



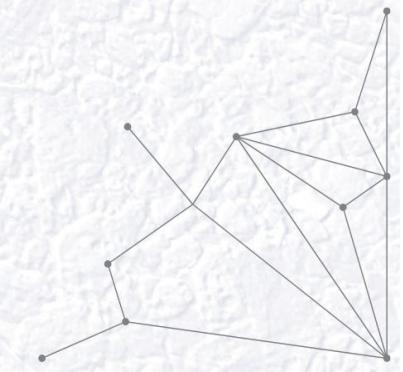
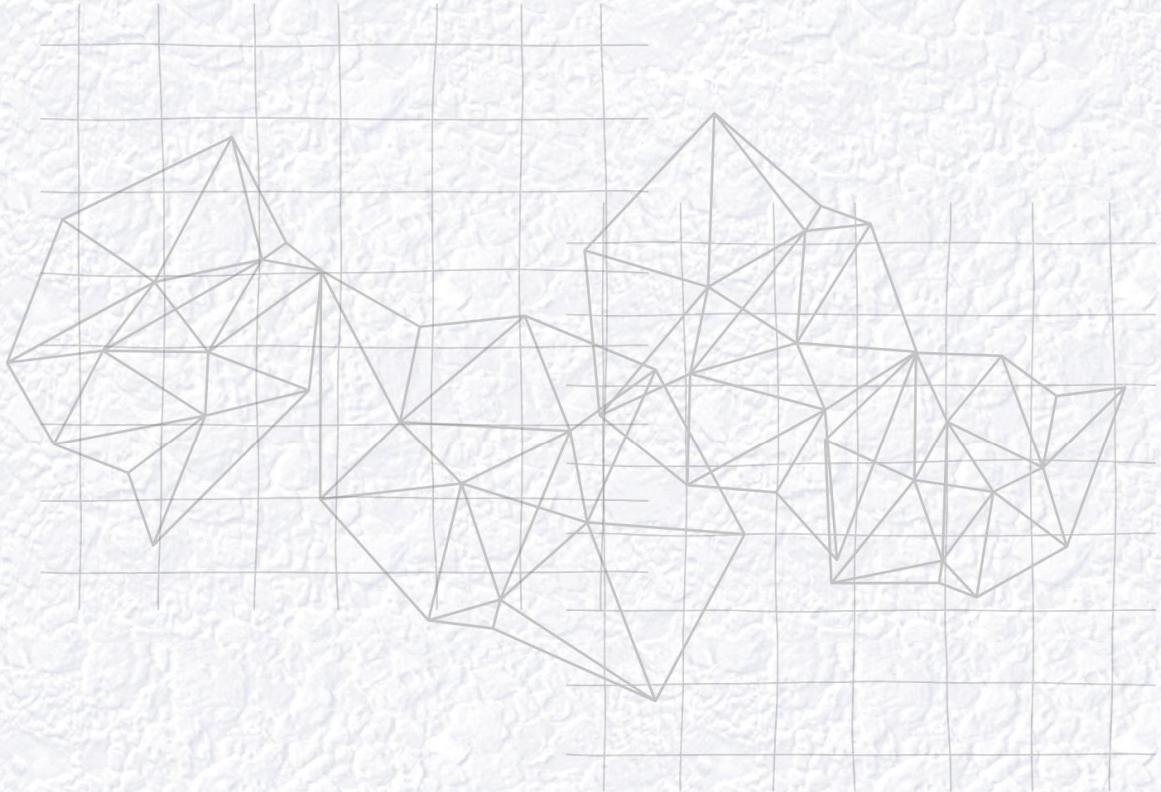
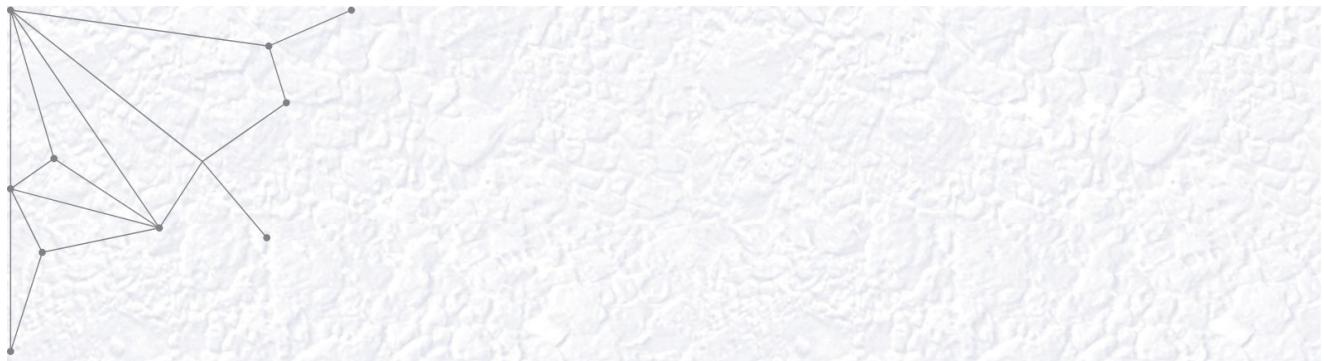
**Shri Sant Gajanan Maharaj
College of Engineering**
SHEGAON, MAHARASHTRA, INDIA

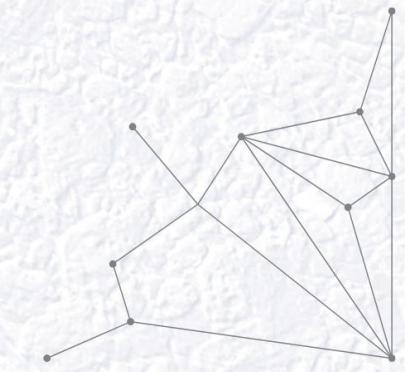
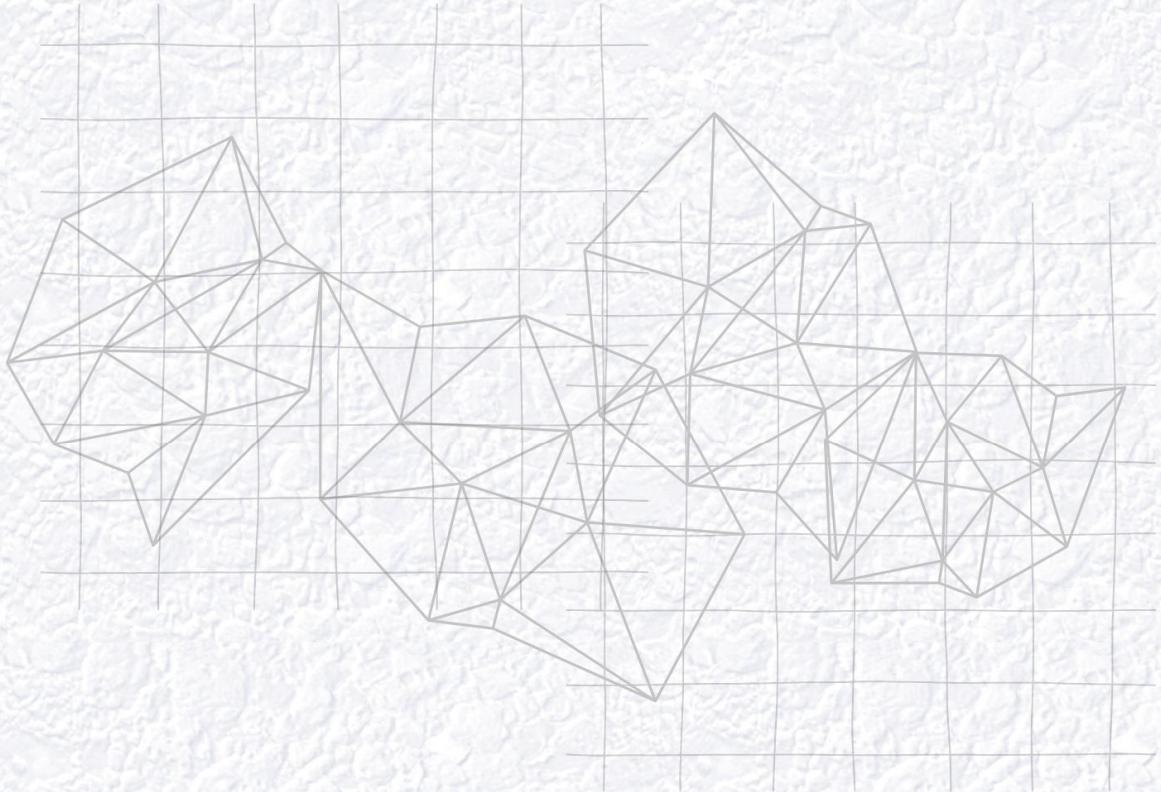
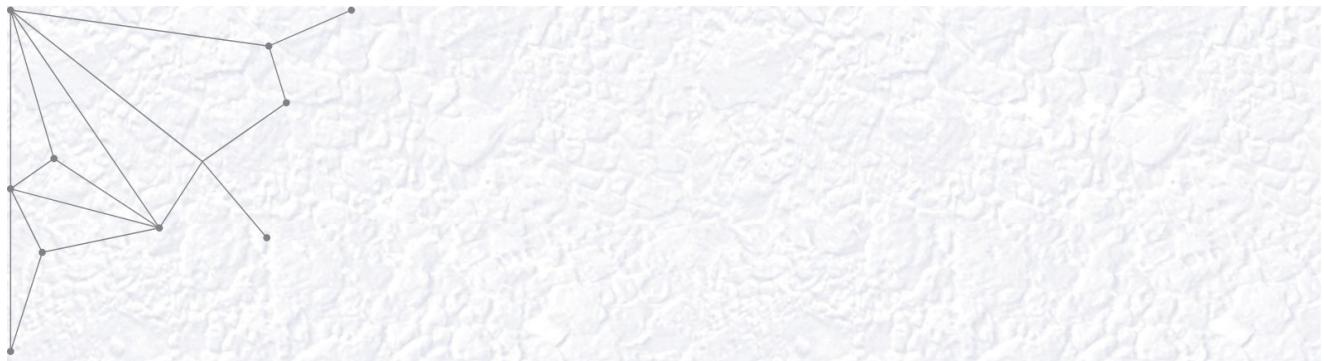


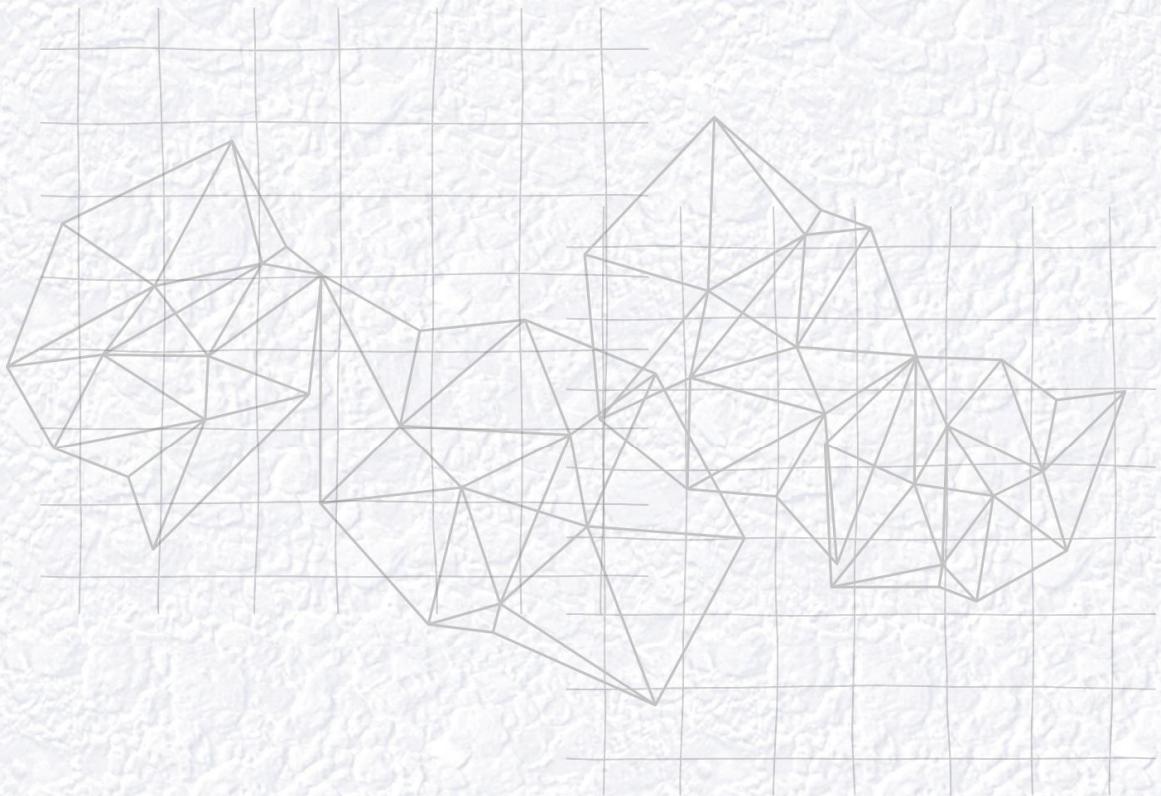
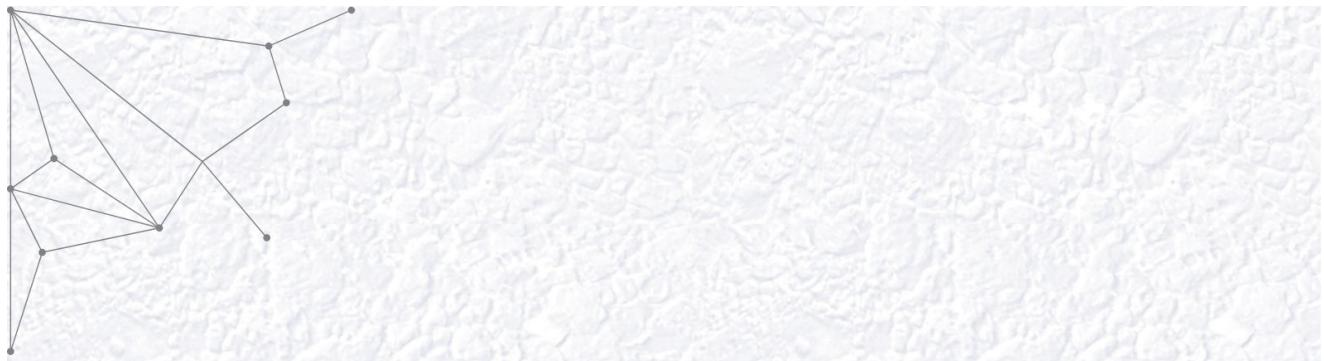
SRUJJAN

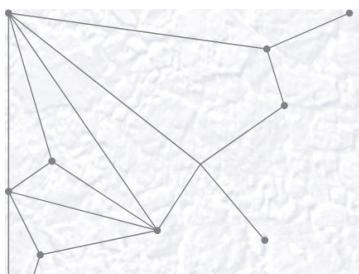
**DEPARTMENTAL MAGAZINE OF
ELECTRONICS AND TELECOMMUNICATION
ENGINEERING**

2023-24









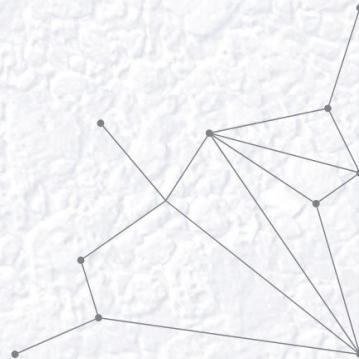
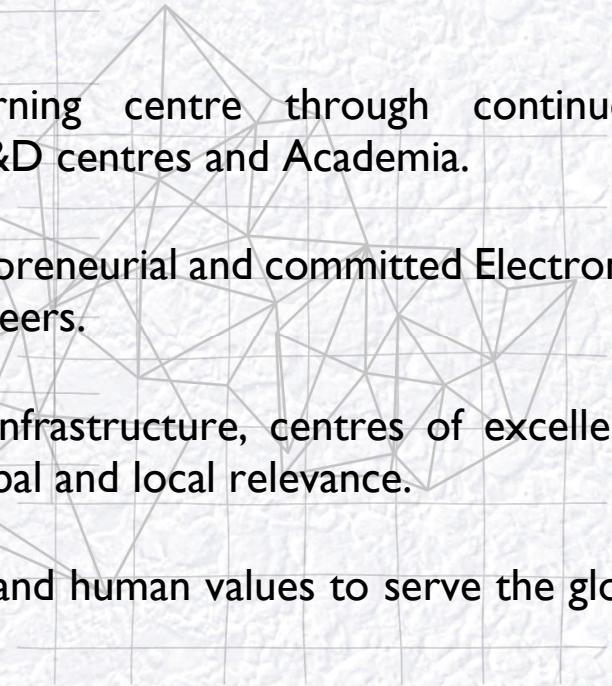
DEPARTMENT VISION

To impart quality education and excel in Electronics and Telecommunication Engineering research to serve the global society.



