



# TIREZIA

Volume 16, Issue 2

**The Editorial Board**  
-Beckoning Creati'wit'y

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**May Issue**  
*Eclectic Essence*



#International Day for Biological Diversity

**Interviewing**  
Mr. Vinay Prajapati  
Co-founder and CEO, Propdial



# Message From The Editorial Board

As the solar arc lances its gilded gaze, Taurus anchors the days with ophelic serenity, and Maia, the nurturing matron of rebirth, unfurls her verdant wings. Beneath her brume, May, a penultimate overture to summer, rises like a sylvan incantation steeped in floriferous renewal and pulsing with latent ardour. From Lily of the Valley to strawberries and cherries, the month unfurls as a lyrical homage to fecundity, where flora deflagrates in chromatic opulence and the air hums with the melisma of life. The days stretch velutinously with gulmohar trees blazing in vermilion, as Labour Day dawns, venerating the dignity of human endeavour. While Maharana Pratap's legacy lumes valour into the vellichor soil, the refulgent cadence of Buddha Purnima bestows the perennial bloom of tendresse across the vast Indian panorama. In this golden interlude, mango blossoms perfume the breeze with a nectarous promise of ripening abundance. Echoing this efflorescence with ardour and effulgence, May melds ascending exuberance with abyssal rumination, coalescing a poised crucible of numen and hiraeth, thereby embarking on the resplendent odyssey of transcendence.

On the sovereign front, India suspended the Indus Water Treaty on April 23, 2025, and incepted Operation Sindoor, demonstrating its steadfast resolve against terrorism. Additionally, it has enacted strategic economic measures, including restrictions on Bangladeshi goods through land ports. Meanwhile, on the diplomatic stage, a glimmer of hope emerged as Russia and Ukraine resumed ceasefire negotiations in Istanbul. Amidst these developments, May 6, 2025, marked a historic milestone with the signing of the Indo-UK Free Trade Agreement. Concurrently, Indian cricket bid farewell to Rohit Sharma and Virat Kohli, whose retirement from Test cricket concludes illustrious careers that have redefined the sport's legacy.

Amid changing tides, MMMUT solidified its position as an innovation nexus with the establishment of Uttar Pradesh's second IDEA Lab. Furthermore, the campus brimmed with global intellect as researchers and industry leaders convened for international conferences: Frontiers in Environment and Material Sciences for Sustainable Development (February 27 to February 28, 2025), Data Science and Artificial Intelligence (April 1 to April 2, 2025), and Innovations in Infrastructural Materials and Sustainability (April 18 to April 19, 2025). Building on this wave of intellectual exchange, Abhyudaya '25, organized from April 4 to April 6, 2025 thrummed through the institute with energy, while Chief Minister Yogi Adityanath's landmark visit on April 7, 2025, culminated in a flurry of impactful inaugurations and foundation stone laying ceremonies, ushering in development projects worth over ₹91 crores. Thereafter, **The Editorial Board** welcomed new members to uphold its legacy following the culmination of the Induction Drive from April 24 to April 29, 2025.

As May yields to Gemini's effervescence, it leaves in its wake an intricate interplay of iridescent fruitions and inchoate apricities. Poised between spring's jubilant exhalation and summer's fervent crescendo, it is a juncture where ebullience burgeons into aureate verity and resonates with the splendour of revelation. Like an emerald seer cloaked in the chiaroscuro of lumen and bough, the season murmurs that true flourishing is never rushed, urging us to attune ourselves to our regal threnody. Emboldened by renewed virescence and sagacity, **The Editorial Board** proudly heralds the May edition of **Tiresia**, hoping its enduring endowment ignites your pursuit with unwavering resolve, boundless ingenuity, and profound reverence across time.

