2K24

E-TRON

VOLUME -III

ELECTRONICS AND TELECOMMUNICATION

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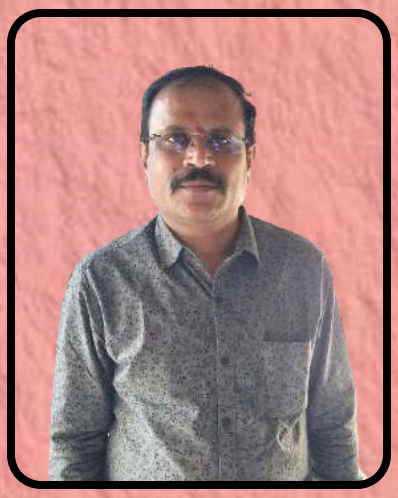

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PROF. K. K. INGOLE
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PROF. M. N. KORADE
[ASSISTANT PROFESSOR, KDKCE]

VISION & MISSON

OF THE COLLEGE

"SERVICE TO THE SOCIETY THROUGH QUALITY TECHANICAL EDUCATION"

M01: Academic Excellence in Engineering and Technology through complete dedication 01 to all-round growth of students.

M02: Enable the students to develop into outstanding professionals with technical competence and magnetic skills.

M03: Fulfil the expectation of the society and industry with high ethical standards for developing sustainable solutions.

K. D. K. COLLEGE OF ENGINEERING

GREAT NAG ROAD, NANDANVAN, NAGPUR– 440 024 (M.S.)

NBA ACCREDITED - FIVE PROGRAMS, GRADE A, NAAC ACCREDITED

COLLABORATIVE ENVIRONMENT TO FOSTER PROFESSIONAL EXCELLENCE

We prepare students to be wellrounded professionals, responsible leaders, and lifelong learners through a rigorous engineering education enhanced by interdisciplinary connections in humanities and science and technology

TRAINING AND PLACEMENT DEPARTMENT

The Training and Placement Department of KDKCE aims to provide a solid platform for students by facilitating them with various industrial training, summer internship, Career Guidance programs, Campus Recruitment Training.

INFRASTRUCTURE / FACILITIES FOR RECRUITERS

- Auditorium for pre placement talk.
- Computer labs having 400 computers connected in network for online test.
- GD Rooms • Interview rooms
- Any other facility available in college campus is provided as-per requirement.

The Karmavir Dadasaheb Kannamwar College of Engineering, situated in the heart of India in Nagpur city, established in 1984 by Backward Class Youth Relief Committee [BCYRC] is one of the leading engineering colleges in Maharashtra State. Government of Maharashtra has conferred 'A' Grade on the basis of excellence & adequate infrastructure as well as academic achievements of students and faculty.

The Karmavir Dadasaheb Kannamwar College of Engineering, situated in the heart of India in Nagpur city, established in 1984 by Backward Class Youth Relief Committee [BCYRC] is one of the leading engineering colleges in Maharashtra State. Government of Maharashtra has conferred 'A' Grade on the basis of excellence & adequate infrastructure as well as academic achievements of students and faculty.

VISION & MISSON

OF THE DEPARTMENT

"ENDEAVORING IN DEVELOPING TECHNICALLY COMPETENT, CONFIDENT AND SOCIALLY RESPONSIBLE ELECTRONICS ENGINEERS."

M01: Focus on teaching–learning process to spread in-depth knowledge of principles and its applications pertaining to Electronics Engineering and interdisciplinary areas.

M02: To inculcate creative thinking through innovative and group work exercises which enhances the entrepreneur skills, employability and research capabilities.

M03: Provide ethical and value based education by promoting activities addressing the societal needs.

About Department

Established in 1999 and approved by AICTE New Delhi and the Government of Maharashtra, the Electronics Engineering department at our institution embarked on a journey of academic excellence. Initially accommodating 40 students, the department's intake capacity grew significantly, reaching 60 from the session 2002-2003 and subsequently expanding to 90 students from the session 2004 onwards. Over the years, the department has maintained a strong focus on providing top-notch education and training.

In 2020, the department underwent a significant transformation, officially renaming itself as the Department of Electronics and Telecommunication. This change, while symbolic, speaks volumes about our adaptability and forward-thinking approach. By embracing this new nomenclature, we embraced a more comprehensive view of the field, preparing our students not only in electronics but also in telecommunications, aligning our curriculum with the industry's ever-evolving demands.

Under the dynamic leadership of Dr. P. D. Khandait, the department boasts highly qualified staff with extensive industrial experience. The students of the department consistently excel in university examinations, securing merit ranks annually. The department's commitment to holistic student development is evident through various activities organized under the Departmental forum IETE Student Forum (ISF). These activities include Technical Seminars, Workshops, and Guest Lectures conducted throughout the year.

E-TRON

2K24

E-TRON

VOLUME -III

INTRODUCTION

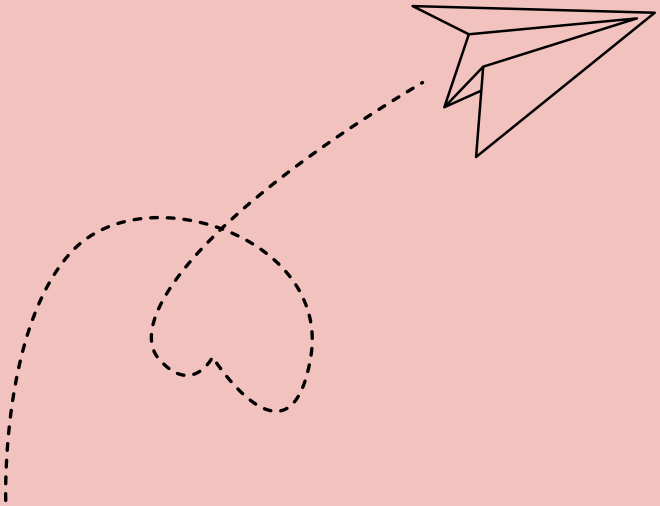
Greetings,

It is with great pleasure that we present E-Tron Volume III session 2023-24, a testament to the ingenuity and passion that defines the Electronics and Telecommunication Department at KDK College of Engineering. In this edition, we invite you to delve into the vibrant world of electronics and telecommunications, where academic brilliance meets real-world innovation.