DEPARTMENT MISSION

- To develop excellent learning centre through continuous interaction with Industries, R&D centres and Academia.
- To produce competent, entrepreneurial and committed Electronics and Telecommunication Engineers.
- To develop state-of-the-art infrastructure, centres of excellence and to pursue research of global and local relevance.
- To inculcate ethical, spiritual and human values to serve the global society.



PROGRAM EDUCATIONAL OBJECTIVES (PEOS)

1. To produce Electronics & Telecommunication engineers with a strong foundation of Mathematics, Science and Technology to full fill needs of society.
2. To enable students to innovate design, simulate, develop, analyse and test hardware and software components for offering solutions to real life situations using state-of-the-art infrastructure and R&D facilities.
3. To nurture students with professional attitude, leadership, entrepreneurship, effective communication, teamwork & multi-disciplinary approach to serve in national and multinational organizations.
4. To inculcate ethical, moral and environment friendly values in students.

FROM THE HOD'S DESK

"Progress is born from the willingness to embrace change and the passion to innovate."

It gives me immense pride to present the **2023–2024** edition of **SRUJJAN**, the annual magazine of the **Electronics & Telecommunication Engineering Department**. This publication is a reflection of our department's vibrant academic culture, technical excellence, and the creativity of our students and faculty.

This academic year has been marked by outstanding achievements. Our students have not only excelled in academics but have also demonstrated commendable performance in **research, national-level technical events, internships, and placements**. The consistent efforts of our faculty in guiding students through workshops, projects, and innovations have been instrumental in driving our department forward.

Our department continues to grow as a hub of **innovation and learning**, integrating **emerging technologies** such as AI, IoT, embedded systems, and communication technologies into our curriculum and student activities.

SRUJJAN continues to serve as a creative platform for our students, offering them a space to express their talents, ideas, and technical explorations. It also stands as a testimony to the teamwork, dedication, and passion that define our department's ethos.

I take this opportunity to thank all the **contributors, editorial team members, faculty coordinators, and students** who have made this magazine a success. May this edition inspire many more to explore, innovate, and excel.

Best wishes to all !

Dr. M. N. Tibdewal
Head of the Department,
Electronics & Telecommunication Engineering.

EDITORIAL MESSAGE

With great enthusiasm and pride, we present the 2023–2024 edition of SRUJJAN, the annual magazine of the Electronics & Telecommunication Engineering Department. This magazine stands as a vibrant reflection of the department's academic accomplishments, technical advancements, creative endeavours, and collaborative spirit.

Throughout this academic year, our department witnessed an inspiring blend of innovation, learning, and participation. From technical workshops and guest lectures to interdisciplinary projects and competitive events, students and faculty worked hand-in-hand to achieve excellence. The rise in research contributions, industry collaborations, and successful placements further adds to our department's growing reputation.

SRUJJAN provides a platform to showcase the creativity, intellect, and passion of our students and faculty. Within these pages, you will find an exciting mix of articles, poems, technical insights, project highlights, and event memories, all curated with care and creativity.

We are deeply grateful to Dr. M.N.Tibdewal, our HOD, for his unwavering guidance and support. We also sincerely thank Prof. Sanjay Satal, our faculty coordinator, and all the mentors who stood behind the scenes ensuring quality and consistency.

We hope this edition not only captures memories but also inspires future innovation and excellence.

Happy Reading!

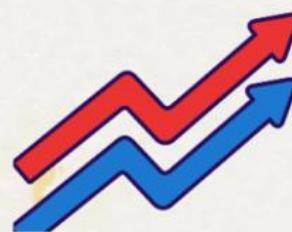
— *Editorial Team, SRUJJAN*
Ashish Lichode

TEAM SRUJJAN
(2023-24)

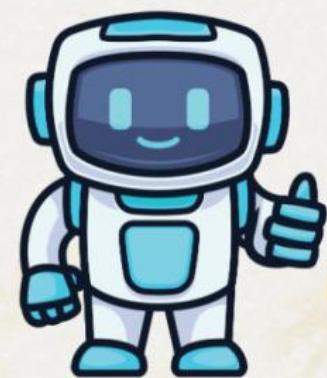
POST	NAME
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Editor in Hindi	Abhay Sharma (3U) Chandan Karnani (2U)
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ACHIEVEMENT OF DEPARTMENT



OVERVIEW

The **Electronics & Telecommunication Engineering Department** at **Shri Sant Gajanan Maharaj College of Engineering, Shegaon**, is a key academic pillar offering **B.E., M.E., and Ph.D. programs**. The department is known for its academic excellence, qualified faculty, and state-of-the-art laboratories.

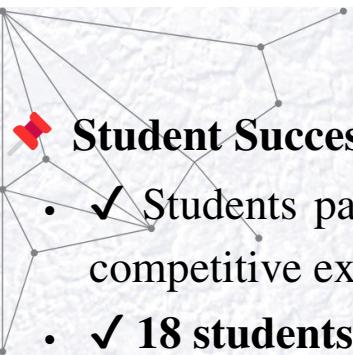
❖ Department Snapshot:

- **22 Faculty Members** (8 with Ph.D., 8 pursuing Ph.D.)
- **6 Laboratory Assistants & Office Staff**
- **8 Support Staff**
- **442 UG & PG Students and 9 Ph.D. Scholars**
- **University-Recognized Research Laboratories**
- **NBA Accreditation** received for the period **2019–2025**

ACADEMIC & RESEARCH ACHIEVEMENTS

❖ Faculty Excellence:

- ✓ Faculty members actively contributed through **quality teaching, research, and industry engagement**.
- ✓ Served as **Deans, project guides**, and resource persons at reputed institutions.
- ✓ Several proposals submitted to **AICTE & MSME** for funding support.



Student Success:

- ✓ Students participated in **GATE**, **CAT**, and other national-level competitive exams.
- ✓ **18 students** completed **internships** in recognized industries.
- ✓ Final-year result: **87.32% pass rate**, with **7 students securing distinction**.



Research Contributions

- ✓ Multiple **research papers published** in reputed **national and international journals/conferences**.
- ✓ Senior faculty delivered **expert lectures** and acted as **reviewers/judges** at technical events.
- ✓ Continuous growth in **interdisciplinary student projects** under experienced faculty mentorship.

WORKSHOPS, TRAININGS & INDUSTRIAL COLLABORATIONS

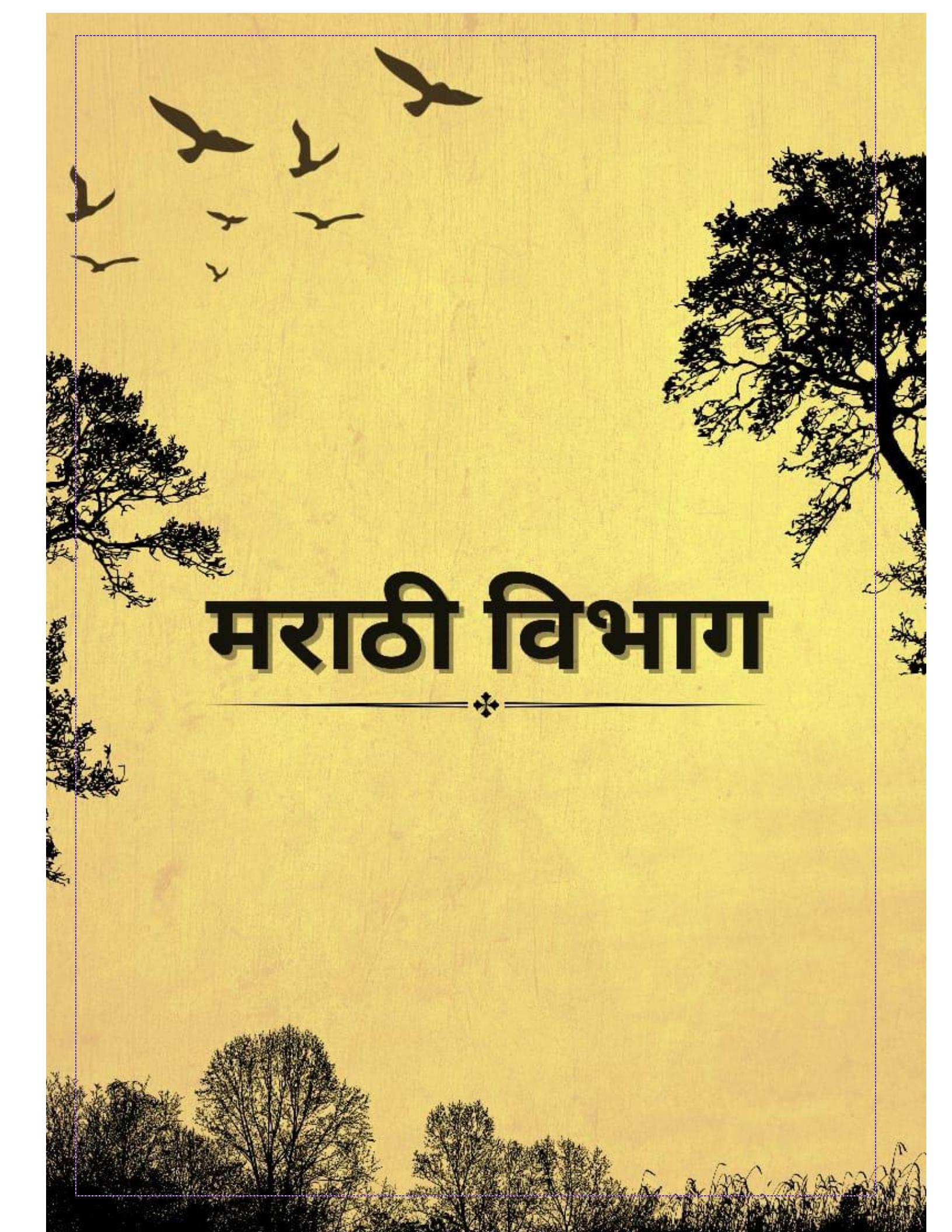
The department conducted a variety of **skill-building and academic programs**:

- ✓ Organized **10+ technical workshops/webinars** for students, faculty, and staff (both online & offline).
- ✓ Topics included **Basic Electronics, PCB Design, Communication Tools, and Advanced Circuit Simulation**.

- ✓ Strong engagement with **industry professionals** and domain experts.
- ✓ Students participated in **mini-project competitions, soft-skill sessions, and tool training modules.**

PLACEMENTS & INDUSTRY LINKAGES

- ✓ **98 final-year students** successfully placed in **leading national and multinational companies.**
- ✓ Top recruiters included **TCS, Wipro, Capgemini, Infosys, HDFC Life, BYJU'S, and more.**
- ✓ Students engaged in **industry-relevant and interdisciplinary projects.**
- ✓ Strong alumni network and consistent collaboration with industries for internships and placements.



मराठी विभाग

कविता

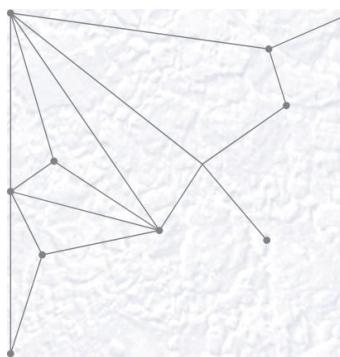
पुस्तकांचे गाव

एका गावी पुस्तकांची वस्ती,
प्रत्येक घरात ज्ञानाची मस्ती.
उघडता पान, भेटे नवी दुनिया,
अक्षरांच्या जगात रमते ही मनिया.

कुठे इतिहासाची पाने फडफडती,
कुठे विज्ञानाची रहस्ये उलगडती.
कथा-कवितांचा जणू मेळा भरे,
प्रत्येक पुस्तक एक नवा मित्र करे.

वृद्धांपासून ते लहानग्यांपर्यंत,
सगळ्यांनाच पुस्तकांचा लळा.
वेळेचे बंधन नसते कोणाला,
ज्ञानसागरात डुंबण्याचा मिळाला लळा.

असे हे पुस्तकांचे सुंदर गाव,
जिथे शब्दांची फुलते बाग.
जाऊया कधीतरी भेटायला त्याला,
मिळेल जीवनाला ज्ञानाचा धाग.



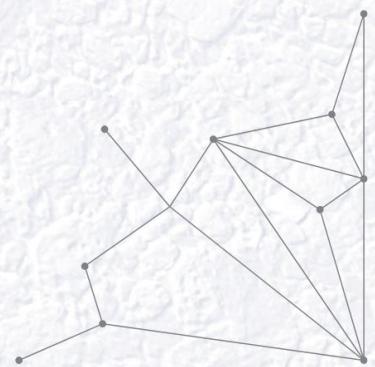
आषाढी वारी

पंढरीची वारी, निघाली दिंडी,
मुखी विठ्ठल नाम, ओठी अभंग गुंफी.
पताका खांद्यावर, टाळ मृदंगाचा नाद,
भक्त निघाले पंढरीला, हरिनामाचा छंद.

उन्हाळ्याचा ताप, पायांना फोड,
तरी भक्तांची चाल अविरत.
श्रद्धेचा सागर, हृदयात उसके,
विठ्ठल भेटीची ॥ स मनात.

गावोगावचे वारकरी जमले,
एकत्रित झाले भक्तीच्या रंगात.
भेदभाव विसरून सारे चालले,
विठ्ठल माझा सोबती, या विश्वासात.

चंद्रभागेच्या तीरी लागली पंकती,
धन्य झाले डोळे विठ्ठला पाहून.
माझी वारी सफल झाली ॥ ज,
॥ नंदाश्रू ॥ ले नयनी दाटून.



तंत्रज्ञानाचा मित्र

॥ ला मित्र नवा, हातात यंत्र घेवूनी,
बोटे फिरता क्षणात, दाखवी दुनिया जननी.
ज्ञानाचा सागर हा, माहितीचा खजिना,
शिकायला मिळे यातून, रोज नवा नमुना.

दूरचे ॥ णतो जवळ, ॥ वाज ऐकवतो स्पष्ट,
चित्र दाखवतो सुंदर, भूतकाळ करतो दृष्ट.
वेळेची बचत करतो, कामे करतो झाटपट,
माणसाच्या मदतीला, हा तंत्रज्ञानाचा पट.

खेळणी बनतो लहानगयांचा, करमणूक देतो मोठी,
वृद्धांनाही जोडतो, नसते ॥ ता कुणाची तुटी.
पण जपायला हवे त्याला, व्यसन नको लागू नये,
माणुसकीचा स्पर्श त्यात, कधीही कमी होऊ नये.

हा मित्र ॥ हे शक्तीचा, विकासाचा ॥ धार,
योग्य वापर केला तर, जीवनाला देतो ॥ कार.
चला तर मग शिकूया, याच्या साथीने पुढे,
नवीन युगाच्या वाटेवर, ॥ त्मविश्वासाने जुडे.

लेख

जलव्यवस्थापन आणि महाराष्ट्राची गरज

महाराष्ट्र एक कृषिप्रधान राज्य असून येथील अर्थव्यवस्था मोठ्या प्रमाणात पावसावर अवलंबून झाले अनियमित पाऊस, वाढती लोकसंख्या आणि औद्योगिकीकरण यामुळे जलव्यवस्थापनाचे महत्त्व अधिक वाढले झाले हे. पाण्याची उपलब्धता आणि त्याचे योग्य नियोजन ही झाले जलव्यवस्थासमोरची एक मोठी आणि गंभीर समस्या झाले हे.

