"	Prof. A. S. Shah	
	"SEISMIC ZONE ANALYSING DEVICE"	Prof. A.N. Shaikh	
Awards	Best Faculty Contribution in ISTE Activity	Prof. A.N. Shaikh	South zone Maharashtra
NPTEL	Matrix Methods of Structural Analysis	Prof. Mrs. S. S. Jadhav	8 week course
	Foundation Engineering	Prof. Mrs. S. S. Jadhav	12 week course
	Fluid Mechanics	Prof. Mrs. S. S. Jadhav	12 week course
External Examiner	External Examiner for Dissertation of ESE summer 2023	Mr. C.B.Patil	At Govt. Engg. Colllege Karad

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INNOVATION ECOSYSTEM : WORKSHOP/FDP ORGANISED & ATTENDED

Sr. No.	Name of Faculty	Type of Programme	Title of Workshop/FDP/STTP Organised	Organised By	Date		Duration
					From	To	
1	Prof. A. N. Shaikh & Prof. mrs. V.P. Pawar	FDP	Advancements in Geotechnical & Foundation Engineering	Department of Civil Engineering, Yashoda Technical Campus, Satara	28/12/2023	30/12/2023	3

Sr. No.	Name of Faculty	Type of Programme	Title of Workshop/FDP/STTP Attended	Organised By	Date		Duration
					From	To	
1	Prof. C. B. Patil	FDP	One Week Online FDP on "QGIS in Civil Engineering: Best Practices and Case Studies"	Department of Civil Engineering, Annasaheb Dange College of Engineering & Technology, Ashta, Sangli	12-07-2023	13/12/2023	7
2		FDP	Three Days National Level Online FDP on "Outcome Based Education and NBA Process"	Department of Mechanical Engineering, A. G. Patil Institute of Technology , Solapur	28/12/2023	30/12/2023	3
3		FDP	Advancements in Geotechnical & Foundation Engineering	Department of Civil, Yashoda Technical Campus, Satara	28/12/2023	30/12/2023	3
1	Prof. A. S. Shah	STTP	Foundation Engineering RECENT TRENDS IN AI TOOLS	Department of Information Technology, D Y Patil College of Engineering, Akurdi	24/7/2023	28/7/2023	5
2		FDP	Recent Research Trends in Smart Technologies Outcome Based Education and NBA Process	Amity School of Engineering and Technology, Amity University Kolkata	31/07/2023	08-04-2023	5
3		FDP		Department of Mechanical Engineering, AG Patil Institute of Technology, Solapur	28/12/2023	30/12/2023	3
4		FDP	Advancements in Geotechnical & Foundation Engineering	Department of Civil, Yashoda Technical Campus, Satara	28/12/2023	30/12/2023	3
1	Mr. P. G. Borate	FDP	Outcome Based Education and NBA Process	Department of Mechanical Engineering, AG Patil Institute of Technology, Solapur	28/12/2023	30/12/2023	3
2		FDP	Advancements in Geotechnical & Foundation Engineering	Department of Civil, Yashoda Technical Campus, Satara A. G. PATIL INSTITUTE OF TECHNOLOGY, SOLAPUR	28/12/2023	30/12/2023	3
1	Prof. A. N. Shaikh	FDP Online	National Level Online FDP "Outcome Based Education and NBA Process"		28-12-2023	30-12-2023	3 days
2		FDP/STTP online	Professional Values and Ethics	NITTTR, Kolkata	04-12-2023	10-12-2023	7 days
3		STTP Online	Voluntary Entrepreneur Masterclass-Series	beBoss Global startup Ecosystem	30-12-2023	26-01-2024	28 days
1	Mrs. V.P. Pawar	FDP	QGIS in Civil Engineering: Best practices and case studies	Annasaheb Dange college of Engineering and Technology, Ashta.	07-12-2023	28/12/2023	one week
2		FDP	Outcome Based Education and NBA Process Advancements in Geotechnical & Foundation Engineering	Department of Mechanical Engineering, AG Patil Institute of Technology, Solapur	28-12-2023	30-12-2023	3
3		FDP		Department of Civil, Yashoda Technical Campus, Satara	28-12-2023	30-12-2023	3
1	Prof. mrs. S. S. Jadhav	FDP	One Week Online FDP on "QGIS in Civil Engineering: Best Practices and Case Studies"	Department of Civil Engineering, Annasaheb Dange College of Engineering & Technology, Ashta, Sangli	12-07-2023	13/12/2023	one week
2		FDP	Three Days National Level Online FDP on "Outcome Based Education and NBA Process"	Department of Mechanical Engineering, A. G. Patil Institute of Technology , Solapur	28/12/2023	30/12/2023	3
3		FDP	Advancements in Geotechnical & Foundation Engineering	Department of Civil, Yashoda Technical Campus, Satara	28/12/2023	30/12/2023	3