In these pages, you will find a curated collection of articles, projects, and interviews that illuminate the exceptional work of our students, faculty, and alumni. From groundbreaking research papers to inspiring conversations with industry pioneers, E-Tron Volume III captures the essence of our department's commitment to excellence.

We believe this volume serves not only as a source of knowledge but also as an inspiration for aspiring engineers and technology enthusiasts. As you navigate through the diverse topics and innovative ideas presented here, we hope you find the same excitement and fascination that drive us in our pursuit of excellence.

Thank you for joining us in celebrating the achievements and potential of the future leaders in electronics and telecommunication. We invite you to immerse yourself in the pages of E-Tron Volume 2K24 and explore the boundless opportunities that lie ahead.



Message from Authorities

Message From Principal

I am thrilled to introduce the third edition of e-Tron, KDK's Electronics & Telecommunication departmental magazine for the academic year 2023-24. This publication stands as a testament to the incredible creativity and imagination of our students and faculty members. At KDK College, we are committed to nurturing the holistic development of our students, encouraging their talents, ingenuity, and creativity beyond the confines of their syllabus.

e-Tron exemplifies this commitment, providing a platform for our students to showcase their innovative ideas and explore diverse areas of knowledge. I extend my heartfelt appreciation to the dedicated editorial team for their hard work and dedication in bringing this magazine to life. Their passion and effort have made this edition possible, and for that, they deserve our sincere gratitude.

To our students, I applaud your outstanding contributions to e-Tron. Your creativity and dedication shine through in these pages, reflecting your immense potential and promising future.

As you explore the contents of this magazine, I encourage you to embrace the spirit of curiosity and innovation. May e-Tron inspire you to continue your journey of learning and exploration, always pushing the boundaries of your knowledge and imagination.

Congratulations to everyone involved in the making of this magazine. I look forward to witnessing the continued success and achievements of our talented students.

Dr. V. P. Varghese
Principal, KDKCE

Message From Vice-Principal

I am delighted to introduce the third edition of e-Tron, KDK's Electronics & Telecommunication departmental magazine for the academic year 2023-24. This edition continues to capture the essence of our students' and faculty members' creativity and innovation. At KDK College, we are dedicated to providing an environment that fosters not only academic excellence but also the overall growth and development of our students.

e-Tron is a testament to our commitment, showcasing the exceptional talent and imaginative capabilities of our students, encouraging them to explore beyond their academic syllabus. I want to extend my heartfelt appreciation to the editorial team for their dedication and hard work in bringing this magazine to fruition. Their efforts have truly paid off, and this edition stands as a shining example of their creativity and commitment. To our students, I commend you for your outstanding contributions to this magazine. Your passion for your field of study and your creative endeavors are truly inspiring. I encourage you to continue pushing your boundaries, exploring new horizons, and embracing the spirit of innovation. Congratulations to everyone involved in the making of this magazine. I am confident that the knowledge and creativity displayed within these pages will inspire others and contribute to the continued success of our department.

Dr. A. M. Badar
Vice- Principal, KDKCE

Message From Head Of Department

It is my distinct pleasure to introduce the third edition of e-Tron, the hallmark of excellence in our Electronics & Telecommunication department at KDK College. This magazine represents not just a collection of pages but a vibrant tapestry woven with the innovative threads of our students and the insightful contributions of our esteemed faculty members.

My deepest appreciation goes to the meticulous editorial team whose tireless dedication and attention to detail have transformed diverse ideas into the cohesive narrative you now hold in your hands. Their passion for academic brilliance and commitment to showcasing the best of our department are evident in every carefully curated article, research paper, and creative endeavor within these pages. Your work reflects not only your individual brilliance but also the collective spirit of inquiry and collaboration that thrives within our department. I encourage each one of you to see this magazine not just as a publication but as a mirror reflecting your potential, inspiring you to reach even greater heights in your academic and creative pursuits.

I extend my heartfelt congratulations to all the contributors, editors, and supporters who have made this edition possible. May e-Tron serve as a beacon of inspiration, guiding you towards a future filled with intellectual curiosity, academic excellence, and endless possibilities.

Dr. P. D. Khandait
Head of Department,
Electronics & Telecommunication, KDKCE

Message From Magazine Inchagre

It is with immense pleasure and pride that I welcome you to the third edition of e-Tron, our cherished departmental magazine at KDK College. As the magazine in-charge, it has been an incredibly rewarding journey to witness the creative brilliance and intellectual depth displayed by our students and faculty members. e-Tron is not just a compilation of articles and artworks; it is a labor of love, dedication, and unwavering commitment to excellence.

Within these pages, you will find the culmination of countless hours of research, passionate discussions, and artistic expressions. Each word penned and every stroke of the brush reflects the essence of our department - a harmonious blend of curiosity, knowledge, and creativity.

I want to express my heartfelt gratitude to the exceptional team of contributors, editors, and designers who have poured their hearts and souls into making this edition a reality. Your enthusiasm and creativity have truly brought e-Tron to life, transforming it into a captivating journey through the diverse landscapes of Electronics & Telecommunication.

I extend my warmest congratulations to all for their exceptional contributions. Thank you for making e-Tron not just a magazine but a vibrant tapestry of our collective achievements and aspirations.

Dr. J. S. Gawai
Magazine In-charge,
Electronics & Telecommunication, KDKCE.

EDITORS NOTE

Welcome to the third edition of e-Tron! In this issue, we proudly present a vibrant collection of exceptional work crafted by our talented students and faculty. From groundbreaking research to captivating artworks, each page reflects our commitment to creativity and knowledge. We hope you find inspiration within these diverse pages, showcasing the remarkable achievements of our department. Thank you for being a part of our journey.

Mr. Shreyash S. Almast
Editor-in Chief of "e-Tron"
Electronics & Telecommunication,
kdkce.

In this edition of e-Tron, we're thrilled to share a captivating glimpse into the innovative spirit thriving within our Electronics & Telecommunication department. From cutting-edge research findings to thought-provoking articles and visually stunning artwork, this magazine is a testament to the talent and dedication of our students and faculty members.

Mr. Sujal A. Dhengre
Editor-in Chief of "e-Tron"
Electronics and Telecommunication,
KDKCE.

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Mr. Kartik V. Pachkhande
Editor of “e-Tron”
Electronics & Telecommunication,
kdkce.