*bienvenidos!*

## Our Team

**Final Year Members:** Abhijeet Yadav, Aditya Raj, Akanksha Pal, Akshat Saxena, Awantika Krishna, Harshita Mishra, Khwaab Jaiswal, Lavanya Gupta, Mayank Jaiswal, Nadeem Ahmed Warsi, Nikhil Tiwari, Saanvi Gupta, Shreyas Kumar, Swati Tiwari

**Third Year Members:** Aadrika Barnwal, Aastha Singh, Harshit Pandey, Jayant Singh, Jyoti Singh, Nandini Mishra, Prisha Agrawal, Shivam Pal, Shivam Rai, Sneha Verma, Vishal Kotak, Vishwadeep Singh, Vivek Mani Tripathy, Yash Pratap Singh

**Second Year Members:** Aditi Sharma, Akshay Kumar, Alok Kumar, Ashmi Singh, Divyansh Singh Rathore, Gaurav Vishwakarma, Himanshu Mishra, Jagriti Singh, Pragya Kumari, Pranav Mishra, Shatakshi Srivastava, Shrestha Gupta, Vaishnavi Rai, Vinayak Yadav, Yashvardhan Ojha



# MESSAGE FROM *Faculty Advisor*



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It is with a sense of solemn pride and intellectual fulfilment that I pen this message for the latest edition of **Tiresia**, a chronicle that not only captures the cadence of campus life but also reflects the aspirations, triumphs, and ethos of our university community. This period has not merely passed in time but unfolded as an era of transformation, marked by visionary undertakings, academic distinction, and a palpable reawakening of collective spirit.

Among the most defining moments was the visit of Hon'ble Chief Minister Shri Yogi Adityanath Ji, who inaugurated infrastructural projects worth Rs. 13.57 crores and laid the foundation for ventures amounting to Rs. 77.65 crores. The occasion was further dignified by the felicitation of our distinguished faculty and researchers with the prestigious Research Excellence Award and the conferral of appointment letters to newly inducted faculty members. The establishment of Uttar Pradesh's second IDEA Lab at MMMUT underscores our commitment to innovation and academic excellence. Complementing this milestone, the university's academic profile was further elevated by hosting several prestigious international conferences, including DSAI 2025, FEMSSD 2025, and IIMS 2025, each reinforcing university's dedication to global scientific engagement and academic collaboration. The university has also initiated the establishment of the School of Medical Science and Technology to introduce interdisciplinary education that combines medical and technological fields. In parallel, a new 528-bed air-conditioned

hostel has been approved to improve student residential facilities.

The literary fest Arunoday, organized by **The Editorial Board**, offered students a platform to refine their critical thinking and communication skills, deepening their engagement with ideas beyond the classroom. Cultural Sub-Council organized Abhyudaya which fostered self-expression, enabling students to explore their creative identities across diverse art forms. Aayaas 2025, the annual sports fest, fostered camaraderie and discipline through enthusiastic athletic competition. Extending this spirit beyond the field, Cycle Yatra 2025, led by NSS volunteers and NCC cadets, raised awareness about vital social causes such as 'Beti Bachao' and 'Swachh Bharat', showcasing the university's sustained dedication to community welfare and national responsibility. Together, these endeavours embody the core values of MMMUT, reflecting continuous advancement, academic rigour, and a sustained commitment to societal contribution.

I extend my deepest appreciation to **The Editorial Board**, whose careful craftsmanship and editorial acumen have shaped this issue of **Tiresia** into an eloquent reflection of our shared journey. I trust this edition will continue to reflect the university's dynamic academic and cultural landscape, offering its readers both valuable insight and inspiration.

With best regards  
Dr. Abhijit Mishra  
Faculty Advisor  
**The Editorial Board**  
MMMUT

# Tête-à-tête

*A talk with Mr. Vinay Prajapati*

Mr. Vinay Prajapati, a successful technologist and entrepreneur from Madan Mohan Malaviya University of Technology (previously MMMEC), 1999 batch in Computer Science and Engineering, is the Founder and CEO of Propdial, a prominent property management platform. With more than ten years of experience in the venture ecosystem, he has developed his skill set in creating scalable products and running tech-intensive businesses. His professional journey includes a significant stint in the United States, where he worked with top-tier ventures, gaining valuable global exposure and industry insight. Mr. Vinay Prajapati's career reflects a strong blend of technical acumen and entrepreneurial vision, making him a standout figure in the startup and property technology ecosystem. **The Editorial Board** takes pride in exploring the rich experience of Mr. Vinay Prajapati and learn significant lessons from his motivational journey. Below is an excerpt of his interview.