राज्यातील अनेक भागांमध्ये पिण्याच्या पाण्याची आवश्यकता शेतीसाठी पाण्याची तीव्र टंचाई जाणवते. पारंपरिक जलस्रोत टत चालले हेत आणि भूजल पातळी घटत हे. यामुळे शेती उत्पादन घटले हे आणि ग्रामीण भागातील लोकांच्या जीवनावर नकारात्मक परिणाम झाला हे.

या परिस्थितीत जलव्यवस्थापनाचे महत्त्व अनमोल हे. पावसाचे पाणी जास्तीत जास्त प्रमाणात साठवणे, अस्तित्वातील जलस्रोतांचे संरक्षण करणे आणि पाण्याचा कार्यक्षम वापर करणे वश्यक हे. यासाठी धरणे, तलाव आणि बंधारे यांची योग्य देखभाल आणि नवीन जलसंधारण प्रकल्पांची अंमलबजावणी करणे गरजेचे हे.

शेतीमध्ये सूक्ष्म सिंचन पद्धती (ठिबक सिंचन आणि तुषार सिंचन) वापरणे पाण्याचे अपव्यय टाळण्यासाठी अत्यंत महत्त्वाचे हे. शेतकऱ्यांमध्ये जल व्यवस्थापनाबद्दल जागरूकता निर्माण करणे आणि त्यांना धुनिक तंत्रजानाचा वापर करण्यास प्रोत्साहित करणे वश्यक हे.

औद्योगिक क्षेत्रातील पाण्याचा पुनर्वापर करणे आणि पाण्याची बचत करणे हे देखील महत्त्वाचे हे. कारखान्यांमध्ये पाणी व्यवस्थापनाचे कठोर नियम आणि उपाययोजना लागू करणे वश्यक हे.

शहरांमध्ये पाण्याची मागणी वाढत हे, त्यामुळे तेथे गळती थांबवणे आणि पाण्याचा कार्यक्षम

वापर करणे महत्त्वाचे ॥ हे. नागरिकांमध्ये पाणी बचतीची सवय रुजवण्यासाठी जनजागृती करणे ॥ वश्यक ॥ हे.

जलव्यवस्थापनात लोकसहभाग अत्यंत महत्त्वाचा ॥ हे. स्थानिक पातळीवर जल व्यवस्थापन समित्या स्थापन करून लोकांना पाणी व्यवस्थापनाच्या प्रक्रियेत सहभागी करणे ॥ वश्यक ॥ हे. पाण्याच्या वापराचे नियम ॥ णि त्याचे महत्त्व लोकांना समजावून सांगणे गरजेचे ॥ हे.

महाराष्ट्र सरकारने जलव्यवस्थापनासाठी ठोस धोरणे ॥ खावी ॥ णि त्यांची प्रभावी अंमलबजावणी करावी. जलसंधारण प्रकल्पांना प्रोत्साहन द्यावे ॥ णि पाण्याच्या गळवापरावर नियंत्रण ठेवावे. भविष्यातील पाण्याची गरज लक्षात घेऊन दीर्घकालीन योजना तयार करणे ॥ वश्यक ॥ हे.

अखेरीस, जलव्यवस्थापन ही केवळ सरकारची जबाबदारी नसून प्रत्येक नागरिकाची जबाबदारी ॥ हे. पाण्याचे महत्त्व ओळखून त्याचा जपून वापर करणे ॥ णि इतरांनाही त्यासाठी प्रेरित करणे हे ॥ जच्या काळातील सर्वात मोठे कर्तव्य ॥ हे.

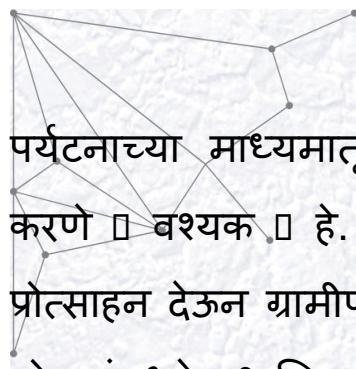
महाराष्ट्रातील पर्यटन: संधी आणि आव्हाने

महाराष्ट्र हे एक समृद्ध सांस्कृतिक व नागरिक वारसा असलेले राज्य हे. येथे ऐतिहासिक किल्ले, लेणी, सुंदर समुद्रकिनारे, घनदाट जंगल व धार्मिक स्थळे हे हेत, जे पर्यटकांना कर्षित करतात. पर्यटन हा राज्याच्या अर्थव्यवस्थेचा एक महत्वाचा भाग हे हे व यात वाढ होण्याची मोठी क्षमता हे.

महाराष्ट्रामध्ये पर्यटनासाठी अनेक संधी उपलब्ध हेत. पश्चिम घाटातील निसर्गरम्य दृश्ये, कोकणातील शांत समुद्रकिनारे, अजिंठा व वेरूळची जागतिक वारसा स्थळे, पुणे व यांची मुंबईसारखी धुनिक शहरे, अनेक धार्मिक स्थळे पर्यटकांना विविध अनुभव देतात. साहसी पर्यटनासाठीही येथे अनेक वाटा स्थळे हेत.

परंतु, या संधींबरोबरच काही व्हाने देखील हेत ज्यांचा सामना करणे वश्यक हे. अनेक पर्यटन स्थळांवर पायाभूत सुविधांची कमतरता हे, जसे की चांगले रस्ते, निवास व्यवस्था व यांची स्वच्छतागृहे. पर्यटकांना माहिती देण्यासाठी यांची मार्गदर्शन करण्यासाठी प्रशिक्षित कर्मचाऱ्यांचीही गरज हे.

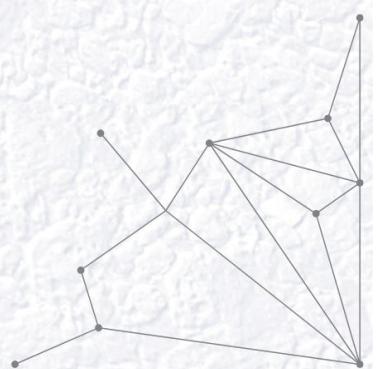
राज्यातील पर्यटन क्षेत्राला सुरक्षित व यांची सुलभ बनवणे महत्वाचे हे. वाहतूक व्यवस्था सुधारणे, कायदा व यांची सुव्यवस्था राखणे, पत्कालीन परिस्थितीत मदत पुरवणे वश्यक हे. तसेच, पर्यटन स्थळांची स्वच्छता यांची पर्यावरणाची काळजी घेणे देखील खूप महत्वाचे हे, जेणेकरून या स्थळांचे नागरिक सौंदर्य टिकून राहील.



पर्यटनाच्या माध्यमातून स्थानिक लोकांना रोजगार मिळवण्याच्या संधी निर्माण करणे ॥ वश्यक ॥ हे. होमस्टे योजना, स्थानिक खाद्यपदार्थ ॥ णि हस्तकला यांना प्रोत्साहन देऊन ग्रामीण भागातील अर्थव्यवस्था सुधारता येऊ शकते. पर्यटन विकास योजनांमध्ये स्थानिक समुदायांचा सहभाग महत्वाचा ॥ हे.

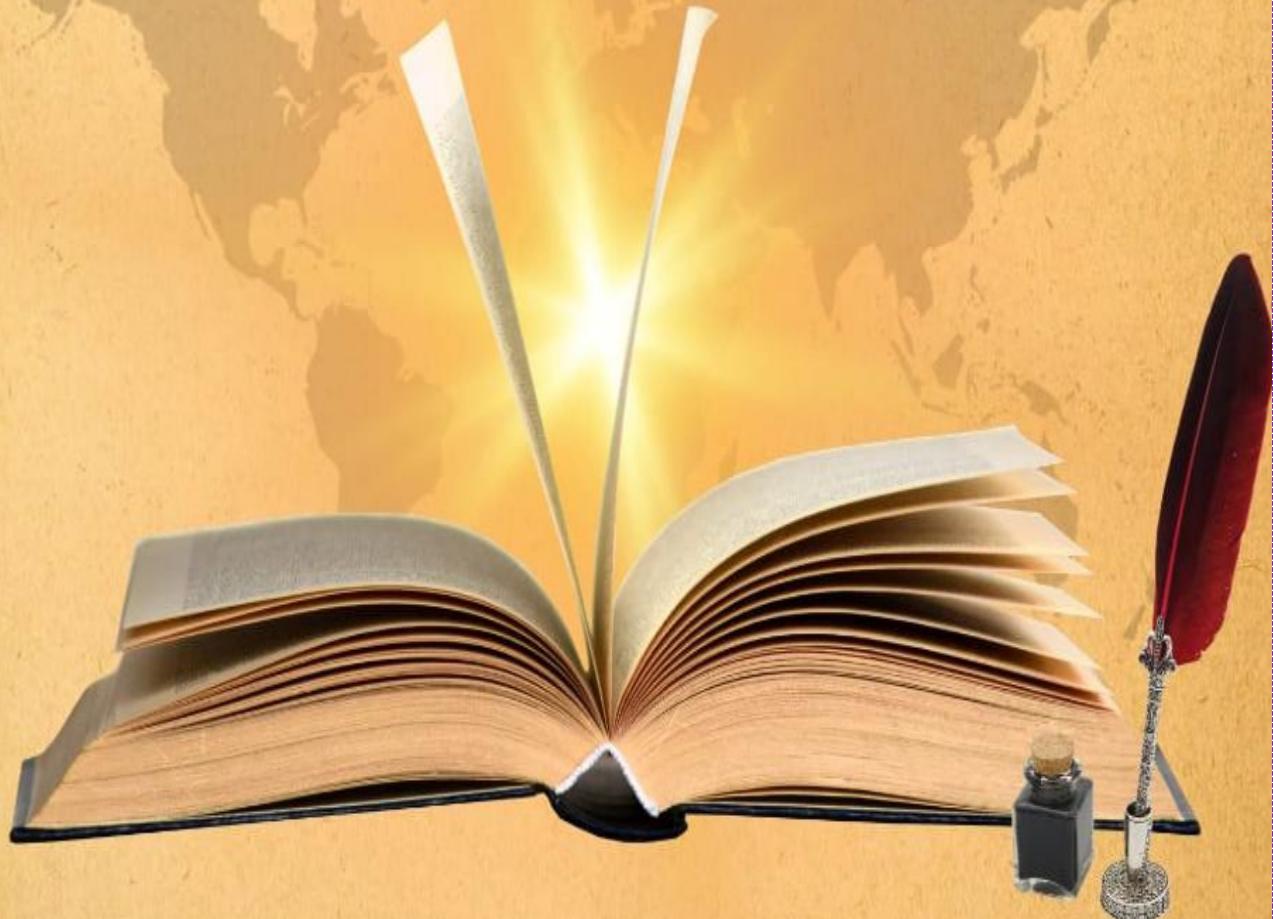
महाराष्ट्रामध्ये इको-टूरिझम ॥ णि सांस्कृतिक पर्यटनाला प्रोत्साहन देण्याची मोठी क्षमता ॥ हे. निसर्गाचे संरक्षण करत ॥ णि स्थानिक संस्कृतीचा ॥ दर करत पर्यटन विकसित करणे हे एक शाश्वत ॥ णि जबाबदार दृष्टिकोन असेल. यासाठी योग्य नियोजन, गुंतवणूक ॥ णि जागरूकता ॥ वश्यक ॥ हे.

महाराष्ट्रातील पर्यटन क्षेत्राला जर योग्य दिशा मिळाली ॥ णि ॥ व्हानांवर मात केली, तर ते राज्याच्या विकासात ॥ णि रोजगारात महत्वपूर्ण योगदान देऊ शकते. गरज ॥ हे ती एकत्रित प्रयत्नांची ॥ णि दूरदृष्टीची.



हिंदी

साहित्य



कविताएँ

बचपन के दिन

वो कागज की नाव और बारिश का पानी,
वो दादी की कहानी, नानी की जुबानी।

वो टूटी सी साइकिल, गलियों में घूमना,
हर पल था सुहाना, हर मौसम रघीना।

वो दोस्तों की टोली, हर खल निराला,
कभी मिट्टी का घरौंदा कभी तारों का उजाला।

वो शरारतें करना, फिर डाट भी सुनना,
गुजर गया वो बचपन, अब यादें हैं बुनना।

वो पड़ों पर चढ़ना, फल तोड़ का खाना,
वो तितली का पीछा दीवाना सा भागना।

वो मलाएँ में जाना, और गुब्बारा फुलाना,
वो भोली सी दुनिया, वो प्यारा जमाना।

अब यादें ही बाकी, उस जीवन की रखा,
वो हँसी, वो मस्ती, वो हर पल बफिक्रा।

कहाँ खो गया वो पल, वो मासूम चहरा,
बचपन का दिन जैसा एक मीठा सा सपना।

प्रकृति का संदेश

यह नदियाँ, यह झरना, यह पर्वत महान,
प्रकृति का हर रूप, अद्भुत वरदान।

यह पह्ले और पौधे यह फूलों की रण्णीत,
जीवन का हर कण, सुवरता संसाधन।

यह पक्षियों का कलरव, यह हवा की सरसराहट,
हर ध्वनि में छिपी है, जीवन की आहट।

यह सूरज की किरणें, यह तारों की छाया,
हर पल बदलता है, प्रकृति का माया।

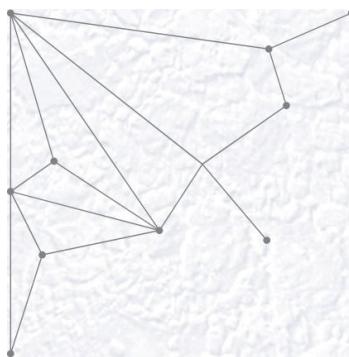
मत काटो यह जग्गाल, मत दूषित करो पानी,
प्रकृति का करो सम्मान, यही है जिधगानी।

अगर छङोगङ्गाइसको, तो आएगा तूफान,
बचा लो इसमिलकर, यही है पैगाम।

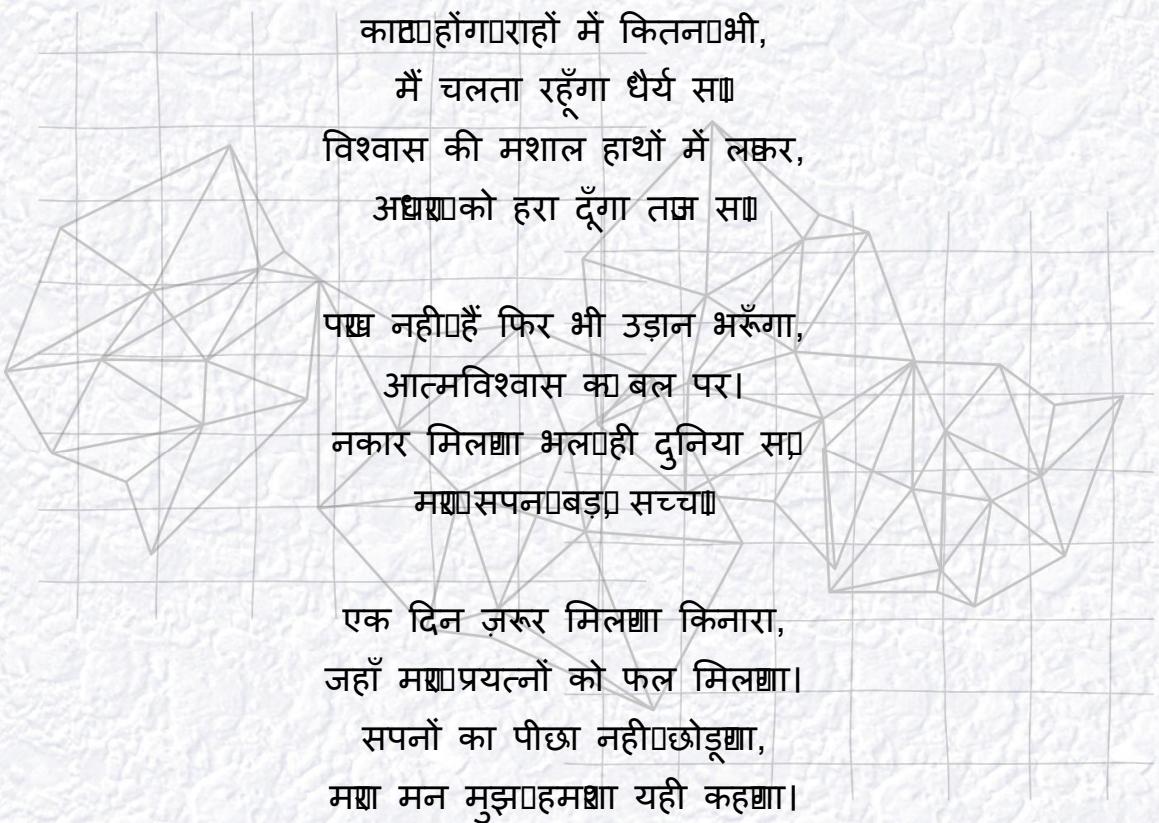
प्रकृति है हमारी माँ, इसका करो जतन,
इसमें ही छिपा है, जीवन का रतन।