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Ms. Shruti Magar
Editor of “e-Tron”
Electronics and Telecommunication,
KDKCE.

CONTENTS

IETE Student forum


Core Team


Executive Members


Events


SPARK-2K24


AMPLIFIA-2K24


Articles


Story Writing

Poems


Painting


Classroom Chronicles


Glimpses

IETE STUDENT FORUM

WELCOME to the TEAM

The Institution of Electronics and Telecommunication Engineers (IETE) is a prominent professional society in India, established in 1953. It has made significant contributions to the fields of Electronics, Communication Engineering, Computer Science, Information Technology, and related subjects. The organization focuses on several key objectives and activities:

1. Engineering Education: IETE is dedicated to providing engineering education at both degree and diploma levels. It aims to make quality education accessible and affordable to students who may not be able to afford it through regular or private engineering institutions, which often charge exorbitant fees.

2. Alumni Association: IETE has an Alumni Association formed in 2013. This association is for the past students (alumni) of IETE who have completed their DIPIETE, AMIETE, and ALCCS programs. It provides a platform for networking and collaboration among former students of IETE.

IETE Students Forum (ISF): This is the second stream of the student base within IETE. ISF primarily consists of engineering students currently enrolled in various engineering colleges and polytechnics across India. There are more than 550 active ISFs in India, with over 60,000 student members. The main objectives of ISF are as follows:

a. Improving Standard of Engineering Education: ISF strives to enhance the quality of engineering education and ensure that students receive a high standard of instruction.

b. Counseling on Emerging Opportunities: ISF provides guidance and counseling to students about emerging career opportunities and pathways in the field of electronics, telecommunication, and related areas.

c. Encouraging Extracurricular Activities: ISF encourages students to engage in extracurricular activities, such as workshops, projects, seminars, and activities beyond the classroom. This helps students gain practical experience and develop their skills.

d. Increasing Membership: ISF aims to increase the student and corporate membership of IETE. By expanding its membership base, IETE can become a more professional and influential organization in the field of electronics and telecommunications.

Professor S.A. Bagal's role as the In-Charge of the ISF committee at K.D.K College of Engineering is pivotal in providing essential guidance and support to student organizations. Within educational institutions, faculty members like Prof. S.A. Bagal serve as facilitators, offering valuable assistance to ensure the seamless operation of these organizations, all while ensuring alignment with the institution's overarching objectives. Such esteemed faculty members provide mentorship and expert advice, thereby enabling students to actively partake in extracurricular and professional development initiatives orchestrated through ISF.

This club likely follows the broader objectives and initiatives of the national ISF network under IETE. Students involved in ISF at K.D.K College would be able to benefit from the various programs, activities, and resources offered by IETE to enhance their engineering education and professional development.

ISF CORE TEAM

Mr. Tejas Bhende,
President

Ms. Aqsa Khan,
Vice-President

Mr. Divyansh Tembhare,
Vice-President

Mr. Kundan Gahukar,
Treasures

Mr. Shreyash Almast,
Secretary

Ms. Aarushi Nagmote,
Jt. Treasurer

Mr. Pratik Mohad,
Jt. Secretary

EXECUTIVE MEMBERS

Ms. Mayuri Sawalakhe

Mr. Raju Malekar

Ms. Ravisha Kolhe

Mr. Devanshu Awalekar

Ms. Sonali Chanekar

Ms. Tanu Girsawale

EXECUTIVE MEMBERS

Kartik Pachkhande
Technical Head

Kalash Lanjewar
Discipline Head

Yash Thaware
Sports Head

Sushil Rahate
Event Head

Avantika Thak
Decoration Head

Sujal Dhengre
Sponsorship Head

Prathamesh Choudhari
Food Head

Vanshita Sonule
Cultural Head

Komal Dubey
Inauguration Head

Shyam Sharma
Promotion Head

Yash Sahare
Social Media Head

Vedika Badhe
News Correspondence Head

EVENTS

Street Play: Plastic Free India
(Extension Activity)
Dated:-25/02/2024

Moon-Light Fest
(Kojagiri Pournima)
Dated - 30/10/2023

Industry Visit to
Lokmat Buttibori
Dated - 16/09/2023

Poster Competition in view of
World Student Day
Dated - 18/10/2023

Teacher's Day Celebration Activity Report Dated:- 05/09/2023

Swachchata Hi Seva Activity Report Dated:- 01/10/2023

ISF Installation Activity Report Dated:- 13/10/2023

Farewell Ceremony Activity Report Dated:- 25/04/2024

Spark 2k24

The XX National Conference on Emerging Trends in Engineering & Technology, also known as SPARK-2024, was held on 15th March 2024 at K.D.K College of Engineering. The conference aimed to provide a platform for students researchers, academicians, and industry professionals to exchange ideas and discuss the latest advancements in various engineering and technology fields. The proceeding of more than 130 research papers is published on the occasion of this conference. The Printed Copies of Research Proceeding is inaugurated by Chief Guest Prof. V. H. Mankar (HOD E&TC Dept. Government Polytechnic, Nagpur), Guest of Honour Er. Satish S. Raipure, Vice-Principal Prof. A. M. Badar, Spark-2024 Convener Dr. P. D. Khandait and Co-Convener Prof. S. A. Bagal. The XX National Conference on Emerging Trends in Engineering & Technology - SPARK-2024, hosted by K.D.K College of Engineering, served as a vibrant platform for knowledge dissemination, idea exchange, and collaboration among stakeholders in the engineering and technology community. By fostering interdisciplinary discussions and promoting innovation, the conference contributed to the advancement of the field and inspired attendees to explore new frontiers in research and practice.

Amplifia 2k24

Department of Electronics & Telecommunication had organized a National Level Technical, Sports & Cultural Fest - AMPLIFIA2K24. AMPLIFIA2K24 is an eagerly awaited national-level technical and cultural festival scheduled for April 24, 2024. This fest is designed to unite students, professionals, and enthusiasts from various regions to participate in a range of technical, cultural, and sports activities. The goal is to foster innovation, celebrate cultural diversity, and promote sportsmanship. AMPLIFIA2K24 promises to be an exhilarating and enriching experience for all attendees. Scheduled for April 24, 2024, this festival is set to be a day filled with intellectual stimulation, cultural expression, and athletic excitement. Participants and spectators alike can look forward to a memorable event that celebrates talent, innovation, and unity. Mark your calendars and prepare to be a part of this extraordinary celebration.