**Q** How do you feel about visiting the University after years?

**A** There is a deep sense of nostalgia as I walk through the same corridors and head to my usual spot for tea and gossips, like old times. The opportunity to reunite with former classmates and exchange reflections on our diverse journeys since graduation renders this occasion exceptionally meaningful. This place holds a special significance, shaping the very core of who I am today. The infrastructural developments are particularly noteworthy, with the addition of architecturally refined buildings, advanced lecture halls, and lush green environment. It is truly reassuring to see the University maintain its original spirit and foundational values, even after decades.

**Q** How have your friendships from college stood the test of time and enriched your life's experiences?

**A** Whenever I recollect my college times, it takes me back to unforgettable moments of shared smiles, inside jokes, and lasting bonds. My friend circle usually included my own colleagues along with senior and junior batchmates. Although I have nurtured some friendships at my workplace throughout my career, the interpersonal bonds established during my collegiate years remain profoundly unparalleled and enduring. Through every phase of life and change in circumstance, time has only fortified these relationships, making them pillars of unwavering support and affection. Looking back, I realize that these friendships have stood among the most meaningful chapters of my life. They are the reason I now see challenges as invitations, not obstacles.

**Q** What professional challenges defined your experience as an entrepreneur, and how would you like to guide the aspirants in this field?

**A** For students aspiring to embark on the path of entrepreneurship, one of the most pivotal steps is developing a strong professional network. In today's digital era, establishing a presence on platforms such as LinkedIn at the earliest stages of one's collegiate journey is imperative. Drawing from my own experience, when I ventured into the real estate domain, my academic background in Computer Science and Engineering proved to be a valuable asset. However, the initial stages of my startup were marked by insufficient monetary resources. Following a couple of years of tireless dedication with limited success, I opened up about my goals to some close associates. Soon, we were able to lay the foundation for what eventually evolved into a thriving enterprise. So, it is highly crucial to know that every venture begins with a clear mission and a drive to deliver meaningful outcomes.

**Q** What differences did you realize while working in India as compared to that of abroad?

**A** Adapting to new environments and managing legal or visa issues can be demanding, but for many, the long-term benefits outweigh the drawbacks. International work experience can enhance your résumé, improve earnings, and expose you to new ideas and lifestyles. On the flip side, it often comes with emotional and logistical hurdles like homesickness, legal complexities, and specially the cultural adjustment. The traditions followed in India are incomparable and have a



*Fidelity in friendship, acts as a catalyst for resolute and unwavering ambition.*

great significance on our lives. Nonetheless, the experience often proves invaluable in shaping a well-rounded, globally aware individual.

**Q** Would you like to share any remarkable incident from your college years?

**A** A long time has passed but I can remember a particularly unexpected incident from my time at University. It was about when our institution had entirely ceased organizing campus recruitment drives. In an attempt to bring attention to the matter creatively, we organized a mock strike involving satirical acts such as polishing shoes in public places. While our intent was to use humour to underscore a serious concern, the approach didn't have the desired impact. Some of us then committed to a hunger strike, which lasted around three to four days. That ultimately drew the necessary attention, prompting meaningful engagement from the University administration and leading to resolution. This experience taught me the power of collective voice, and the importance of choosing the right strategy for the right moment.

**Q** Can you now give us insights about your company, Propdial?

**A** Sometimes, the most practical business ideas come from personal aspects and Propdial was no exception. Our company, Propdial is a real estate solutions firm dedicated to serving the unique needs of non-resident property owners. Our mission is to bridge the logistical gap between property ownership and effective property management in India. I purchased a residential property in an emerging area of India

but soon after, my job required me to move to the U.S. However, due to my professional commitments abroad and inability to meet the demands here, in India, personally, my friend managed it further. The story of this company is not one of instant success, but of relentless pursuit, hard-won trust, and meaningful impact. We offer services in various Indian cities, including NCR, Bengaluru, Pune, and Hyderabad, with upcoming locations in Mumbai, Ahmedabad, and Chennai.