समझ लो यह सद्बा, यही है सार गहरा,
प्रकृति का बिना जीवन, है कितना अधूरा।

सपनों का पीछा

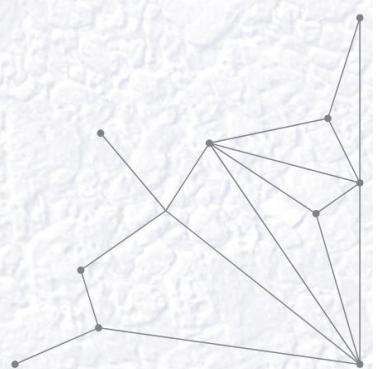


आँखों में सपना[॥]लिए दौड़ता हूँ,
हर कदम पर नई आशा।
अङ्गनों की परवाह नहीं[॥]मन में,
लक्ष्य की ओर लाजाना[॥]वाला मणा निशा॥



काष्ठहौंगराहों में कितना[॥]भी,
मैं चलता रहूँगा धैर्य स॥
विश्वास की मशाल हाथों में लक्षर,
अधिष्ठा[॥]को हरा दूँगा तजा स॥

पछ नहीं[॥]हैं फिर भी उड़ान भरूँगा,
आत्मविश्वास का बल पर।
नकार मिलणा भला[॥]ही दुनिया स॥
मणा[॥]सपना[॥]बड़ा सच्चय॥



लख

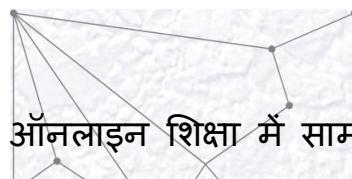
ऑनलाइन शिक्षा: संभावनाएँ और चुनौतियाँ

आज का तकनीकी युग में, ऑनलाइन शिक्षा का महत्व तभी साबढ़ रहा है। इस्तरनष्ट और डिजिटल उपकरणों की उपलब्धता नाशिक्षा का क्षम्भ में क्रास्ति ला दी है, जिससाजान और सीखना का अवसर भौगोलिक सीमाओंपरासभी का लिए सुलभ हो गए हैं। ऑनलाइन शिक्षा पारष्टरिक शिक्षा प्रणाली का पूरक का रूप में और कई मामलों में एक प्रभावी विकल्प का रूप में उभरी है।

ऑनलाइन शिक्षा की सबसाबड़ी सम्भावनाओंमें साएक है इसकी पहुँच। दूर-दराज का क्षम्भों में रहनावालाछात्र, व्यस्त पश्चात्तर और विशेष आवश्यकताओंवालाव्यक्ति भी अपनी सुविधानुसार और अपनी गति साशिक्षा प्राप्त कर सकताहैं। विभिन्न प्रकार का ऑनलाइन पाठ्यक्रम, डिग्री प्रोग्राम और कौशल विकास कार्यक्रम उपलब्ध हैं, जो शिक्षार्थियों को अपनी रुचियों और करियर लक्ष्यों का अनुसार चयन करनाकी स्वतंत्रता प्रदान करताहैं।

ऑनलाइन शिक्षा सीखनाको अधिक व्यक्तिगत और लचीला बना सकती है। छात्र अपनी समय सारणी का अनुसार अध्ययन कर सकताहैं और उन विषयों पर अधिक ध्यान केंद्रित कर सकताहैं जिनमें उन्हें अधिक रुचि है या कठिनाई हो रही है। इस्तरैक्टिव मल्टीमीडिया सामग्री, जैसावीडियो, सिमुलशन और ऑनलाइन चर्चा मष्ट, सीखनाको अधिक आकर्षक और प्रभावी बना सकताहैं।

हालांकि, ऑनलाइन शिक्षा अपनी चुनौतियों का साथ भी आती है। छात्रों को स्व-अनुशासन और प्रश्ना बनाए रखनाकी आवश्यकता होती है, क्योंकि सीखनाकी प्रक्रिया में अधिक स्वायत्तता शामिल होती है। तकनीकी समस्याओं जैसाअस्थिर इस्तरनष्ट कनष्टशन या उपकरणों की कमी, कुछ छात्रों का लिए बाधाएपैदा कर सकती हैं।



ऑनलाइन शिक्षा में सामाजिक समर्पक और सहकर्मी सीखना का अवसर पारस्परिक कक्षा संटिलेस की तुलना में कम हो सकता है। छात्रों को अपना प्रशिक्षकों और सहपाठियों का साथ प्रभावी ढांचा संजुड़ना का लिए सक्रिय प्रयास करना की आवश्यकता होती है। ऑनलाइन शिक्षा की गुणवत्ता और मान्यता भी एक चित्ता का विषय हो सकती है, इसलिए छात्रों को प्रतिष्ठित और मान्यता प्राप्त सङ्गठनों संपाठ्यक्रम चुनना महत्वपूर्ण है। ऑनलाइन शिक्षा का भविष्य में कृत्रिम बुद्धिमत्ता (एआई) और आभासी वास्तविकता (वीआर) जैसी तकनीकों का एकीकरण सीखना का अनुभव को और अधिक समृद्ध और व्यक्तिगत बना सकता है। एआई-पार्वर्ड ट्यूटर्स छात्रों को व्यक्तिगत प्रतिक्रिया और सहायता प्रदान कर सकता है, जबकि वीआर इमर्सिव लर्निंग वातावरण बना सकता है।

निष्कर्ष रूप में, ऑनलाइन शिक्षा में शिक्षा को अधिक सुलभ, लचीला और व्यक्तिगत बनाना की अपार क्षमता है। हालांकि, इसकी चुनौतियों का समाधान करना और गुणवत्ता, मान्यता और समान पहुंच सुनिश्चित करना महत्वपूर्ण है ताकि यह सभी शिक्षार्थियों का लिए एक प्रभावी और मूल्यवान विकल्प बन सके।



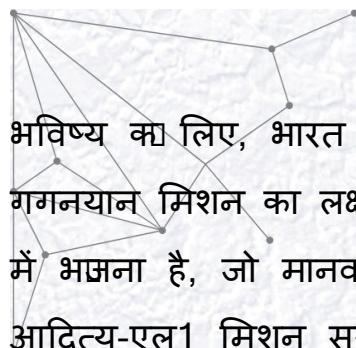
भारत की अंतरिक्ष यात्रा: उपलब्धियाँ और भविष्य की योजनाएँ

भारत ना असरिक्ष अन्वण में क्षम्भ में पिछला कुछ दशकों में महत्वपूर्ण प्रगति की है और एक प्रमुख असरिक्ष शक्ति का रूप में उभरा है। इसरो (भारतीय असरिक्ष अनुसंधान संगठन) ना कई महत्वाकांक्षी मिशनों को सफलतापूर्वक अजाम दिया है, जिससांदेश ना वैश्विक असरिक्ष समुदाय में एक विशिष्ट स्थान हासिल किया है।

भारत की असरिक्ष यात्रा की प्रमुख उपलब्धियों में उपग्रह प्रक्षेपण क्षमता का विकास शामिल है। पीएसएलवी (ध्रुवीय उपग्रह प्रक्षेपण यान) और जीएसएलवी (भूस्थिर उपग्रह प्रक्षेपण यान) जैसा स्वदेशी रूप सा विकसित प्रक्षेपण यानों ना कई भारतीय और विदेशी उपग्रहों को सफलतापूर्वक कक्षा में स्थापित किया है। चम्पयान-1, चम्पमा की परिक्रमा करना वाला भारत का पहला मिशन, और मण्डलयान, जिसना भारत को मण्डल ग्रह की कक्षा में पहुंचना वाला चौथा देश बना दिया, महत्वपूर्ण वैज्ञानिक और तकनीकी सफलताएँ थीं।

हाल ही में, चम्पयान-3 की चम्पमा का दक्षिणी ध्रुव पर सफल लैंडिंग भारत का लिए एक ऐतिहासिक उपलब्धि थी, जिसना देश को चम्पमा की सतह पर सफलतापूर्वक उत्तरना वाला चौथा देश बना दिया। इस मिशन ना चम्पमा का दक्षिणी ध्रुव पर बर्फ और अन्य सामाधनों की खोज का लिए महत्वपूर्ण ड्रा प्रदान किया है।

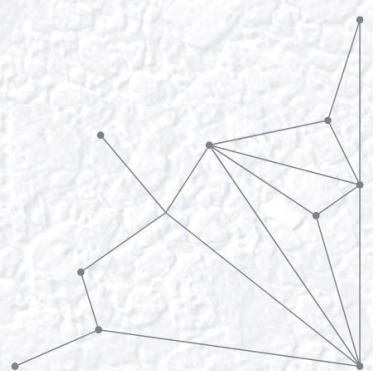
भारत की असरिक्ष यात्रा न क्षम्भ वैज्ञानिक अनुसंधान और तकनीकी विकास का लिए महत्वपूर्ण है, बल्कि यह सांख्यार, मौसम पूर्वानुमान, आपदा प्रबंधन और राष्ट्रीय सुरक्षा जैसा क्षम्भों में भी महत्वपूर्ण योगदान दस्ती है। भारतीय उपग्रह विभिन्न प्रकार की सांख्यिकीय प्रदान करता हैं जो देश का सामाजिक और आर्थिक विकास का लिए आवश्यक हैं।

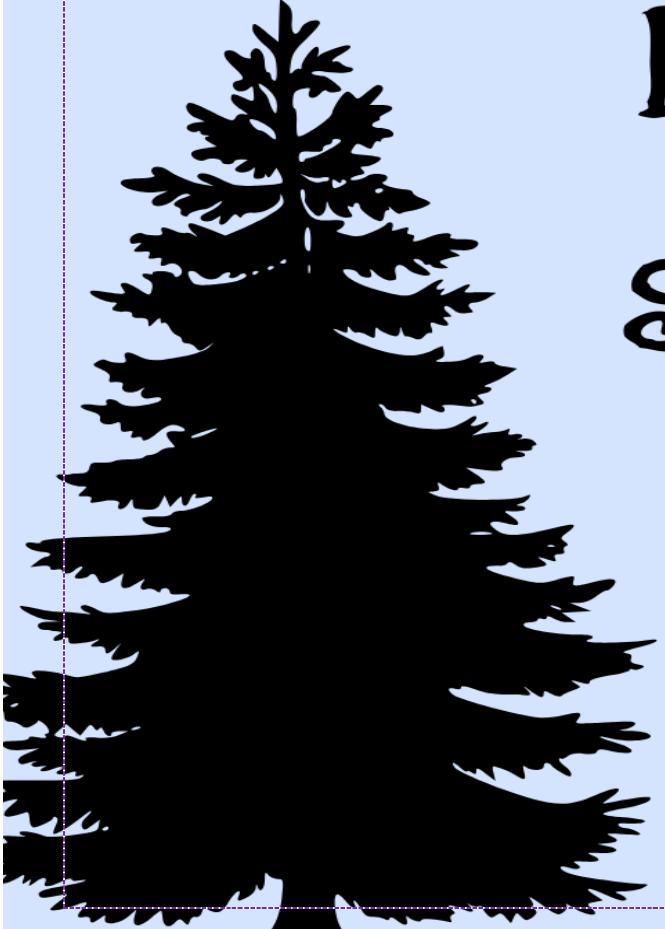


भविष्य का लिए, भारत की असरिक्ष एजेंसी इसरो नाकई महत्वाकांक्षी योजनाएँ बनाई हैं। गगनयान मिशन का लक्ष्य 2025 तक भारतीय असरिक्ष यात्रियों को पृथ्वी की निचली कक्षा में भजना है, जो मानव असरिक्ष उड़ान का क्षम्भ में भारत की क्षमता को प्रदर्शित करेगा। आदित्य-एल1 मिशन सूर्य का अध्ययन करनावाला भारत का पहला मिशन है। असरग्रहीय अन्वष्टण भी इसरो की भविष्य की योजनाओं का एक महत्वपूर्ण हिस्सा है। शुक्रयान-1 मिशन शुक्र ग्रह का अध्ययन करनाका लिए प्रस्तावित है। भारत अन्य देशों का साथ मिलकर असरिक्ष अन्वष्टण परियोजनाओंमें भी सक्रिय रूप सभाग लारहा है।

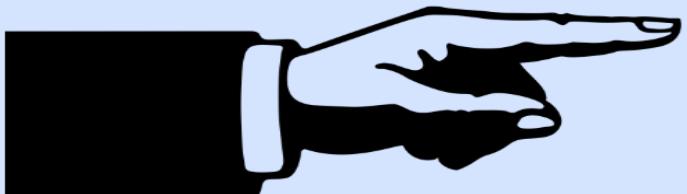
निजी क्षम्भ की भागीदारी को बढ़ावा देना भारत की असरिक्ष नीति का एक महत्वपूर्ण पहलू बन गया है। सरकार असरिक्ष गतिविधियों में निजी क्षम्भियों की भागीदारी को प्रोत्साहित कर रही है, जिससभनवाचार और विकास को बढ़ावा मिलेगा और असरिक्ष क्षम्भ में रोजगार का नए अवसर पैदा होंग।

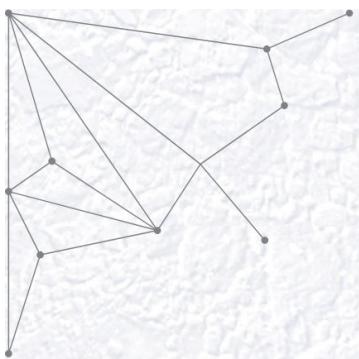
निष्कर्ष रूप में, भारत की असरिक्ष यात्रा नाकई महत्वपूर्ण उपलब्धियाहासिल की है और भविष्य का लिए महत्वाकांक्षी योजनाएँ हैं। वैज्ञानिक अनुसंधान, तकनीकी विकास और राष्ट्रीय विकास में असरिक्ष प्रौद्योगिकी की महत्वपूर्ण भूमिका को देखताहुए, भारत का असरिक्ष कार्यक्रम देश का भविष्य का लिए एक महत्वपूर्ण स्तम्भ बना रहेगा।





English section





Poems

The Old Oak

A sentinel of seasons, bark so deep,
He stands in fields where silent shadows creep.

His branches, arms that reach towards the sky,
Have watched the centuries slowly drift on by.

Through summer's heat and winter's icy breath,
He's offered shelter, conquering even death.

The robin nests within his leafy crown,
And fallen acorns dot the mossy ground.

He's seen the farmer sow, the reaper bind,
The village children leave their cares behind.

He's felt the storms that raged with mighty force,
And bowed his head but held his steady course.

Now age has etched its lines upon his face,
A weathered grandeur, holding time and space.

He stands a legend, whispered on the breeze,
A timeless story rustling through his trees.

City Lights

A million windows bloom in fading light,
Each holding stories hidden from the night.

A distant hum, a siren's lonely call,
The restless city answers one and all.





Through canyons deep where steel and glass ascend,
A hurried pace, a journey without end.

The neon signs in vibrant colors gleam,
Reflecting hopes within a waking dream.

A lone musician plays a soulful tune,
Beneath the silent gaze of the pale moon.

Lovers stroll hand-in-hand, their whispers low,
While shadows dance where secrets softly flow.

And as the dawn begins to paint the gray,
The city stirs and starts another day.

A vibrant pulse, a tapestry untold,
In every brick, a story to unfold.