ARTICLES

The Future of Electronics: Paving the Path for a Connected World

The electronics industry, a cornerstone of modern technology, is poised for a transformative future. Innovations are occurring at a rapid pace, fueled by advancements in artificial intelligence (AI), quantum computing, and sustainable technologies. As we step further into the 21st century, these developments promise to reshape not only consumer electronics but also entire industries, from healthcare to transportation. This article delves into the key trends and emerging technologies that are set to define the future of electronics.

AI and machine learning are no longer futuristic concepts; they are now integral to the evolution of electronics. These technologies enable devices to learn from user interactions, making them smarter and more intuitive. For instance, AI-powered processors in smartphones can optimize performance based on usage patterns, enhancing battery life and processing speed. In the broader scope, AI is driving advancements in robotics, autonomous vehicles, and IoT (Internet of Things) ecosystems, creating a more connected and efficient world.

Quantum computing represents a significant leap beyond classical computing, promising unprecedented processing power and speed. This technology leverages the principles of quantum mechanics to perform complex calculations at incredible speeds. In the future, quantum computers could revolutionize fields such as cryptography, material science, and drug discovery, solving problems that are currently intractable for traditional computers. As research and development in this field progress, we can expect quantum computing to become a pivotal component of the electronics landscape.

With growing awareness of environmental issues, the electronics industry is shifting towards sustainability. Manufacturers are exploring eco-friendly materials, energy-efficient designs, and recycling initiatives to reduce the environmental impact of electronic devices. Innovations such as biodegradable circuit boards and solar-powered devices are gaining traction. Additionally, the concept of a circular economy, where products are designed for reuse and recycling, is being increasingly adopted. This shift not only addresses environmental concerns but also meets the demands of eco-conscious consumers.

The development of flexible and wearable electronics is opening new avenues for innovation. These devices, which can be bent, stretched, and worn on the body, are revolutionizing industries such as healthcare and fitness. Wearable sensors can monitor vital signs in real-time, providing valuable data for personalized healthcare. Flexible displays and e-textiles are also gaining popularity, offering new possibilities for consumer electronics and fashion. As materials science and manufacturing techniques advance, the market for flexible and wearable electronics is expected to expand significantly.

The rollout of 5G networks is set to revolutionize the electronics industry by providing ultra-fast, low-latency connectivity. This new generation of wireless technology will enable seamless communication between a vast number of connected devices, from smartphones to smart cities. The impact of 5G extends beyond faster internet speeds; it will facilitate the growth of IoT, autonomous vehicles, and smart infrastructure. Looking further ahead, research into 6G technology is already underway, promising even greater advancements in connectivity and data transmission.

Mr. Shreyash S. Almast
4th Yr ETC

Machine Learning in Computer Vision and Image Processing

Machine learning (ML) has been used by many companies in the field of computer vision and image processing in the modern digital world, revolutionizing the analysis and visual data processing. Not surprisingly, these advances have enabled computers to automatically extract information from images, identify objects, spot trends, and improve image quality. Machine learning is used in many fields, including security systems, medical imaging, and driverless cars. With the help of machine learning, computer vision and image processing, advancements have become possible. This blog explores how machine learning and its applications utilize computer vision and image processing for broader use. Computer vision analyses data from digital images and videos to infer relationships. It uses artificial intelligence and machine learning technology for better output. Like other machine learning systems, computer vision systems need a lot of data to train their algorithms to

comprehend the input. Many industries use computer vision, including entertainment, security, robotics, and healthcare. Machine learning improves computer vision tasks by automatically enabling computers to learn from experience and improve without explicit programming. Fundamentally, machine learning algorithms are trained on large datasets of labelled images to recognize patterns and make predictions. Like other machine learning systems, computer vision systems need a lot of data to train their algorithms to understand the input. Convolutional neural networks (CNNs) have demonstrated outstanding performance in various

computer vision tasks. Training CNNs to categorize images into specified categories or identify specific objects within images becomes the basis for image classification and object identification. It goes one step
further with object detection and localization, which not only recognizes the things in the image but also pinpoints its location. For semantic and instance segmentation, labelling every pixel in an image is required to identify objects and their bounds accurately. Pose estimation and landmark identification focus on
locating and identifying objects in photos or identifying specific objects of interest, like face landmarks.

Applications of ML in Computer Vision
There are several uses for machine learning in computer vision across many industries.
To identify verification and access control systems which employ biometrics and facial recognition.

Computer vision algorithms are used in autonomous vehicles and driver assistance systems to locate objects, navigate roads, and guarantee safe driving.
Security systems for object tracking and surveillance tracking for examining video feeds.
Utilizing computer vision with augmented reality and virtual reality overlays virtual things on the ground to produce immersive experiences.

Mr. Harsh K. Shinde
4th Yr ETC

The Mysteries of Globular Clusters: Stellar Relics of the Early Universe

Globular clusters are dense, spherical collections of stars that orbit galaxies, containing some of the oldest stars known. These clusters, formed from primordial gas clouds, offer insights into the early universe's conditions. With low metallicity and homogenous star populations, they help estimate the universe's age and understand galactic evolution.

Key Points

Ancient Origins : Globular clusters are among the oldest cosmic structures, providing a window into the early universe.
Scientific Importance : They help in studying stellar dynamics, black holes, and binary star systems.
Observation Techniques : Telescopes like Hubble and future ones like JWST and ELT will deepen our understanding.
Challenges : High star density makes individual analysis difficult, requiring advanced imaging and spectroscopy.

Scientific Significance:

1. Cosmic Chronometers :
   - Age Dating : By studying globular clusters, astronomers can estimate the age of the stars within them. This provides a lower limit for the age of the universe, offering a benchmark for cosmological models.
   - Chemical Composition : The low metallicity of globular cluster stars helps scientists understand the chemical evolution of galaxies and the process of nucleosynthesis.

2. Dynamical Studies :
   - Gravitational Dynamics: Globular clusters serve as natural laboratories for studying gravitational interactions and stellar dynamics due to their dense star populations.
   - Black Holes and Exotic Objects : The dense environments of globular clusters are ideal for the formation and detection of exotic objects like intermediate-mass black holes and binary star systems.