DEPARTMENTAL ACTIVITY

Portfolio	Sr. No.	Date	Name of Activity	Name of Coordinator	Remark
Industrial Visit	1	09-07-2023	Last Year Students Study Visit to Bamboo plant, under subject Bamboo Construction Technology	Mr. P. G. Borate	At Wadhe, Satara
	2	09-09-2023	Visit to site for Building Construction and Drawing subject	Mr. A. S. Shah	Yashoda Pharmacy Construction Site, Yashoda Campus.
	3	13/10/2023	Visit to site for under construction site for DRPSC subject	Mr. A. S. Shah	Yashoda Pharmacy Construction Site, Yashoda Campus.
	4	11-04-2023	Visit to site for presstressed concrete structures at Satara Nagar parishad, Satara.	Mr. A. S. Shah	Under construction Site of Satara Nagarparishad, Satara.
	5	11-04-2023	Visit to site for Construction equipments and techniques at Satara Nagar parishad, Satara.	Mrs. V. P. Pawar	Under construction Site of Satara Nagar parishad, Satara.
CESA activity	1	09-05-2023	Teachers Days	Mr. D. B. Patil	
	2	15/9/23	Engineers Day: Poster Presentation	Mr. D. B. Patil	Judges: Amruta Mohite mam and Shirin Mam
	3	15/9/23	Guest lecture on Drone Technology	Mr. A. N. Shaikh	Resource Person Mr. Bajirao nangare patil
Guest Lecture	1	30/10/2023	Guest Lecture on Non-Destructive Test	Mr. A. N. Shaikh	Resource Person Mr. Mukund Gaikwad
	2	15/9/23	Guest lecture on Drone Technology	Mr. A. N. Shaikh	Resource Person Mr. Bajirao nangare patil

Yashoda Shikshan Prasarak Mandal's
Yashoda Technical Campus, Satara
Department of Civil Engineering
Constromatix
JULY - DECEMBER 2023

STUDENT FACULTY CORNER

Study visit at construction site and Bamboo plant Satara

Yashoda Shikshan Prasarak Mandal's
Yashoda Technical Campus, Satara
Department of Civil Engineering
Constromatix
JULY - DECEMBER 2023

STUDENT FACULTY CORNER

'Poster Presentation' event conducted on Engineer's Day.

Guest Lecture on Non-Destructive Test by Mukund Gaikwad

Guest Lecture on 'Drone Technology' conducted on Engineer's Day. Resource Person was Bajirao Nangare Patil.

Yashoda Shikshan Prasarak Mandal's
Yashoda Technical Campus, Satara
Department of Civil Engineering
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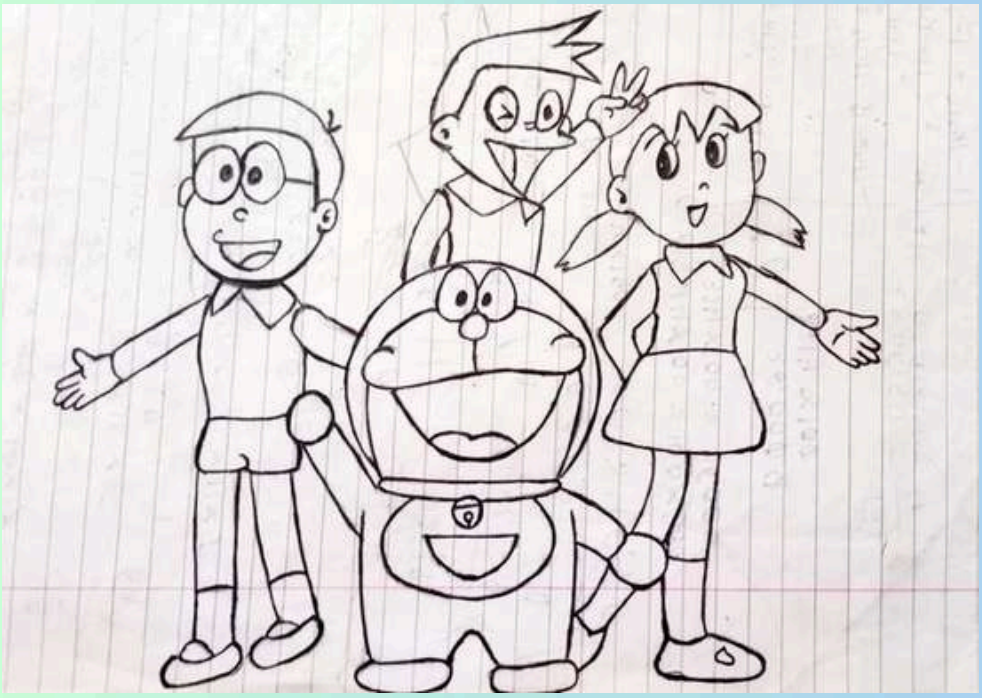
JULY - DECEMBER 2023

ART GALLERY



Sakshi Pawar

मन

या श दातच चंड आपलेपणा वाटत असतो
ते मन असतं .....
जे कधीही आप याला सोडून जाणार नसतं
ते मन असतं .....
यावर फ आपण रा य क शकतो
ते मन असतं .....
एखा ाचा अपराधही माफ करायला भाग पाडतं
ते मन असतं .....
जे आप यापासून कोणी कधीही हसकावू शकत नाही
ते मन असतं .....
याला श दांची नाही तर भावनांची भाषा समजते
ते मन असतं .....

ल मी नानू च हाण

प्रेरणा

वझलेआज जरी मी
हा माझा अंत नाही
पेटन उ ा न ाने
हेसाम य नाशवंत नाही

छाटलेजरी पंख माझे
पु हा उडेन मी
अडवूशकेल मजला
अजून अशी भत नाही

माझी झोपडी जाळ याची
केलीत कैक कावे
जाळेल झोपडी माझी
अशी आग ती वलंत नाही

रोख यास वाट माझी
वादळे होती आतुर
डो यात जरी गेली धूळ
थांब यास उसंत नाही

येतील वादळे
तरी चालतेवाट
अडथ यांना भऊन अडखळणे
पावलांना मा या पसंत नाही