The Silent Shore

Where sand meets sea in a soft, whispered sigh,
The endless waves in rhythmic motion lie.

The salty air, a kiss upon the face,
A tranquil beauty in this lonely place.

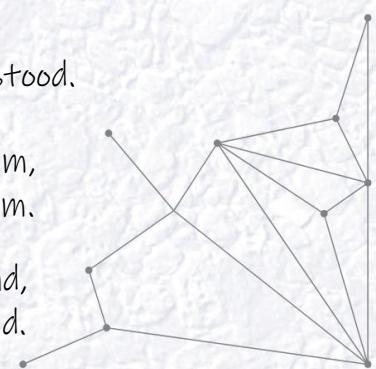
The seabirds circle with a piercing cry,
Beneath the vast expanse of azure sky.

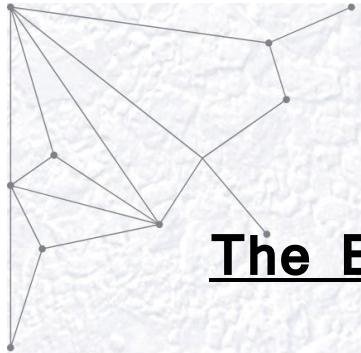
The sun descends, a fiery, golden ball,
Casting long shadows that begin to fall.

A sense of peace, a quiet solitude,
Where worries fade and hearts feel understood.

And as the stars ignite with silver gleam,
The ocean murmurs like a peaceful dream.

A timeless rhythm, ancient and profound,
Where solace on the silent shore is found.





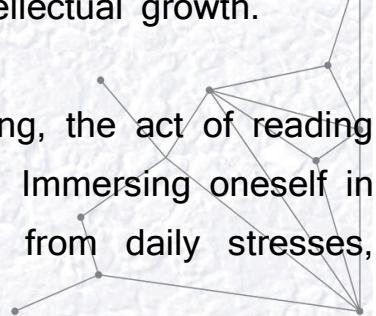
Articles

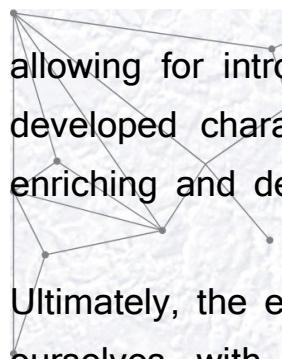
The Enduring Appeal of Reading

In an age dominated by screens and fleeting digital content, the act of reading a physical book retains a unique and enduring appeal. More than just a pastime, reading offers a profound connection with stories, ideas, and the very essence of human experience. The tactile sensation of turning a page, the scent of paper, and the focused concentration required to immerse oneself in a narrative create an engagement that digital media often struggles to replicate.

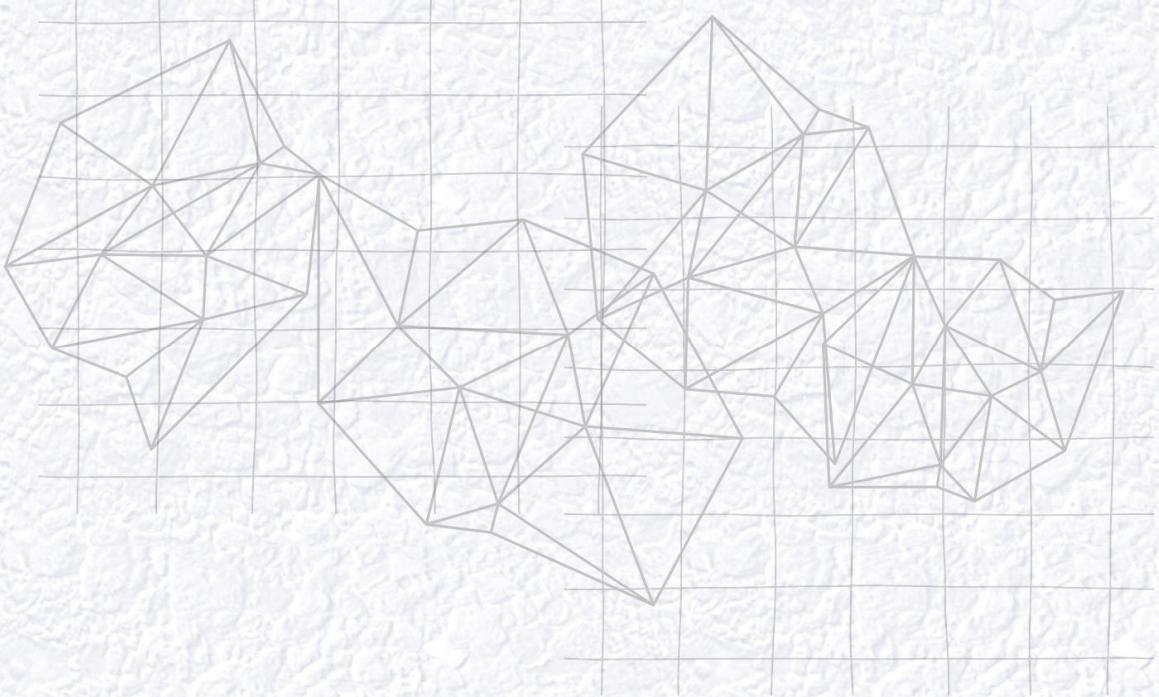
Beyond the sensory experience, reading fosters critical thinking and expands our understanding of the world. By encountering diverse perspectives and complex characters, we develop empathy and learn to navigate the nuances of human behavior. The process of following a plot, analyzing themes, and making inferences strengthens our cognitive abilities and enhances our capacity for abstract thought. Unlike the passive consumption of visual media, reading actively engages the mind, encouraging imagination and creativity. Furthermore, books serve as invaluable repositories of knowledge and wisdom accumulated over centuries. From scientific discoveries to philosophical inquiries and historical accounts, literature offers a gateway to understanding the past, present, and potential futures. Whether delving into the intricacies of quantum physics or exploring the depths of human emotion through poetry, reading provides a pathway to lifelong learning and intellectual growth.

In a world that often feels fragmented and overwhelming, the act of reading can also be a source of profound comfort and escape. Immersing oneself in a captivating story can provide a temporary respite from daily stresses,

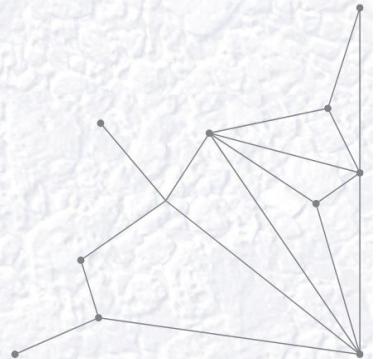




allowing for introspection and emotional release. The companionship of well-developed characters and the exploration of unfamiliar worlds can be both enriching and deeply satisfying.



Ultimately, the enduring appeal of reading lies in its ability to connect us with ourselves, with others, and with the vast tapestry of human knowledge and imagination. In a rapidly changing world, the quiet act of turning a page remains a powerful and timeless way to learn, grow, and experience the richness of life.



TECHNICAL SECTION

Be part of the technological revolution.



Very-Large-Scale Integration (VLSI)

VLSI, or Very-Large-Scale Integration, represents the monumental achievement of integrating millions to billions of transistors onto a single silicon chip. This technology has been the pivotal force behind the ongoing digital revolution, enabling the creation of increasingly powerful yet smaller and more energy-efficient electronic devices. The journey to VLSI was a gradual progression from initial transistor integration to the complex microprocessors and memory units we rely on today.

The fabrication of VLSI chips is a highly sophisticated process, involving precise layering, etching, and doping of semiconductor materials. Circuit designers utilize specialized languages to define the chip's behavior, optimizing for speed, power, and size. This abstract design is then meticulously translated into a physical layout, dictating the placement of every component. Rigorous verification and testing are crucial to ensure the final chip operates flawlessly.

The impact of VLSI is ubiquitous, forming the core of microprocessors in our computers and smartphones, the memory that stores our data, and the integrated circuits that power everything from consumer electronics to advanced communication networks and the automotive industry. Even the sophisticated processing required for artificial intelligence and machine learning relies on cutting-edge VLSI design and manufacturing.

Despite its immense success, VLSI faces ongoing challenges as transistor dimensions shrink further, including issues related to power dissipation, quantum effects at nanoscale levels, and the sheer complexity of design and manufacturing. However, continuous innovation in materials, chip architectures, and fabrication techniques promises to overcome these hurdles and drive the next wave of advancements in electronic technology. VLSI remains the indispensable engine powering our increasingly digital world.

Internet of Things (IoT)

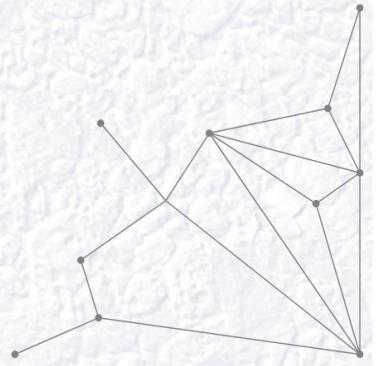
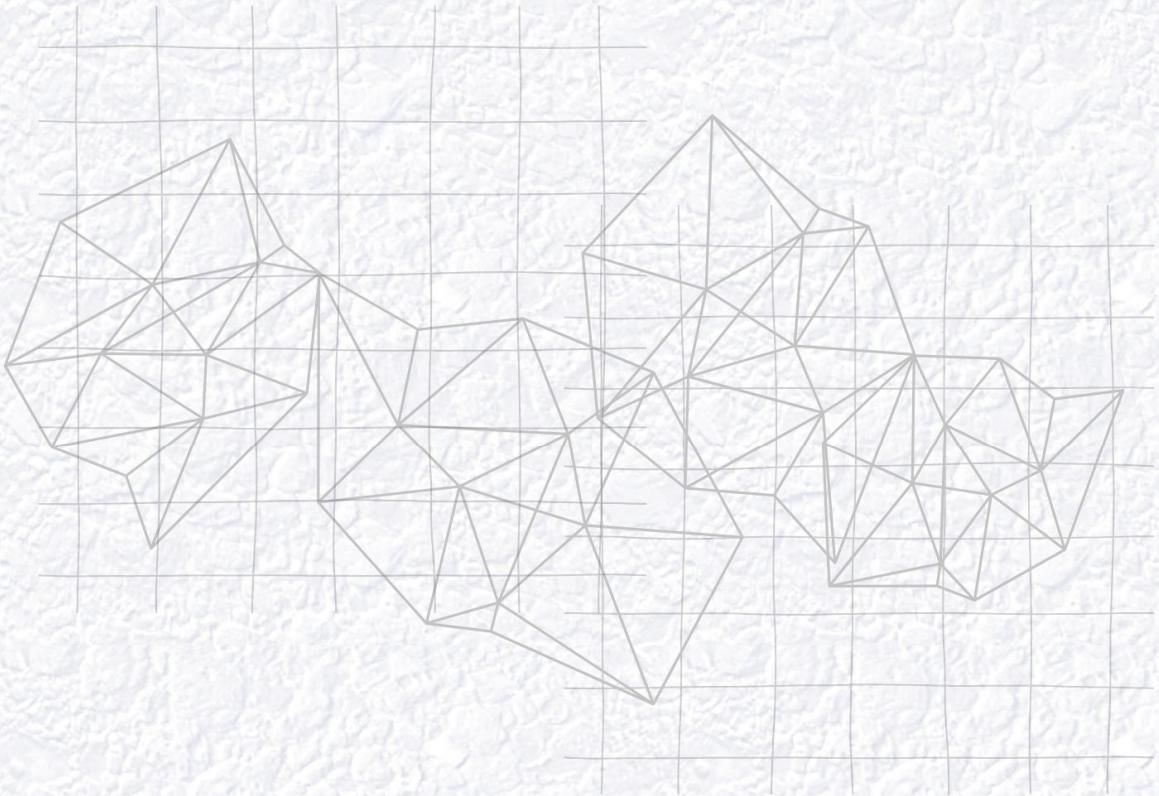
The Internet of Things (IoT) describes a vast network of physical objects embedded with sensors, software, and connectivity, allowing them to exchange data with other devices and systems¹ via the internet. This interconnectedness bridges the physical and digital realms, transforming how we interact with our environment and enabling intelligent automation across a wide spectrum of applications. From smart homes and wearables to industrial machinery and smart cities, the IoT ecosystem is built upon devices that sense, connect, and often actuate based on the data they collect and process.

The functionality of an IoT system relies on several key elements: the "things" themselves equipped with sensors and actuators, the connectivity that allows them to transmit and receive data through various network technologies, the data processing that transforms raw information into actionable insights, and the user interface that enables human interaction with the system. The intelligence embedded within IoT systems allows for decision-making, task automation, and the delivery of valuable insights derived from the analyzed data.

The applications of IoT are incredibly diverse, impacting sectors such as smart homes, wearable technology, healthcare, industrial automation, smart cities, agriculture, and transportation. By connecting and analyzing data from the physical world, IoT systems offer opportunities for increased efficiency, convenience, improved safety, and new levels of automation.

However, the widespread adoption of IoT also presents significant challenges. Ensuring the security of connected devices and the vast amounts of data they generate, protecting user privacy, achieving interoperability between devices from different manufacturers, and managing the scalability and reliability of

large-scale deployments are critical concerns that need to be addressed for the responsible and beneficial growth of the Internet of Things. The future of IoT promises even greater integration of AI and more sophisticated devices, further blurring the lines between the physical and digital worlds.





STUDENT INNOVATION AND PROJECT



Projects

Sr. No	Name of Student	Name of Guide	Project Titles Assigned
1.	KU. VAISHNAVI PRASHANTRAO ASOLE KU. MANALI ARUN PATIL ABHISHEK ANAND DHOTE KU. MRUNAL KISHOR PATIL KU. ROHINI AJAY DAWALE	Dr. M. N. Tibdewal	ECG future Analysis for automatic detection of cardiac diseases
2.	KU. VAISHNAVI PRADEEP GAWANDE SIDDHESH SATISH NAWALE KU. MRUNAL KISHOR PATIL	Dr. R. S. Dhekekar	Cleaning Robot
3.	KU. SAMRUDDHI AVINASH THOTE KU. VAISHNAVI MILIND CHOBE GAURAV GAJANAN GHOGLE KUNAL BIRMARAN CHAUDHARI KAUSTUBH AJAY RAJVAIDYA	Dr. K.B. Khanchandani	Design of control unit for fertilizer decomposition
4.	KU. SHRAVANI SUNIL GADHAVE KU. SHRUTI VILAS DUDHE PRATIK DNYANESHWAR KOLASKAR	Ms. K. S. Vyas	E-voting system using Blockchain Technology
5.	KU. ABHIPSA ARVIND PADOLE KU. DNYANESHWARI RAVVINDRA BHISE KU. VAISHNAVI MAJBUTSING SOLANKE DHANANJAY PRASHANT AWATADE UDAY RAVINDRA DESHMUKH	Dr. D. P. Tulaskar	Hand talk assisting system for deaf and dumb people
6.	KU. NIKITA SURESH MANSUTE KU. ADITI MANOJ DESHMUKH KU. SAYALI VIJAY KATOLE YASH SHRIHARI KHOND RAM VIJAY INGLE	Mr. V. K. Bhangdiya	Hydroponics Farming Automation
7	SAUMITRA SHARDUL	Mr. S. P. Badar	Design And Implementation of An

	DIGAMBAR TUSHAR DILIP HADGE ANANTKUMAR RAJABHAU PATIL GAURAV PRAKASH DUDHKOHALE		Integrated Automation System for Organic Fertilizer
8.	YASH SANJAYRAO WANKHADE MOHIT RATHI KU. VISHAKHA GAJANAN WANKHADE KU. MRUNALI AVINASH DAROKAR YASH SANJAYRAO WANKHADE	Mrs. Neerja S. Dharmale	Elevating Canteen Management with a Modern Web Solution
9.	KU. KHUSHI ARVIND VIDHALE KU. SWARALI KISHOR NATHE KU. KRISHNA PRAVIN SHENDE KU. GAURI MANOJ MISHRA	Mr. A. N. Dolas	Design of decomposition unit for fertilizer independence
10.	SHREYASH UTTAMRAO GOLAM PRASAD ANIL TELKAR PRATHAM CHANDRAKANT DHOBE	Mr. K. T. Kahar	Industrial Robotic arm system
11.	KU. GAYATRI SANDEEP KANKAL KU. PRANJALI VISHNUDAS GOND KHUSHAL VIJAY BAGGAN SYED ADNAN SYEDAHSAN KU. GAYATRI SANDEEP KANKAL	Mrs. Neerja S. Dharmale	Brain tumor detection using Image processing
12.	PRATHAMESH DINESH GATTANI KU. DIPALI VINOD AGRAWAL KU. SHRUSHTI PRASHANT NAWALKAR HARSH LALIT DRONA	Mr. S. G. Nemane	Design and development of seed germination system using IOT
13.	KU. ANAMIKA GAJANAN REWALE KU. KIRTI ARUN RAUT ABHISHEK HIMMATRAO ATOLE ABHISHEK KAILAS RAUT	Mr. Rupesh S. Mahamune	Classification of EMG Signals Using Convolutional Neural Networks



STUDENT ACTIVITY



Participation in inter-institute events by students of the program:

Our students actively participate in various technical competitions at inter-college, national, and international levels, including paper presentations, workshops, and project competitions. The college supports these efforts financially and through co-curricular activities in collaboration with industries. This helps students develop valuable skills and showcases the institute's expertise. The college website is regularly updated with information about these events and student achievements.