Globular clusters are crucial for studying the universe's history and evolution, offering valuable data on early stellar and galactic formation processes.

Ms. Tanu Girsawale
3rd Yr ETC

Harnessing the Power of the Sun: Solar Panel-Based Robotic Vehicle Controlled through RF

introduction

The fusion of renewable energy and robotics has opened up exciting possibilities in various fields, from sustainable transportation to remote exploration. One such innovation is the Solar Panel-Based Robotic Vehicle Controlled through Radio Frequency (RF). This technology marries the efficiency of solar power with the versatility of robotics, offering a glimpse into the future of eco-friendly automation.

The Solar Power Advantage

The cornerstone of this robotic vehicle's design is its reliance on solar panels for energy generation. Solar power is not only clean and sustainable but also readily available, making it an ideal choice for powering mobile robots. Solar panels harness energy from the sun and convert it into electricity, which can be used to charge batteries, ensuring continuous operation even in challenging environments.

Components of the Solar Panel-Based Robotic Vehicle

1. Solar Panels: Photovoltaic panels are strategically mounted on the vehicle's surface to capture sunlight efficiently. The energy generated is stored in onboard batteries, providing power for movement and other functions.

2. Robotic Platform: The vehicle's chassis is equipped with wheels or tracks, allowing it to move across various terrains. This platform supports the weight of the vehicle's components and payload.

3. RF Communication: An RF transmitter and receiver module enable remote control and communication between the vehicle and the operator. This technology allows for wireless and real-time control.

4. Microcontroller: A microcontroller serves as the vehicle's brain, processing commands received through RF communication and controlling the vehicle's movement and other functions.

5. Battery System: Energy storage is crucial for uninterrupted operation, especially in low-light conditions. Batteries store excess energy generated by the solar panels for later use.

Mr. Saikiran R. Asamwar
4th Yr ETC

STORY WRITING

TITLE:- "HARMONY IN THE HALLS A MELODIC COLLEGE JOURNEY"

In the vibrant city of Chennai, where the aroma of filter coffee blends with the melodies of classical music, stands the prestigious Madras Music Academy. Nestled amidst the bustling streets and ancient temples, the academy is not just a place of learning but a sanctuary where the language of music speaks loudest.

Meet Kavya, a talented young vocalist whose passion for Carnatic music rivals the devotion of its greatest maestros. Her journey at the Madras Music Academy is a symphony in itself, woven with the threads of dedication, inspiration, and the pursuit of perfection. From the moment she steps into the grandeur of the academy's halls, Kavya is enveloped in an atmosphere of reverence and creativity, where every note sung resonates with the history and tradition of South Indian classical music. The academy's library becomes Kavya's sanctuary, a treasure trove of ancient ragas and compositions that have withstood the test of time. Here, amidst shelves lined with yellowed manuscripts and revered treatises on music theory, she delves deep into the intricacies of her art. It is in these quiet moments of study and reflection that Kavya finds inspiration, her voice echoing through the hallowed halls as she practices under the watchful gaze of portraits of legendary musicians.

But Kavya's journey towards mastery is not without its challenges. As she grapples with the demands of rigorous practice and the weight of expectation, she finds solace in the academy's quaint cafe, a humble corner where the aroma of freshly brewed filter coffee mingles with the chatter of fellow students. It is here that she forms friendships that transcend language and background, bonding over shared passions for music and the pursuit of excellence.

Among Kavya's newfound friends is Arjun, a gifted tabla player whose rhythmic prowess complements her vocal talents with effortless harmony. Their impromptu jam sessions in the cafe's cozy confines become a fusion of melodies and rhythms, each session a testament to the camaraderie and mutual respect that define their musical journey. As Kavya and Arjun navigate the challenges of their academic pursuits, their friendship blossoms into something deeper, fueled by their shared love for music and their dreams of leaving a lasting legacy in the world of Carnatic classical music.

Together, they explore the academy's expansive library, uncovering hidden gems of compositions and finding inspiration in the stories of composers who once walked the same halls. As graduation day approaches, Kavya and Arjun stand on the threshold of their future, their hearts brimming with gratitude for the academy that has nurtured their talents and shaped their identities as musicians. Surrounded by the timeless beauty of Madras Music Academy - from the serene library to the lively cafe - they realize that their time here has been more than just an education; it has been a harmonious symphony of experiences that have prepared them for a future filled with music, passion, and endless possibilities. As they bid farewell to the academy that has become their second home, Kavya and Arjun carry with them not just diplomas, but a melody of memories and friendships that will endure long after their final notes fade. For in the halls of Madras Music Academy, where the spirit of Carnatic music thrives, they have found not only a foundation for their careers but a lifelong bond forged through the power of music's timeless language.

Ms. Sonali P. Chanekar
3rd Year

TITLE: "LOVE BREWED IN PAGES: A TALE OF COLLEGE, BOOKS, AND COFFEE"

In the vibrant city of Delhi, where history whispers through the streets and culture thrives in every corner, Anika found herself drawn to the cozy corners of her college library café. A literature student with a penchant for classic novels and a taste for strong coffee, she spent her days lost in the worlds of Austen and Tagore, and her evenings savoring the aroma of freshly brewed beans.

It was during one such evening that Anika first noticed Arjun, a fellow student whose quiet demeanor and intense gaze often lingered over the pages of philosophical texts. They exchanged glances over the steaming mugs of chai and cappuccino, their conversations initially limited to polite nods and shared smiles.

As the semester progressed, their encounters became more frequent. They began to discuss their favorite authors, debate literary theories, and slowly unravel the layers of each other's personalities. Anika admired Arjun's intellect and his ability to find beauty in the complexities of life, while Arjun was captivated by Anika's passion for literature and her unwavering determination to pursue her dreams.

Their friendship blossomed amidst the stacks of books and the scent of freshly ground coffee beans. They shared laughter and tears, supported each other through exams and deadlines, and found solace in the sanctuary of the library café. Their bond grew stronger with each passing day, transcending the boundaries of friendship and blooming into something deeper. Yet, like the protagonists of the novels they cherished, Anika and Arjun faced their own trials. Misunderstandings arose, doubts clouded their hearts, and they found themselves at a crossroads where they had to decide whether to risk their friendship for the possibility of love. It was a rainy afternoon, much like the ones described in their favorite novels, when Arjun finally gathered the courage to confess his feelings. With trembling

hands and a heart full of hope, he poured out his love in words that echoed through the library café. Anika listened, her own heart racing, as the realization dawned that what they had was not just a fleeting connection but a love story waiting to be written.