**Q** What life advice would you like to give our students?

**A** With an alarming surge in health-related concerns observed in recent times, I would like to offer a personal recommendation, shared by many of my seniors, which turned out to be a great deal. Academics and extracurricular activities must go hand in hand for the overall development of personality as it forges enhanced mental stability and better retention ability. Furthermore, I personally recommend reading non-fictional books to the young generation such as *1,000 Places to See Before You Die* by Patricia Schultz and *Sapiens* by Yuval Noah Harari, since they help shape perspectives and foster personal growth. Engagement with books transcends intellectual pursuit, shaping character through diverse experiences. Personally, I found *Sapiens*, offering a captivating exploration of human evolution, society, and culture, and it surely left a lasting impression on me. Perhaps you have reached the end but every ending holds a quiet beginning. This may seem small now, but it truly holds the promise of something far greater.



Mr. Vinay Prajapati with his colleagues



# CAMPUS

**JAN  
28**

The NSS, MMMUT, Gorakhpur conducted an RTI Act workshop on **January 28, 2025**. Justice G. K. Pandey (H. J. S.) led an engaging session on citizens' rights, joined by faculty members Prof. Govind Pandey, Dr. Pradeep Muley, Prof. P. K. Singh, and Shri D. M. Pandey, offering students valuable insights into legal awareness and democratic empowerment.

**FEB  
08**

The NSS, MMMUT, Gorakhpur organized a two-day workshop on 'Inspection of Schools and Auditing' from **February 8, 2025 to February 9, 2025**. Held at the Takshashila Lecture Hall Complex, the session offered hands-on exposure to field level auditing practices, enriching the experience of all participants through practical learning, real world application.

**FEB  
17**

AAYAAS '25, the annual sports fest organized by the **Sports Sub-Council** from **February 14, 2025 to February 15, 2025**, brought the campus alive with athletic spirit through track, field, and sporting events, celebrating speed, strength, and sportsmanship. The fest fostered unity, competitive zeal, and vibrant participation, leaving behind moments of glory, camaraderie, and unforgettable victories across the university.

**FEB  
17**

Arunoday '25, organized by **The Editorial Board** from **February 17, 2025 to February 19, 2025** at MMMUT, Gorakhpur, illuminated minds with thoughts and expressions. The event invited participants to journey through the beauty of language and participate in a celebration of eloquence, insight, and the timeless power of storytelling. It sparked creativity and inspired students to engage deeply with perspectives beyond the written word.

**JAN  
28**

The Training and Placement Cell hosted an expert session with Mr. Lucky Singh (Founder of The Menta) and his team on **January 28, 2025**, delivering valuable insights on professionalism, career paths, internships, and bridging the gap between academics and the workplace through real-world experience and valuable guidance.

**FEB  
11**

Electra, a Squid Game inspired event by **Electrical Engineers' Legation**, was held from **February 11, 2025 to February 13, 2025** at MMMUT, Gorakhpur. Participants were challenged on their strategy, adaptability, and determination through thrilling challenges that tested their wit, reflexes, adaptability, and ability to perform under intense pressure.





# BUZZ

**FEB 20** Chemisch'Graphy, an online event by Indian Institute of Chemical Engineers Student Chapter MMMUT, Gorakhpur on February 20, 2025, beautifully showcased chemistry through stunning visuals and creative write-ups. This online photography competition captured the charm of swirling colours, and the hidden aesthetics of the chemical world.

**FEB 24** Capture The Flag '25, a thrilling cybersecurity showdown, was organized by the Computer Engineering Society at MMMUT, Gorakhpur from February 24, 2025 to February 25, 2025. Participants unlocked challenges, climbed leaderboards, and showcased their ethical hacking skills in an intense test of technology.

**FEB 28** Innovizion '25, a marvelous saga, organized by the University Innovation Cell, under Institution's Innovation Council (IIC) from February 28, 2025 to March 2, 2025, the event transformed creativity into tangible outcomes through a series of innovative challenges. It served as a vibrant platform for ideation, collaboration, and breakthrough thinking.