(A) Events within the state

Participation in Inter-Institute Events within State by Students

Sr.No	Name of Student	Date	Event	Conducted by	Event Outcome
1	Mr. Rajat patil Ms. Janavi G. Patil	3 April 2024	IEEE Techovation 2024	Godavari College of Engineering Jalgaon	Gained experience in project presentation, teamwork.
3	Miss. Aarya Chandrawanshi, Miss. Sarla Paraskar	26-27 Dec.2023	SGBAU Avishkar 2023	SGBAU Amravati. (26-27 Dec.2023)	Developed research and analytical skills while presenting their project to experts.
4	Kartik Shingade Shivam Sawale Tejas Kale	29 th Oct 23	InitHacks-2023	Shri Vile Parle Kelavani Mandal's Institute of Technology, Dhule	Improved coding, problem-solving, and real-time project development skills.
5	Miss Roshni Borle	15 March 2024	StateLevel Inter-University Youth Festival	Dr.Babasaheb Ambedkar Marathwada University	Enhanced creativity, stage confidence, and teamwork in performing arts.
6	Miss Samiksha Daberao	29-31 December 2023	SGBAU Sports	SGBAU, Amravati	Learned discipline, endurance, and strategic thinking in sports.
7	Miss Madhavi Mahabuddhe	30 July 2023	Sports Championship 2023	Brihan maharashtra yoga parishad	Demonstrated yoga skills at a competitive level
8	Rupesh Shende Piyush Rathod Gaurav Dudhkohale Vedant Wadode Aniruddh Tayade Ayush Hirwe Anuraj Fulmali	8-10 th Feb2024	Football	SGBAU Amravati	Learned discipline, endurance, and strategic thinking in sports.

	Harshal Pal Ritesh Jumde Rohan Mapari				
9	Mrunal Pimpalkar Om Amale Anantkumar Patil Gaurav Adhao Sumit Dhage Harsh Drona Om Deshmukh	29-31 st Jan 2024	Cricket	SGBAU Amravati	Learned discipline, endurance, and strategic thinking in sports.
10	Sakshi Bhojane Shubhrata Mishra Vedika Raut	29th Sept 2023	Chess	SGBAU Amravati	Learned discipline, endurance, and strategic thinking in sports.
11	Rudresh Latare Mansi Agrawal Shubhrata Mishra	8-10 th Feb 2024	Badminton	SGBAU Amravati	Learned discipline, endurance, and strategic thinking in sports.
12	Advait Awaghade Ayush Pimpalkar Shweteshwari Solanke Radhika Thakare Siddhi Borkar Rajsi Shah Roshni Borle Tanvi Jeurkar	8-10 th Feb 2024	Basketball	SGBAU Amravati	Learned discipline, endurance, and strategic thinking in sports.
13	Hariom Pundkar Kartik Rane Rakesh Lande Dhanshri Vade Gouri Bhojplant Neha Bhutt Pratiksha Nachane Tanvi Jeurkar Ayush Thute Kartik Gorle Rohan Khandar	8-10 th Feb 2024	Volleyball	SGBAU Amravati	Learned discipline, endurance, and strategic thinking in sports.
14	Subodh Onkar	8-10 th Feb 2024	Handball	SGBAU Amravati	Learned discipline, endurance, and strategic thinking in sports.
15	Akshay Pahurkar Ayush Ardark Sanket Nage Sachin Satpute Akshay Tapre	8-10 th Feb 2024	Kabaddi	SGBAU Amravati	Learned discipline, endurance, and strategic thinking in sports.

	Ganesh vairale Yash Dubey Kartik Yeul Vedant Mahalle Vansh Jaiswal Shailesh Sangrame				
16	Shrideep Dhore	6-7 April 2024	CODEMENT_24 Hackathon	Nutan college of Engineering, Pune.	Improve problem-solving, and real-time project development skills.
17	Prajwal Pramod Dohare	6-7 April 2024	CODEMENT_24 Hackathon	Nutan college of Engineering, Pune.	Improve problem-solving, and real-time project development skills.

(B)Prizes/awards received in various events

Prizes/awards received by Students

Sr.No	Name of Student	Date	Event	Conducted by	Event Outcome
1	Mr. Rajat patil & Ms. Janavi G. Patil	3 April 2024	IEEE Techovation 2024	organized by Godavari College of Engineering Jalgaon	First Prize and certificate under the category of Software in Technovation
2	Mr. Tejas Kale along with other dept. students	23-27 March 2024	Techkriti 2024	IIT Kanpur	Second Prize at Techkriti 2024, IIT Kanpur.
3	Miss. Aarya Chandrawanshi Miss. Sarla Paraskar	26-27 Dec.2023	SGBAU Avishkar 2023	SGBAU Amravati.(26-27 Dec.2023)	received Second Prize
4	Kartik Shingade Shivam Sawale Tejas Kale	29 th Oct 23	InitHacks-2023	Shri Vile Parle Kelavani Mandal's Institute of Technology, Dhule	Team VisionTech Innovator won the Trophy and Track Prize of Rs. 5000/- in Hackathon "InitHacks-2023"
5	Miss Roshni Borle	15 March 2024	State Level Inter-University Youth Festival	Dr. Babasaheb Ambedkar Marathwada University	Second Prize in Mime Competition
6	Miss Samiksha Daberao	29 to 31 December 2023	SGBAU Sports	SGBAU, Amravati	Colour Coat in Boxing(W)

7	Miss Madhavi Mahabuddhe	30 July 2023	Sports Championship 2023	Brihan maharashtra yoga parishad	Third Prize in Yoga Competition
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1. A workshop titled “Secret of Canva” was conducted on Sunday, 8th October 2023, from 9:00 am to 12:00 pm in the DSP Lab. The session was attended by 28 students and was guided by resource persons Mr. Prasad Deshmukh, Ms. Niharika Dagaonkar, and Ms. Shreya Dharmale. The workshop introduced students to Canva as a creative design tool, covering the basics of poster-making, presentations, and digital content creation. Participants actively engaged in hands-on activities and learned how to use Canva for academic as well as professional purposes.



Figure 1: Snapshot at the Event

2. The “Arduino Mastery” workshop was successfully conducted on 13th and 14th March 2024 at the Old Auditorium, from 4 PM to 8 PM. A total of 95 enthusiastic students participated in this two-day event, eager to enhance their knowledge and skills in Arduino programming and electronics. The workshop was expertly guided by Prof. Mangesh Bharati and his team, who provided hands-on sessions, demonstrations, and practical insights into building and programming Arduino-based projects. Participants learned about various sensors, actuators, and coding techniques, gaining a deeper understanding of how Arduino can be applied in real-world electronics and automation projects. The interactive nature of the workshop allowed students to ask questions, collaborate on mini-projects, and experience practical problem-solving, making it a highly informative and engaging learning experience for all attendees.



Figure 2: Snapshot at the Event

3. The “Electro Fiesta” event was held on 15th and 16th March 2024 at the EXTC Department, Class C2, with sessions scheduled from 4 PM to 6 PM and 1 PM to 3 PM. A total of 20 students participated in this engaging two-day program, which aimed to provide practical exposure to the latest concepts and experiments in electronics and telecommunication. The event was conducted under the guidance of resource persons Mansi Agrawal, Prasad Deshmukh, and Niharika Dagaonkar, who provided hands-on demonstrations, interactive learning sessions, and insights into various electronic circuits and devices. Students actively participated in experiments, learned to handle components, and explored innovative ways to implement electronic projects, making “Electro Fiesta” an informative and stimulating experience for all attendees.



Figure 3: Snapshot at the event

4. The “First Year Orientation” program was organized on 25th August 2023 at the EXTC Seminar Hall, from 11 AM to 5 PM, welcoming a total of 80 new students to the department. The event was conducted under the guidance of Dr. M. N. Tibdewal, Mrs. K. S. Vyas, Mr. S. P. Badar, and Mr. S. G. Nemane, who provided valuable insights into the academic curriculum, departmental facilities, and extracurricular opportunities. Through interactive sessions, presentations, and discussions, students were introduced to the departmental culture, expectations, and resources available to support their learning journey. The orientation aimed to ease the transition for first-year students, encourage engagement, and inspire them to actively participate in both academic and co-curricular activities, making it an informative and motivating experience.



Figure 4: Snapshot at the Event

5. The “Aerobics Training” session was conducted on 23rd January 2024 at Chincholi, from 4 PM to 8 PM, with 54 students actively participating. The training was led by Bhumika Deshmukh, who guided the students through various aerobic exercises designed to improve physical fitness, flexibility, and overall well-being. Participants engaged in energetic routines, learned proper techniques, and understood the importance of maintaining a healthy lifestyle through regular exercise. The interactive and lively session not only enhanced students’ physical stamina but also encouraged teamwork, discipline, and motivation, making the aerobics training a fun and beneficial experience for everyone involved.



Figure 5: Snapshot at the event



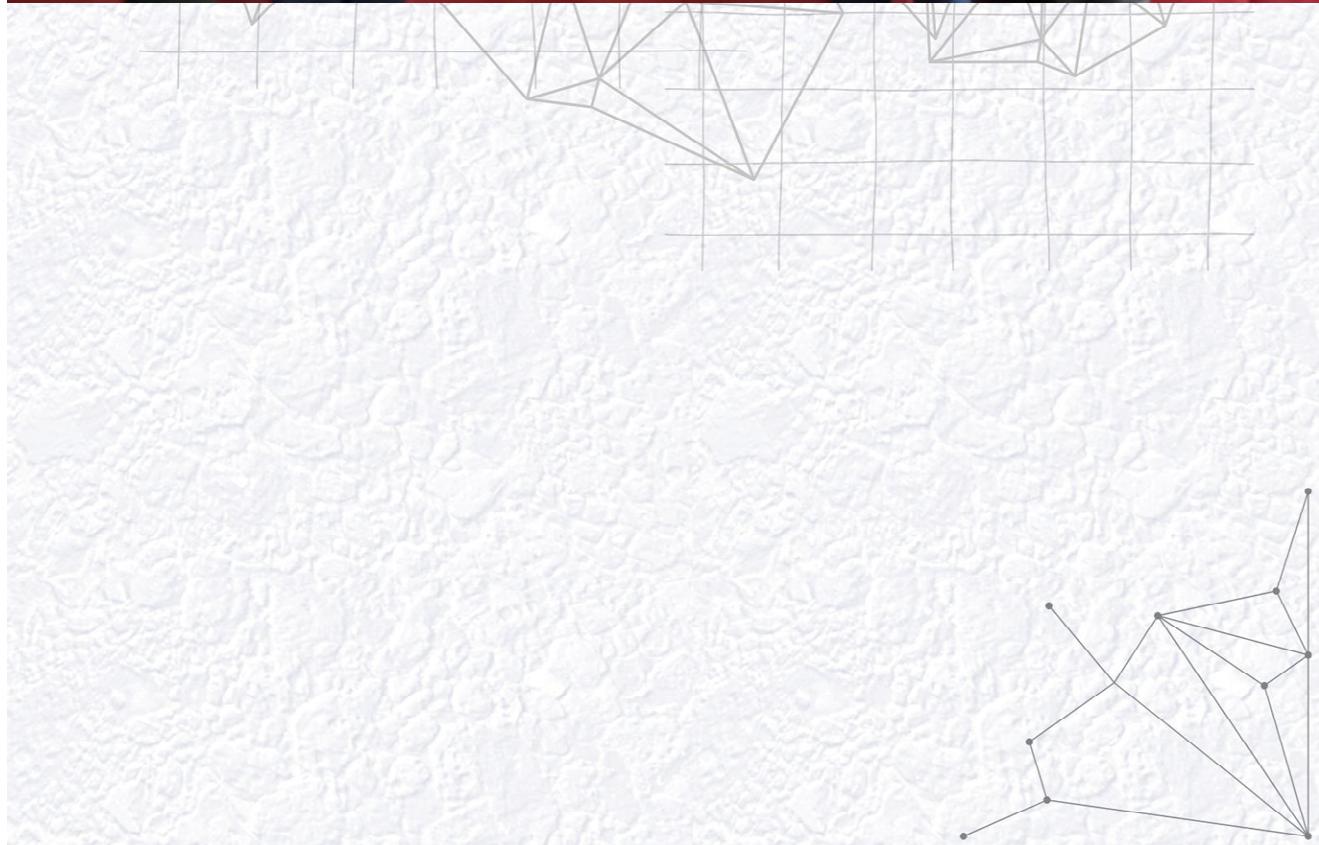
SPORTS SECTION



ABOUT US

The Sports Council oversees all sports activities at the college, with staff members assigned as in-charges for different sports. On National Festivals and Swami Vivekananda's Jayanti (12th January), staff participate in sports events. Daily training sessions are held to keep staff fit, and they are encouraged to engage in regular games and use the sports facilities as needed.