In that moment, surrounded by the scent of books and the warmth of their favorite corner table, Anika and Arjun embarked on a new chapter of their lives—a chapter filled with love, laughter, and the timeless magic of a library café where dreams are nurtured and hearts find their home.

Mr. Vaibhav S. Pawar
3rd year

TITLE: THE FORGOTTEN ISLAND

Lena had always craved adventure, so when she came across an old map in her grandmother's attic, she felt an inexplicable pull. The map detailed an uncharted island, with cryptic notes scrawled in the margins: "Eternal Spring" and "Heart of the Island."

With curiosity burning inside her, Lena decided to follow the map's route. She flew to the last known coordinates and hired a small boat. The sea was rough, and the journey was long, but finally, a misty outline of land appeared on the horizon.

As Lena stepped onto the island, she was awestruck by its beauty. Lush, vibrant foliage and strange, colorful flowers surrounded her. The air was filled with the sweet scent of blooming plants and the gentle hum of unseen insects. It truly was an eternal spring.

Exploring deeper, Lena stumbled upon ancient ruins overgrown with vines. In the center of the ruins stood a stone pedestal, atop which lay a small, heart-shaped locket. The locket's intricate design matched the drawings on the map exactly.

She opened it carefully and found a tiny, faded photograph of a woman—her grandmother, as a young woman. The back of the photograph bore a simple inscription: "To my beloved, in memory of our adventure."

Tears filled Lena's eyes as she realized this island had once been a secret hideaway for her grandparents. The locket and the map were left behind, a treasure hunt meant for Lena to discover their past.

Lena returned home with a full heart and the locket around her neck, knowing she had not only uncovered a piece of her family's history but also a part of herself. The island was more than a destination; it was a bridge between generations, connecting her to the adventures of the past and the endless possibilities of the future.

Ms. Isha S. Upare
3rd Year

TITLE: THE HAPPINESS JAR

In the quaint village of Elmswood, lived a young girl named Lily. She was known for her radiant smile and infectious laughter. Despite the hardships her family faced, Lily believed in finding joy in the simplest things.

One summer, Lily's grandmother, Emma, visited from a faraway town. Emma brought with her a curious gift: a large, empty glass jar. It wasn't an ordinary jar but a "Happiness Jar."

Emma explained, "Every day, write down one thing that makes you happy and put it in the jar. On New Year's Eve, you'll open it and read about all the joy you experienced throughout the year."

Excited by the idea, Lily decorated the jar with colorful ribbons and placed it on her windowsill. Each day, she dropped a note into the jar. Some days, the notes were about big events like a birthday party or a good grade at school. Other days, they captured small, precious moments like the smell of freshly baked bread or the sight of a rainbow after the rain.

As the jar filled, Lily found herself looking forward to her nightly ritual. Her parents, initially skeptical, noticed a change in the household. The atmosphere seemed lighter, and conversations around the dinner table often revolved around the little joys of their day.

When Christmas came, the family hit a rough patch. Lily's father lost his job, and the future seemed uncertain. The joy in the house dimmed, and the jar, too, saw fewer notes.

On New Year's Eve, with a heavy heart, Lily brought the jar to the dining table. "It's time to open the Happiness Jar," she announced.

Her parents exchanged weary glances but sat down to join her. As Lily read each note aloud, the room slowly filled with laughter and fond memories. They reminisced about the day they found a stray kitten, the time they had a spontaneous picnic, and the night they danced in the living room to their favorite songs.

By the time the last note was read, tears of joy and nostalgia glistened in their eyes. They realized that despite the hardships, there had been moments of happiness every single day.

The experience transformed their outlook. They decided to continue the tradition of the Happiness Jar, even in difficult times. It became a family ritual, reminding them that joy often lies in the small, everyday moments we sometimes overlook.

Years later, Lily, now grown up and living in a bustling city, kept her own Happiness Jar. Whenever she felt overwhelmed or lost, she would read her notes and remember that happiness is not just a destination but a collection of beautiful moments along the way.

Ms. Muskan Kulkarni
3rd Year

POEM WRITING

जिंदगी

जिंदगी बड़ी हसीन है।
पल में हसाती है और, पल में रुलाती है।।
एक बार जिंदगी से पूछ लिया मैंने
क्या मेरी तरह सब परेशान है जिंदगी मै,
जिंदगीने मुस्कुराके जवाब दिया
कि परेशानियाँ तो गरीब को भी है
और धनवान को भी है
बस हर किसी के ज़िने का अंदाज अलग होता है।
तु जिंदगी को खुल के जी
बाज़ की नजर से देख
उसमें एक राज़ छुपा है,
चलते हुए समय को देख
और फिर सही निर्णय लेना सीख
मन में चल रहे विचारों को विश्वाम दे,
और दिमाग को आराम दे ।।
जिंदगी को ऐसे ही जिया जाता है

SAMRUDDHI
M. GAIDHAR
3RD YEAR

जग माझे

भाकरी खाणारे साधे आपण
उगाच पिझ्झ्याच कौतुक का,
जगाचा भार वाहणारे आपण
नोकरीच्या ओझाच नाटक का ?

संघर्ष जन्मापासून पाठीशी
मग दडपणाला घाबरतोस का,
गुणधर्म आपापल्या गाठीशी
मग साधेपणा लपवतोस का ?

माहितेय आला आहेस शहरात
मग गावची लाज कशासाठी,
ज्यांच्या सोबत मोठा झालास
त्यांना शहराचा माज कशासाठी ?

वाट चुकशील या गडबडीमध्ये
मोठ्या शहरात अडकून जाशील,
जगाला दाखवायच्या ओघात
तू स्वतःलाच हरवून बसशील !

SAMIR BARAI
3RD YEAR

In the glow of screens , our world unfolds,
Every tap and click , a story told.

From dawn till dusk,
in the internet's embrace,
We find inspiration in every digital space.

The hum of machines , the buzz of wires,
Each electronic heartbeat fuels our desires.

From smartphones to laptops , and everything in between,
In these gadgets , a world of possibilities is seen.