**MAR 01** On March 1, 2025, in accordance with the directive of the Government of Uttar Pradesh, the Cultural Sub-Council organized a speech and drama competition to commemorate Women's Day celebrating the strength, resilience, and invaluable contributions of women through art and expression.

**FEB 20** Avalamban '25, organized by Association of Civil Engineers at MMMUT, Gorakhpur from February 20, 2025 to February 22, 2025, brought together civil engineering challenges, creative workshops, and cultural vibrance into a memorable celebration of talent, teamwork, innovation, and spirited participation.

**FEB 27** FEMSSD 2025, the International Conference on Frontiers in Energy, Environment, and Material Sciences for Sustainable Development, was held from February 27, 2025 to February 28, 2025, organized by the department of Chemical Engineering, Chemistry and Environmental Sciences, and Mechanical Engineering.



**MAR 03** Arthavya '25, organized by The Finance Club from March 3, 2025 to March 5, 2025, sparked innovation and strategic thinking, offering a dynamic platform for emerging financial talent to shine and grow, fostering leadership, collaboration, and real-world financial skills development.



# CAMPUS

**MAR  
18**

**Mind Be Dazzle '25**, organized by the **Indian Institute of Chemical Engineers Student Chapter, MMMUT, Gorakhpur** was held from **March 18, 2025 to March 19, 2025**, featuring a quiz, an extempore, and a Pictionary contest, an engaging convergence of intellect, spontaneity, and collaboration that highlighted the participants' diverse talents.



**MAR  
24**

**Cycle Yatra**, held from **March 24, 2025 to March 25, 2025**, saw NSS volunteers and NCC cadets ride for causes like 'Beti Bachao' and 'Swachh Bharat' spreading awareness and promoting education, health, and sustainability while fostering community spirit, environmental responsibility, and youth engagement across the campus and beyond.

**MAR  
30**

**Explora '25**, organized by the **Electronics and Communication Engineering Society** from **March 30, 2025 to April 2, 2025**, featured six dynamic events that integrated creativity, intellect, and adventure, honouring talent and fostering team spirit, encouraging innovation, collaboration, and hands-on learning for all participants.

**APR  
01**

**DSAI 2025**, an international conference on Data Science and Artificial Intelligence, was held on **April 1, 2025**. Organized by the **Department of Computer Science and Engineering**, it brought together experts and researchers to explore emerging trends and innovations in AI and data driven technologies, fostering collaboration, knowledge sharing, and cutting-edge advancements worldwide.



**APR  
04**

The **Cultural Sub-Council** hosted **Abhyudaya '25**, the annual Art, Cultural and Literary Fest from **April 4, 2025 to April 6, 2025**. With over 30 dynamic events, the fest celebrated creativity in all its forms. The nights came alive with mesmerizing performances by Shivam Chowhan, the Ko-Ras Band, and electrifying DJ Tracer, making Abhyudaya a seamless convergence of talent, intellect, and unforgettable celebration.





# BUZZ

**APR 08** **Ennexus '25** TechTrek, The Jungle Edition, organized by **Computer Engineering Society** from **April 8, 2025 to April 11, 2025**, turned **MMMUT, Gorakhpur** into a wild tech arena. With events like CTF 2.0, Flip-Flop, and Cludicode, participants battled bugs and logic in a thrilling race for innovation and ignites excitement, inspiring creativity, teamwork, and cutting edge problem solving skills among participants.



**APR 11** **Robomania '25**, hosted by the **Robotics Club** from **April 11, 2025 to April 13, 2025**, sparked tech thrills with events like Electro Tekken, Electro NFS, and Sherlocked. The event attracted enthusiastic participants, blending engineering, gaming, and intrigue into a captivating experience that fueled creativity and sparked enthusiasm.



**APR 17** **IIMS 2025**, a two day international conference on Innovations in Infrastructural Materials & Sustainability, was held from **April 17, 2025 to April 18, 2025**. Organized by the **Department of Civil Engineering** at **MMMUT, Gorakhpur**, the event spotlighted sustainable solutions and breakthrough research in infrastructure.