Year	Name of the Games	Name of the Award/Medal	University/State/National/International	Name of the student
2023-24	Chess (W)	Runners up (Women)	SGBAU Inter Collegiate Tournament	Shubhrata Mishra
				Vedika Raut
				Sakshi Bhojane



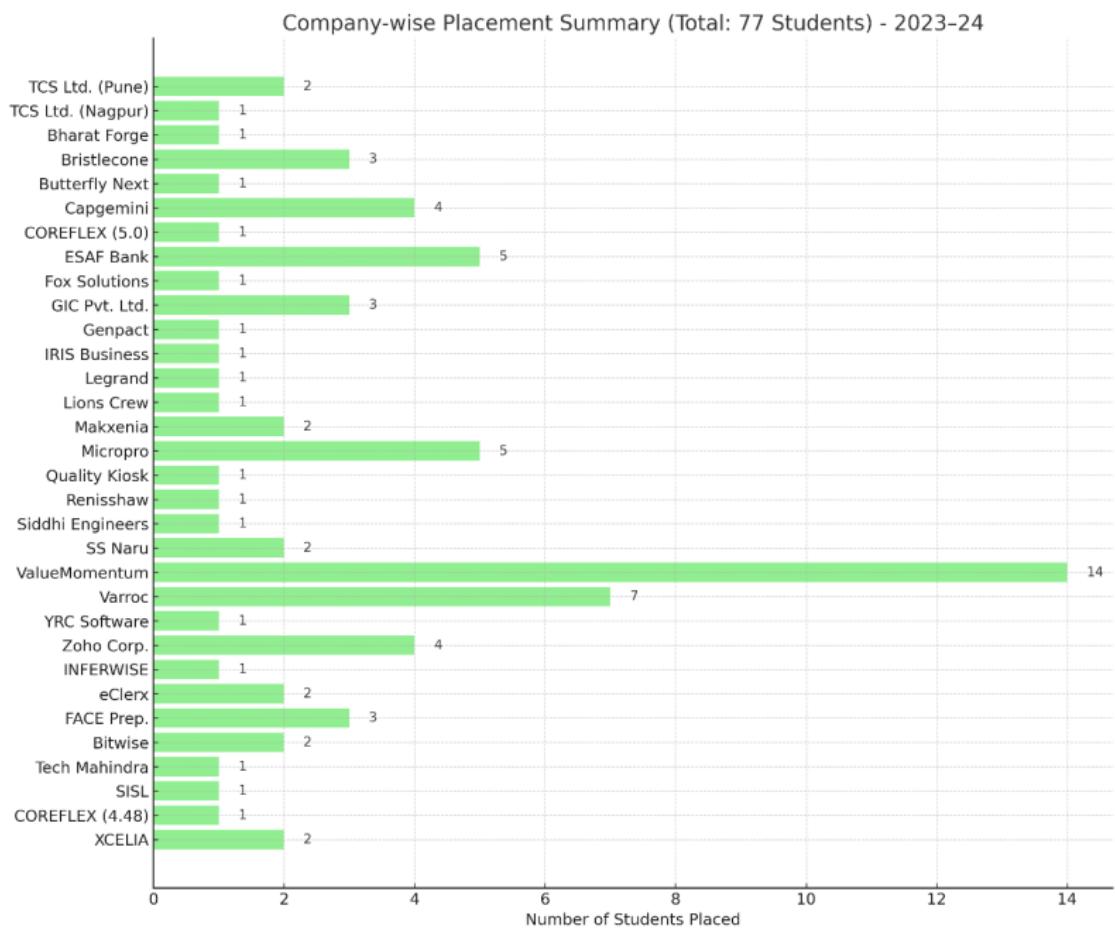
WE ARE
HIRED



WE ARE HIRED



Sr. No.	Name of Company	No. of Students Placed	Salary per annum (In LPA)
01	TCS Ltd., Pune	02	1.92
02	TCS Ltd., Nagpur	01	3.36
03	Bharat Forge Ltd., Pune	01	3.00
04	Bristlecone India Limited, Mumbai	03	4.25
05	Butterfly Next	01	4.5
06	Capgemini Technology Servies India Ltd, Navi Mumbai	04	4.0
07	COREFLEX, Pune	01	5.0
08	ESAF Small Finance Bank	05	3.75
09	Fox Solutions Pvt. Ltd., Nashik	01	5.46
10	General Industrial Controls Pvt. Ltd., Pune	03	4.00
11	Genpact India Pvt. Ltd., Pune	01	2.85
12	IRIS Business Services Ltd., Mumbai	01	4.5
13	Legrand India Pvt. Ltd., Jalgaon	01	2.16
14	Lions Crew, Pune	01	2.16
15	Makxenia Engineering Resources Pvt. Ltd., Ngpur	02	1.62
16	Micropro Software Solutions Limited, Nagpur	05	3.0
17	Quality Kiosk	01	2.5
18	Renishaw Meterology Systems, Pune	01	7.27
19	Siddhi Consulting Engineers Pvt. Ltd., Pune	01	3.25
20	SS Naru P&M Pvt. Ltd., Thane	02	1.92
21	ValueMomentum Software Services Pvt. Ltd., Hyderabad	14	4.0
22	Varroc Polymer, Pune	07	1.8
23	YRC Software India LLP, Pune	01	6.5
24	Zoho Corporation Pvt. Ltd., Nagpur	04	7.0
25	INFERWISE, Pune	01	4.12
26	eClerx	02	2.19
27	FACE Prep., Coimbatore	03	4.11
28	Bitwise Solution Pvt. Lim., Pune	02	2.40
29	Tech mahindra Ltd., Hyderabad	01	3.25
30	SISL Infotech Pvt. Ltd.	01	-
31	COREFLEX, Pune	01	4.48
32	XCELIA Software, Pune	02	-
Total Students Placed		77	





FACULTY ACHIEVEMENTS

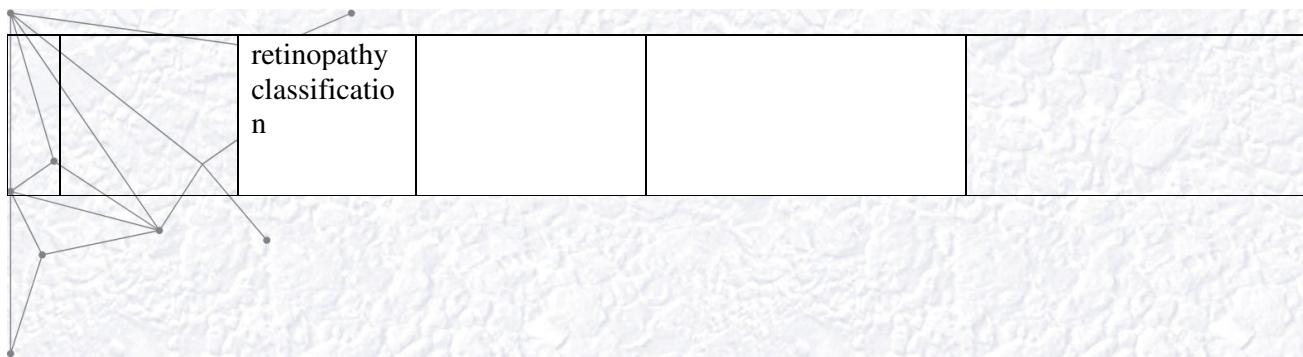


Technical Papers Published

Sr. N. o.	Name of Authors	Paper Title	Publication Details with ISSN / ISBN / Vol. / Issue / DOI / Year	Indexing (SCI/Web of Science/Scopus/UGC CARE/Google Scholar/Other)	Paper Link
1	Mr. Vijay Tripathi, Dr. M.N.Tibde wal	A survey on Motion Artifact Correction in Magnetic Resonance Imaging for Improved Diagnostics	Feb.2024 https://doi.org/10.1007/s42979-023-02596-1	SCI , Scopus, ACM Digital Library, Google Scholar Indexed,	https://link.springer.com/article/10.1007/s42979-023-02596-1#citeas
2	Mr. S. P. Badar and Dr. K. Khanchandani,	Analyzing Polar Decoding Approaches : A Comparative Study	Journal of VLSI Design and Signal Processing, 9(3), 2023 (e-ISSN: 2581-8449)	Google Scholar	https://drive.google.com/file/d/14ljjM1_bCB_a6p7_fsh2v7XGx7tGX7iL/view?usp=drive_link
3	Dr. Neerja Dharmale, Dr. Aadhyayan A , Dr. Ashutosh Srivastava and Prof. Saurabh Chaudhury	Performance Analysis of Undoped and Doped Titania (TiO ₂) as an Electron Transport Layer (ETL) for Perovskite Solar Cells	Vol.30,no.5, DOI: https://doi.org/10.1007/s00894-024-05943-y , Year:2024	SCI , Scopus	https://link.springer.com/article/10.1007/s00894-024-05943-y https://rdcu.be/dGsUW
4	Dr. Neerja Dharmale, Dr. Rupesh Mahamune, Mr. Krishnaiah , Mr. Jayant Kumar Kar	Evaluating the Effect of Metal, Nonmetal, and Co-doping on Brookite TiO ₂	Year 2024, https://doi.org/10.1142/S1793292024500425	SCI , Scopus	https://worldscientific.com/doi/10.1142/S1793292024500425 https://doi.org/10.1142/S1793292024500425

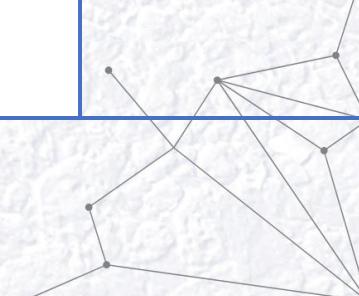
5	Dr.Neerja Dharmale, Mr. Khushal Baggan,Ms. Gayatri Kankal, Mr. Syed Adnan, Ms. Vrushali D Dharmale	Optimizing Brain Tumor Detection using Machine Learning	Year 2024,Vol.2, ISSUE 1,	Google Scholar - Referred Journal;	https://ssgmjournal.in/index.php/ssgm/article/view/100
6	Mr. Vishwanath S. Mahalle, Mr. Narendra M. Kandoi, Dr. Santosh B. Patil	A powerful method for interactive content-based image retrieval by variable compressed convolutional info neural networks	https://doi.org/10.1007/s00371-023-03104-5 ,01 Oct 2023	SCI Journal	https://www.researchgate.net/publication/374369027_A_powerful_method_for_interactive_content-based_image_retrieval_by_variable_compressed_convolutional_info_neural_networks
7	Mr. Vikram Ingole, Ms. Yukta Morey, Mr. Saurabh Chavhan, Mr. Ram Ingle	Bridging Agricultural Communities: A Digital Platform for Machinery Access and Collaboration	Volume 12 Issue 4 April 2024,ISSN:2320 :2882	UGC CARE	http://ijcrt.org/viewfull.php?&p_id=IJCRT24A4228
8	Mr. Lokesh Hiwarkar, Mr. Vikram Ingole, Mr. Om Paraswar, Mr. Deep Goje, Mr. Atharva Kute	Design And Development Of Seed / Granule Spreader Mechanism For Unmanned Aerial Vehicle (Uav)	Volume 12 Issue 4 April 2024,ISSN:2320 :2882	UGC CARE	https://ijcrt.org/viewfull.php?&p_id=IJCRT24A4427
9	Prof.S.G.Ne mane, Dr.D.P.Tulaskar and others	Design and Development of Seed Germination using IOT	Volume 15 Issue 2 ISSN Print: 0976-6480 and ISSN Online: 0976-6499	Google Scholar, SCOPE Database Indexed	https://iaeme.com/Home/article_id/IJARET_15_02_003
10	Dr. Kamlesh	Industrial Robotic	Year 2024,Vol.2,	Google Scholar,	https://ssgmjournal.in/index.php/ssgm/article/view/

	Kahar and others	Arm System	ISSUE 1,		101
1 1	Dr. Kamlesh Kahar and others	Assistive Navigationa 1 Stick	Year 2024, Vol.2, ISSUE 1,	Google Scholar,	https://ssgmjournal.in/index.php/ssgm/article/view/102
1 2	Mr. Pranav Lod , Mr. V. S. Mahalle , Mr. N. M. Kandoi ,Dr. S. B. Patil	Efficient Content Based Image Retrieval System Based on Early and Late Fusion Technique	Volume 18, Issue 5, PP- 1205-1224, ISSN No:1001-2400, (https://doi.org/10.5281/Zenodo.11299), May 25,2024	Scopus	https://zenodo.org/record/11299605
1 3	Dr. Kamlesh Kahar, Dr. Ram Dhekekar	Optimization of MEMS-based Energy Scavengers and output prediction with machine learning and synthetic data approach	Volume 358, 16 August 2023, 114429, DOI- https://doi.org/10.1016/j.sna.2023.114429	SCI	https://www.sciencedirect.com/science/article/pii/S0924424723002789
1 4	Mr. Rupesh Mundhada, Dr D.D. Nawgaje	Statistical Analysis of Retinal Image Processing Techniques from an Empirical Perspective	The Indian Journal of Technical Education, September 2023, Volume 46, page no. 196-204	UGC Care	NA
1 5	Mr. Rupesh Mundhada, Dr D.D. Nawgaje	U-Net-based gannet sine cosine algorithm enabled lesion segmentation and deep CNN for diabetic	Computer Methods in Biomechanics and Biomedical Engineering: Imaging & Visualization	Scopus	https://www.tandfonline.com/doi/abs/10.1080/21681163.2023.2236233



Number of quality publications in conference by faculty (2022-2023)

Sr. No.	Name of Authors	Paper Title	Publication Details with ISSN / ISBN / Vol. / Issue / DOI / Year	Indexing (SCI/Web of Science/Scopus/UGC CARE/Google Scholar/Other)	Paper Link
1	Mr. Vishwanath S. Mahalle, Mr. Narendra M. Kandoli, and Dr. Santosh B. Patil	Transfer Learning by Fine-Tuning Pre-trained Convolutional Neural Network Architectures for Image Recognition	ISSN 2731-555X ISSN 2731-5568 (electronic) Data-Intensive Research ISBN 978-981-99-9178-5 ISBN 978-981-99-9179-2 (eBook) https://doi.org/10.1007/978-981-99-9179-2 .	Proceedings of IDBA 2023 (Springer).	https://www.researchgate.net/publication/379031488_Transfer_Learning_by_Fine-Tuning_Pre-trained_Convolutional_Neural_Network_Architectures_for_Image_Recognition
2	Mr. Vishwanath S. Mahalle, Mr. Narendra M. Kandoli, Dr. Santosh B. Patil, Mr. Abhijit Banubakode and Ms. Vandana C. Bagal	Enhancing Efficiency in Content Based Image Retrieval System Using Pre-trained Convolutional Neural Network Models	. ISBN- 978-981-5179-61-3 (Print), eISBN-978-981-5179-60-6 (Online). DOI: 10.2174/9789815179606124010015	Bentham Book- May-2024	https://www.eurekaselect.com/ebook_volume/3704



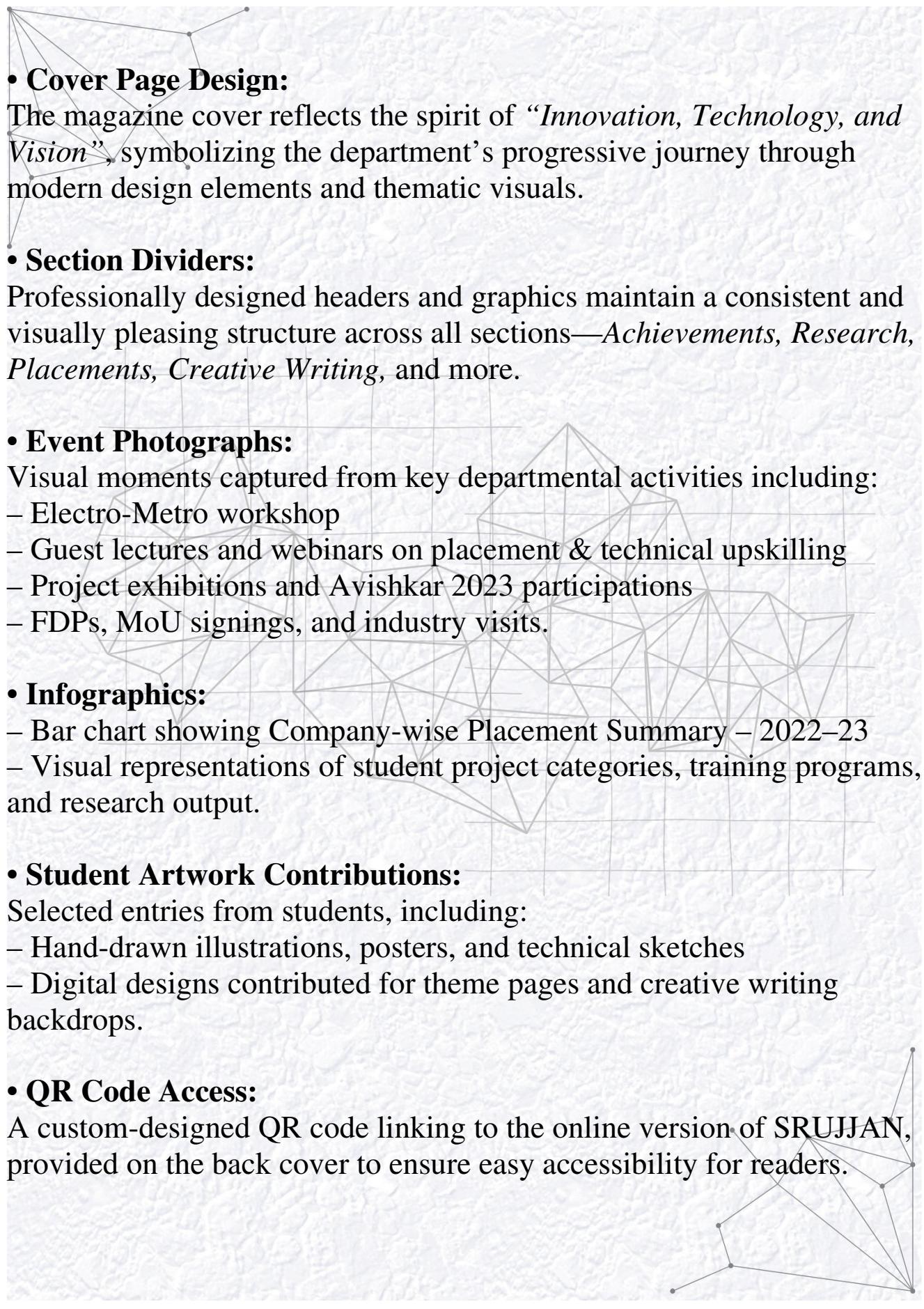
Number of patent/Copyright by faculty (2023-2024)

Sr. No.	Name of Inventors	Application No. / Publication No.	Title of the Invention	Status	link for proof
				Published / Granted	
1	Dr. Santosh. B. Patil and Others	Application No.: 202421032258	A Seeding Device for An Unmanned Aerial Vehicle	Date of filing of Application: 24/04/2024	
2	Dr. Rupesh Mahamune, Dr. Neerja Dharmale	418067-001	EMOTIONAL INSIGHT MONITORING WEARABLE DEVICE	45503	https://drive.google.com/file/d/1zWu5bF65VrBVKiEDFCbTmqkGJp4MauEs/view?usp=sharing



GRAPHICS AND ILLUSTRATIONS





- **Cover Page Design:**

The magazine cover reflects the spirit of “*Innovation, Technology, and Vision*”, symbolizing the department’s progressive journey through modern design elements and thematic visuals.