With each connection made , a spark ignites,
In the realm of circuits , we reach new heights.

From routers to modems , transmitting data a far,
Every signal carries the promise of a shining star.

In the realm of electronics , innovation thrives,
As we navigate through circuits and drives.

Every switch, every LED , a beacon of light,
Guiding us forward , through the darkest night.

So let us embrace the technology of today,
For in these devices , our dreams find their way.

With each electronic heartbeat , let us aspire,
To create, to innovate e, and to reach higher.

KARTIK V. PACHKHANDE.
4TH YEAR

जीवन

जीवन का सफर , प्रकृति के साथ,
हर पल एक नई राह , हर पल एक नई बात।

नदी का पानी , पहाड़ों की ऊँचाई,
सिखाते हैं हमें , जीने की सच्चाई।

जैसे परिंदों की उड़ान , बेताब और बेखबर,
तू भी अपने सपनों की ओर बढ़ने का इरादा कर।

प्रकृति की सुंदरता , बड़ी है प्रेरणा,
जीवन के हर मोड़ पर , बढ़ने का संदेश देती यह संवेदना।

प्रकृति की खूबसूरती , अद्भुत और निराली,
हमें प्रेरित करती , चलने की बनाती मुहाली।

जीवन की पारियों में , ज्ञान की अनगिनत धार,
प्रकृति से मिलता , हमें हर पल नया साथ।

कभी भी जीवन के मोड़ पर , जब हो मुश्किल या आस,
प्रेरणा से भर देती , प्रकृति की मिठास।

प्रकृति की सुंदरता से , हमें मिलता साथ,
जीवन के हर पल में , प्रेरणा की है बात।

जीवन को खुशियों से सजाओ,
नई प्रेरणा से जीने की राह बनाओ।

अपने सपनों को पूरा करने का संकल्प बनाओ,
और हर पल खुशी से जीते जाओ|

KHUSHAL BHAWSAR
4TH YEAR

A MAN ON THE EDGE OF THE WORLD

AT THE EDGE OF THE WORLD, YOU WILL FIND A LONELY MAN.
TWO WHISKERS ON HIS HEAD AND HE'S TRYING TO DO EVERYTHING HE CAN.

THERE'S A ROOM SO DARK AND YOU WILL FIND HIM IN A CORNER.
HEART IS SO COLD THAT HE'S BURNING RELIGION TO KEEP HIMSELF WARMER.

AND DON'T YOU FEEL SYMPATHY AS HE IS THE MANIPULATOR'S GREED.
HARD TO BELIEVE THAT HE IS FROM YOUR HUMAN BREED.

BUT IF YOU LOOK AROUND YOU WILL FIND COUNTRIES COVERING THE WALL.
FEW OF THEM BLOOMING AND FEW SIMPLY DYING IN FALL.

BUT ONE CONSTANT THING ON THE WALL WILL BE BORDERS AND WAR.
DON'T BE FOOLED AS IT MIGHT LOOK LIKE A PEACE TREATY FROM AFAR.

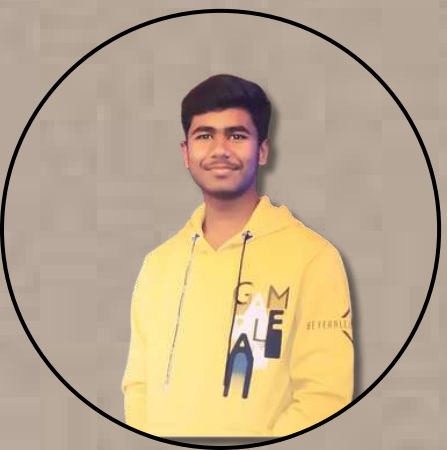
LEAVING THE WALLS IF YOU WISH TO CHECK THE MARBLED FLOOR,
DO KNOW THAT IT'S MADE UP OF YOUR BONES FROM THE BODY'S CORE.

AND DON'T BE FASCINATED BY HIS PURELY WHITE CLOTHES.
IT'S WOVEN WITH TENDONS AND ADORNED WITH ROTTEN MOTHS.

THE REST OF IT WOULD BE DARKNESS WITH HIS SMILE AND CALLS
AS ONLY THIS MUCH CAN FIT IN FOUR CLOSED WALLS.

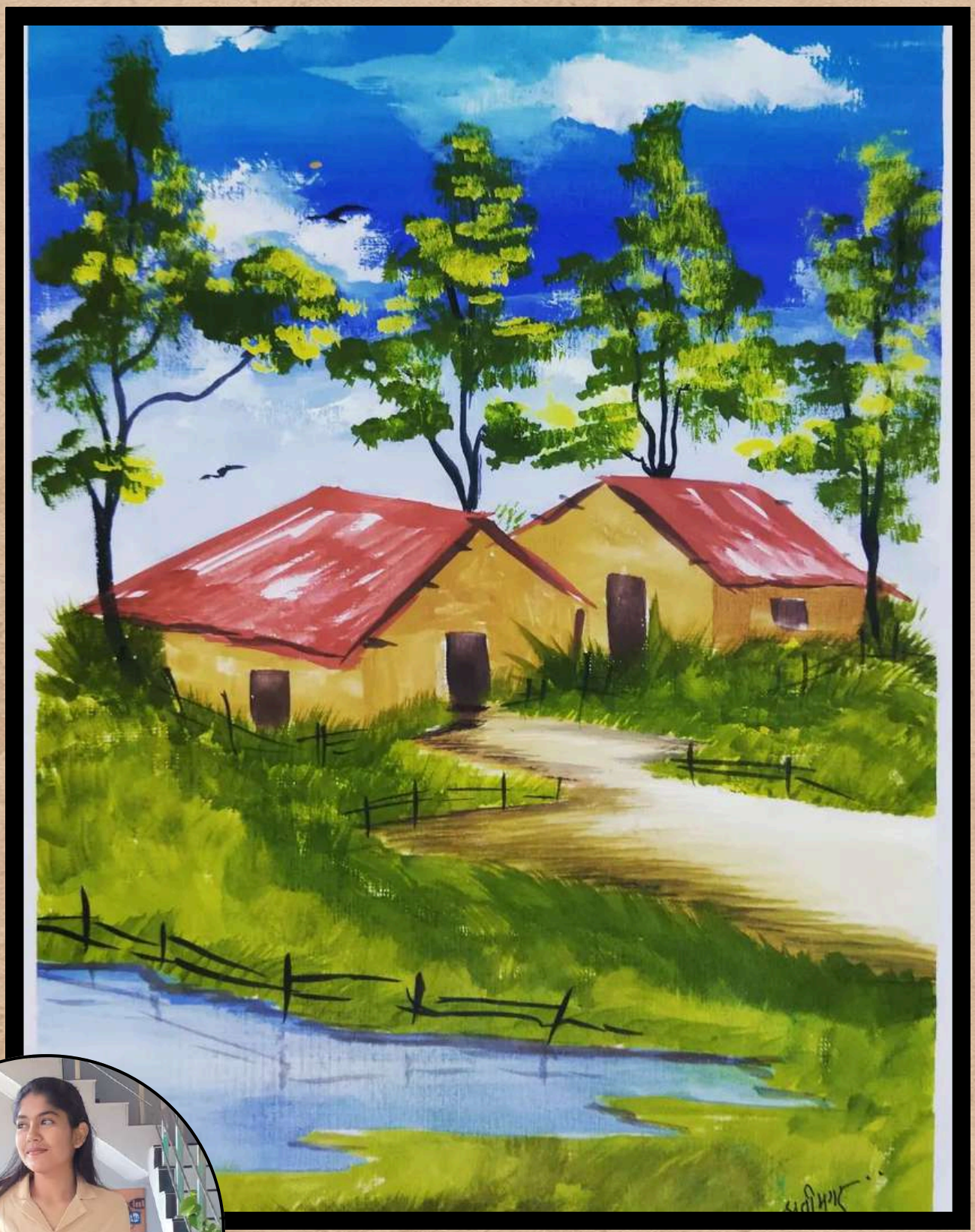
A BIRD ONCE SAT ON HIS GARDEN'S ONLY TREE.
IT HEARD FRUITS SCREAMING, "LET US BE FREE."