**APR 23** **Annual Prize Distribution Ceremony**, organized by the **Computer Society of Software Engineers** on **April 23, 2025** in **Aryabhata Hall**, honoured academic and co-curricular excellence of students throughout the academic year, celebrating achievements and motivating future success.

**APR 24** **The Editorial Board** conducted its **Induction Drive** from **April 24, 2025 to April 29, 2025**, embodying a shared vision, unwavering enthusiasm, and a tradition of impactful contributions rooted in dedication and excellence, encouraging fresh talent to foster creativity, teamwork, and a commitment to meaningful engagement and growth.







## Warfare Wings

“

*With drones we rise, our ambit bold and bright,  
Reshaping war's fierce tide in day or night.*

First-Person View (FPV) drones are compact, remotely operated aircraft with cameras that stream live video to operators via screens or goggles, enabling precise navigation in complex environments. Originally designed for sports and cinematography, FPV drones have emerged as pivotal tools in contemporary warfare. Equipped with explosives, they serve as affordable, guided munitions capable of targeting enemy personnel, vehicles, tanks, and command posts with high accuracy due to their small size, agility, and real-time vision. Beyond offensive roles, they excel in reconnaissance, allowing troops to scout terrain and enemy positions without risk, making them transformative tools in contemporary combat.

The development of FPV technology began in the 1970s and 1980s when hobbyists attached cameras to radio-controlled aircraft, initially capturing post-flight footage. Real-time video transmission emerged in the early 2000s with analog systems, enabling true FPV flight. The

2010s brought significant advancements, fueled by drone racing and innovations like lightweight quadcopters, brushless motors, lithium polymer batteries, and advanced flight controllers. Digital FPV systems, introduced by companies like DJI in 2019, improved video clarity and reduced latency, expanding military applications. FPV drones are now indispensable on the battlefield due to their affordability, agility, and expendability. Kamikaze drones, carrying explosive payloads, can neutralize high-value targets like tanks and artillery at low cost. The Russia-Ukraine conflict has highlighted their effectiveness, with footage showing precise strikes on armored vehicles and helicopters. Static artillery units are especially vulnerable, leading to escalated yet frequently insufficient counter-drone responses.

The rise of FPV drones has reshaped infantry tactics, moving away from concentrated formations to dispersed, mobile squads less susceptible to drone strikes. These units operate autonomously,



using drone feeds for navigation, surveillance, and coordination, marking a shift from traditional mass-deployment doctrines to maneuverability in drone-heavy environments. Artificial intelligence enhances FPV drones by enabling autonomous targeting of vehicles, personnel, and infrastructure with reduced operator involvement, improving precision and reducing collateral damage. To address range limitations, militaries use satellite systems like Starlink and mesh networks for real-time control over long distances, supporting deep-strike missions from secure command centers. Thermal imaging significantly boosts FPV capabilities, detecting heat signatures through darkness, smoke, and camouflage. In conflicts like Ukraine, thermal-equipped drones have facilitated preemptive strikes and safer ground operations by identifying hidden threats. Fiber optic technology supports military-grade FPV systems by ensuring high-speed, interference-resistant data transmission, crucial in electronic warfare and for coordinating swarm operations involving multiple drones. Swarm tactics, deploying dozens or hundreds of drones in synchronized waves, overwhelm enemy defenses with their speed, numbers, and unpredictability. Their persistent presence also exerts psychological pressure, eroding enemy morale and cohesion.

Despite their advantages, FPV drones face limitations. Limited endurance and range constraints operational scope to 10–20 minutes, though research into improved batteries, hybrid models, and relay drones is ongoing. Electronic warfare, including jamming and signal disruption, poses challenges, countered by anti-jamming protocols, autonomous fallback systems, and encrypted communications. Environmental factors like wind, rain, and rugged terrain affect performance, but advancements in weather-resistant designs, stabilization, and navigation are improving resilience. Use of open-source parts exposes systems to cyber

### First Person View (FPV) Drone



vulnerabilities. Military drones now incorporate self-erasing data, encryption, and self-destruct mechanisms to protect sensitive technology.