- **Section Dividers:**

Professionally designed headers and graphics maintain a consistent and visually pleasing structure across all sections—*Achievements, Research, Placements, Creative Writing*, and more.

- **Event Photographs:**

Visual moments captured from key departmental activities including:

- Electro-Metro workshop
- Guest lectures and webinars on placement & technical upskilling
- Project exhibitions and Avishkar 2023 participations
- FDPs, MoU signings, and industry visits.

- **Infographics:**

- Bar chart showing Company-wise Placement Summary – 2022–23
- Visual representations of student project categories, training programs, and research output.

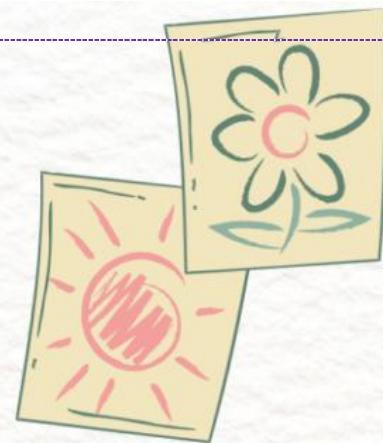
- **Student Artwork Contributions:**

Selected entries from students, including:

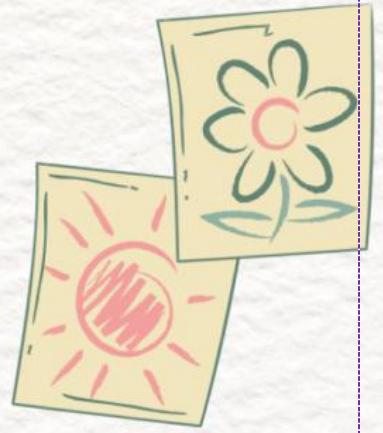
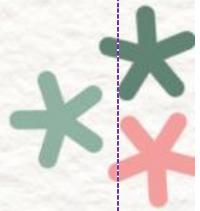
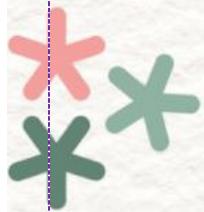
- Hand-drawn illustrations, posters, and technical sketches
- Digital designs contributed for theme pages and creative writing backdrops.

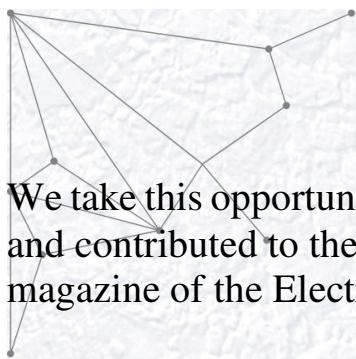
- **QR Code Access:**

A custom-designed QR code linking to the online version of SRUJJAN, provided on the back cover to ensure easy accessibility for readers.



ACKNOWLEDGMENT





We take this opportunity to express our sincere gratitude to all those who supported and contributed to the successful completion of SRUJJAN 2023–2024, the annual magazine of the Electronics & Telecommunication Engineering Department.

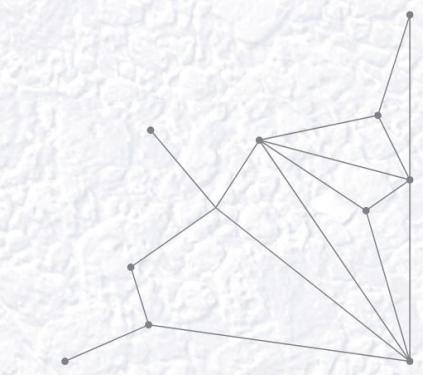
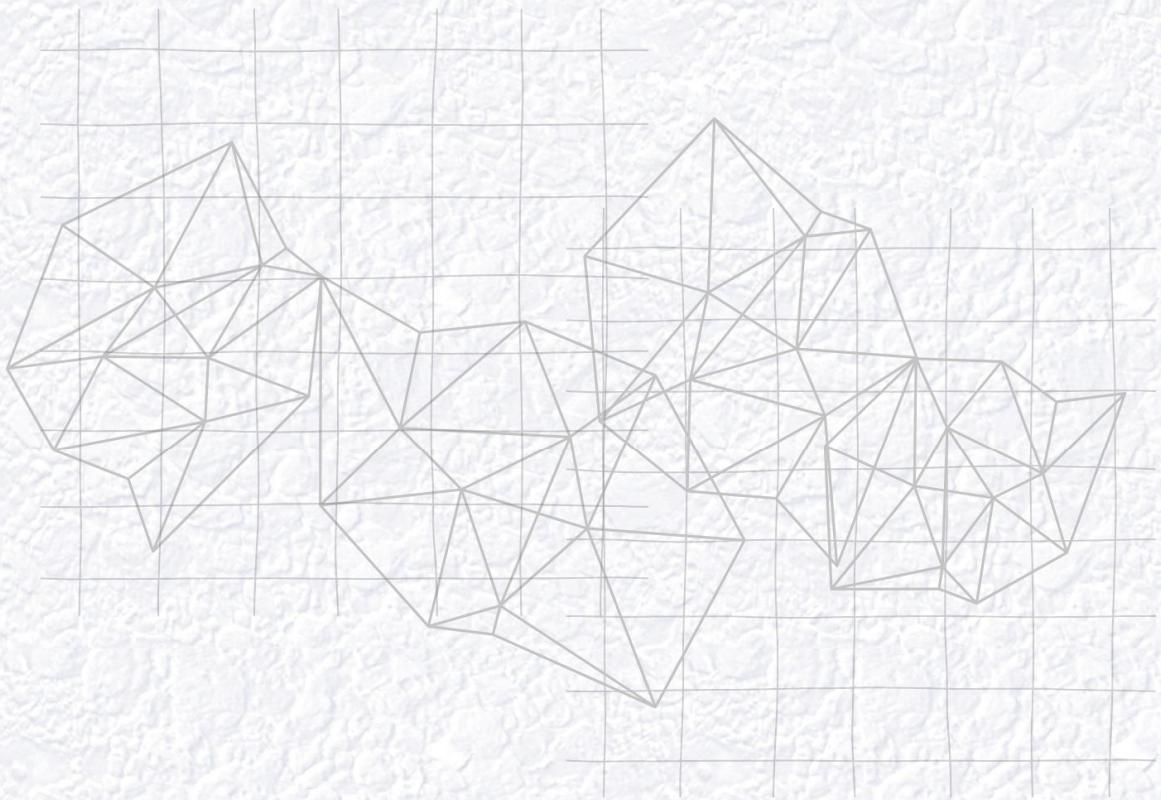
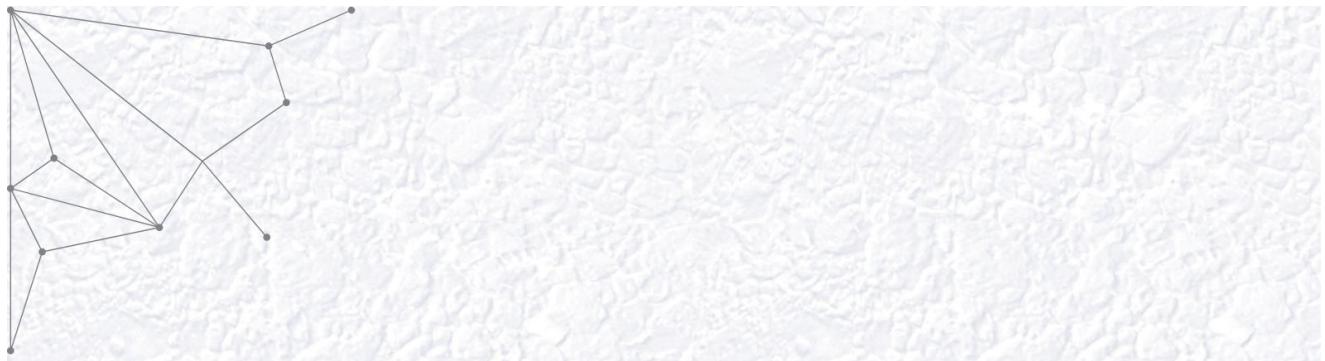
We are deeply grateful to:

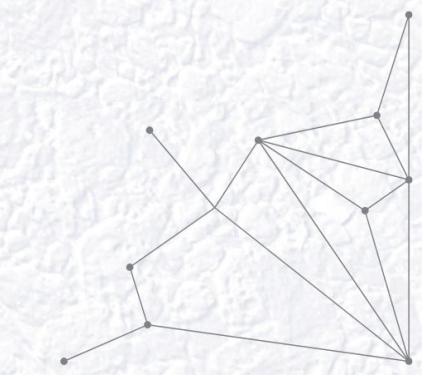
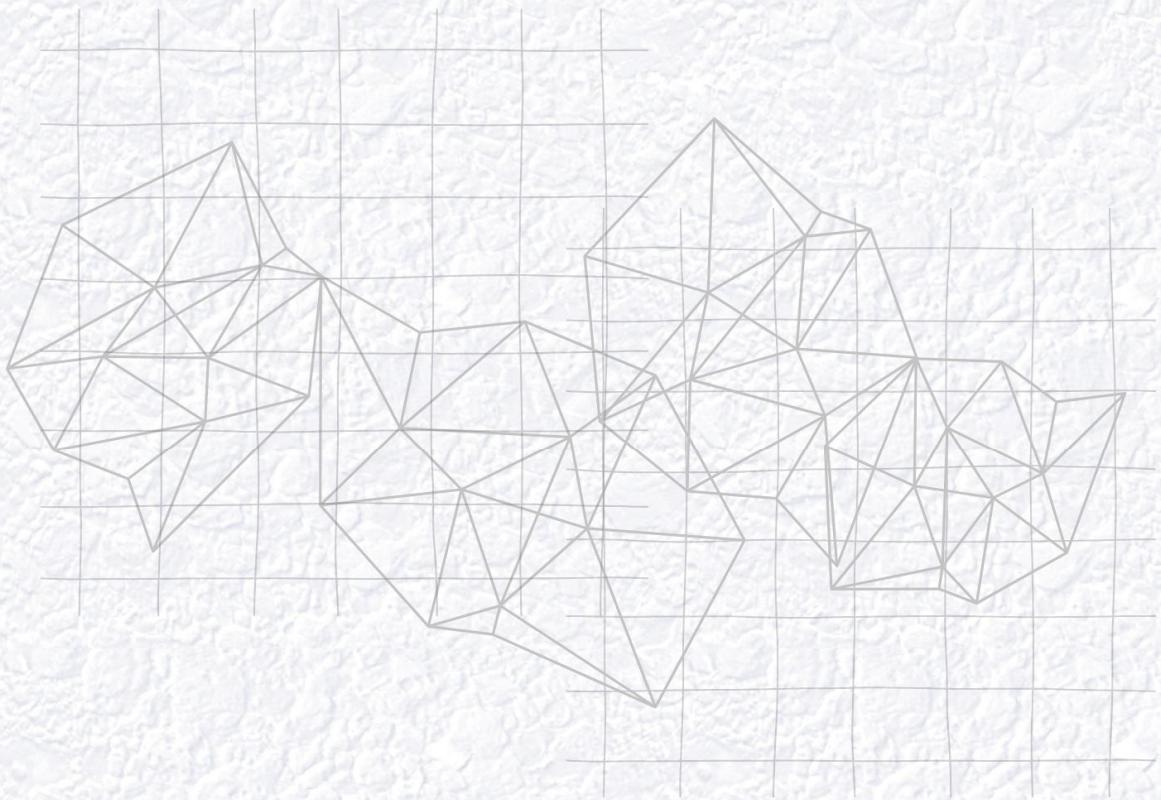
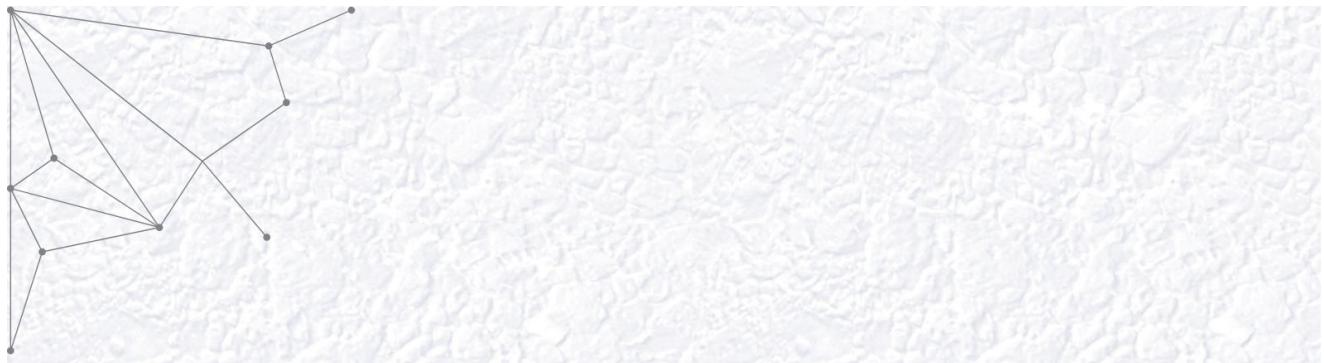
- **Dr. M. N. Tibdewal**, Head of Department, for his continuous encouragement, valuable guidance, and motivation throughout the magazine's journey.
- **Prof. Sanjay Satal**, Faculty Coordinator, whose mentorship, vision, and unwavering support served as the backbone of the editorial team.
- All **faculty members** for their contributions in content review, event documentation, and their active involvement in departmental activities featured in this edition.
- The **SRUJJAN Editorial Team**, whose dedication, teamwork, and creative energy turned ideas into reality through meticulous editing, designing, and coordination.
- The **students and contributors**, who enriched the magazine with their articles, poems, artworks, and project insights, making SRUJJAN not just informative but also inspiring.
- The **technical and non-teaching staff**, whose behind-the-scenes efforts helped us in completing this magazine smoothly and on time.

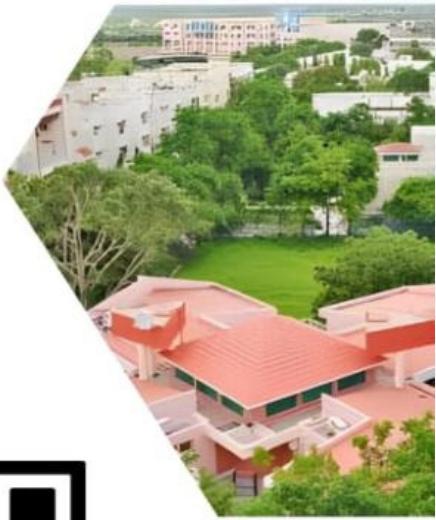
We wholeheartedly thank everyone who helped transform this edition of SRUJJAN into a vibrant record of our department's achievements, creativity, and spirit.

– SRUJJAN Editorial Team
Department of Electronics &
Telecommunication Engineering
SSGMCE, Shegaon









**"Your hard work and
dedication will pave the way
for your success."**