I TOLD YOU THE STORY OF A MAN THAT I ALWAYS SEE
SO YOU TELL ME NOW WHO IS HE?



DEVANSHU R. AWALEKAR
3RD YEAR

PAINTINGS



SHRUTI P. MAGAR

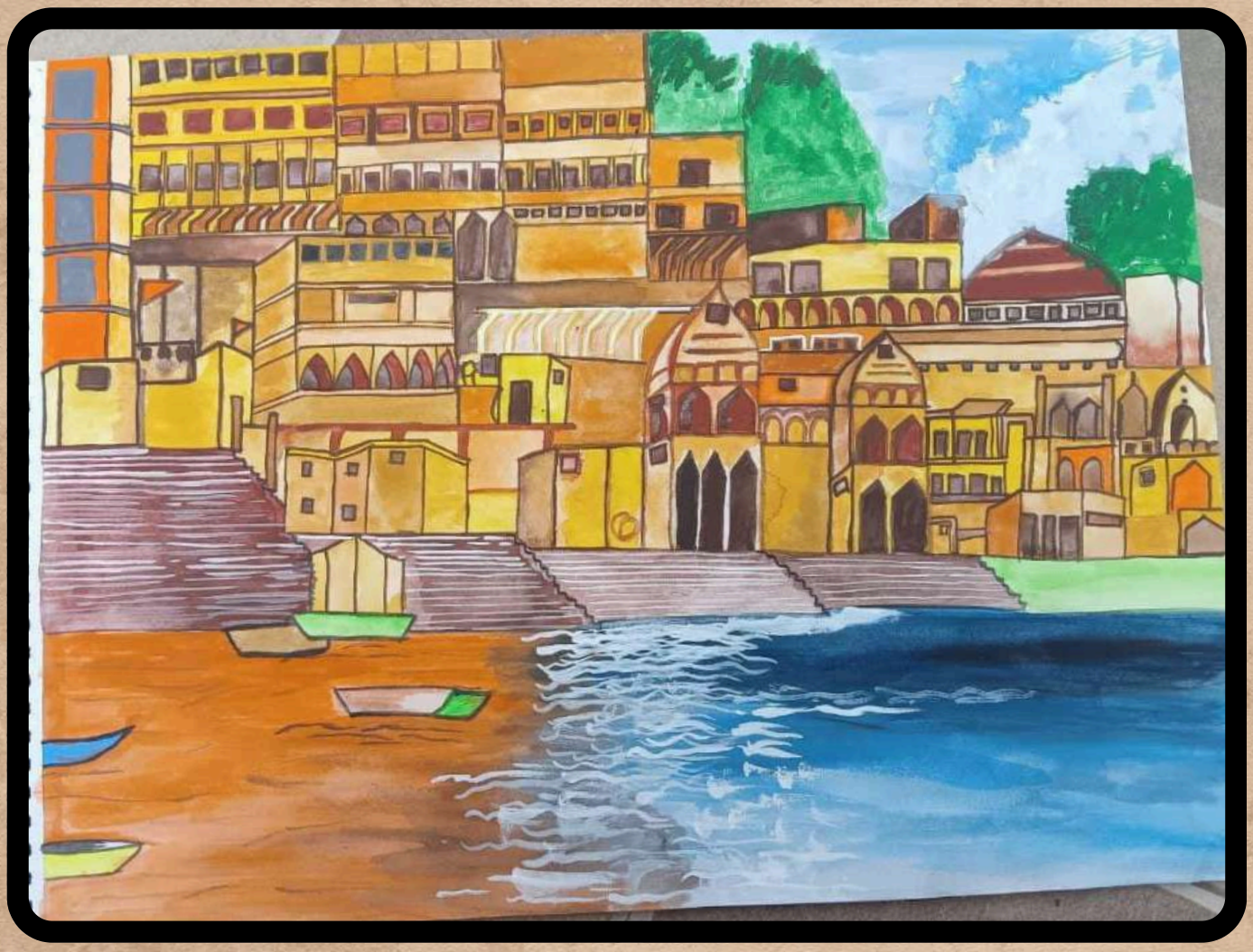
2ND YEAR

AASTHA S.KHANDELWAL

2ND YEAR

PRASAD SHASTRAKAR

4rd Year



SAMRUDDHI M. GAIDHAR

3rd Year

CLASS CHRONICLES

SECOND YEAR

THIRD YEAR

FINAL YEAR

GLIMPSES


2024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