Non-state actors, including ISIS, Hezbollah, and Houthi rebels, have adopted FPV drones, using commercial components to build surveillance and attack units in informal settings. Their affordability and concealability make them ideal for insurgents and terrorists. Governments are responding with anti-drone technologies like radio jammers, GPS spoofers, and laser-based weapons, alongside stricter regulations on drone components and online sales. Operator skill is critical, requiring technical proficiency and the ability to navigate hostile environments and engage dynamic targets. Militaries are investing in simulation-based training and AI-assisted controls to enhance operator performance under pressure. FPV drone feeds are increasingly integrated into broader combat systems, linked to command centers and augmented reality gear for rapid, data-driven decisions, enhancing situational awareness and responsiveness.

As FPV drone technology evolves, it will remain central to military operations. Ongoing innovations in AI, communications, and sensors address challenges like electronic warfare and range constraints. Their versatility, cost-effectiveness, and adaptability ensure continued relevance in military and civilian applications. With robust training, effective countermeasures, and responsible regulation, FPV drones will shape the future of warfare. The integration of collective AI behaviors and self-directed targeting will further amplify their battlefield impact.



War Zone



# Monetized Minds

“

*In a world where ideas fuel empires, imagination is no longer a gift - it is a profession.*

**I**n a world driven by innovation, the currency of success is no longer just money; it is the power of the mind. Monetized minds, a term both exciting and unsettling, captures how imagination has evolved into a powerful business asset. What was once seen as mere daydreaming now powers billion dollar industries, from the buzzing offices of Silicon Valley to the creative studios of online influencers. Entrepreneurs, designers and creators no longer simply offer products, they deliver experiences, provide solutions and share unique perspectives. Start-ups, apps, campaigns and trends often begin as raw ideas, shaped into reality through a blend of strategy and storytelling. Today's economy does not merely reward effort, it thrives on vision and the ability to think ahead of the curve.

The shift from a labour-driven economy to one fueled by knowledge and creativity is most evident in the rise of the knowledge economy, where thought and invention carry more value than physical labour. Companies no longer

rely solely on production lines or manpower but on creativity that drives innovation and user experience. Brands and businesses seek people who can solve problems with originality. From design thinkers to tech visionaries, those who imagine differently define markets and shape consumer culture. The mind becomes the engine of productivity and the more adaptable, intuitive and inventive it is, the more valuable it becomes. In such an environment, creativity is no longer optional, it is essential.

Imagination becomes profitable when it addresses needs and stands out. Great ideas that simplify daily tasks, increase efficiency, or solve frustrations are often most lucrative. A single app that automates a complex process, a website that personalizes learning, or a tool that saves time for businesses can create passive income with minimal continued effort. Consumers are drawn to simplicity and effectiveness and they are willing to pay for it. At the same time, uniqueness triggers



emotional and psychological engagement. When people encounter something original, they feel seen, curious or inspired. It breaks monotony and captures attention. As a result, audiences tend to follow, share and invest in ideas that reflect boldness, novelty or authenticity. This makes uniqueness not just a strategic trait but a marketing strategy. People remember what feels different and that recall transforms into reach, influence and financial gain.

However, with opportunity comes pressure. The same platforms that reward creativity also demand constant output and relevance. Ideation power, once free-flowing, is now filtered through algorithms, audience expectations and performance metrics. Many creators struggle to strike a balance between personal expression and the demands of commercial success. The constant push to innovate can become exhausting, and the fear of being overlooked often drives creators to conform rather than create freely. Still, those who offer smart, practical innovations, like user-friendly apps, automation tools, or time-saving methods, often experience effortless growth. Their work spreads organically because it solves real problems. In such cases, creative intellect becomes a silent worker, earning money and reach even when the creator sleeps. These ideas don't need to scream for attention, they offer value, and value draws people naturally.

Despite the challenges, the digital age has lowered entry barriers for imaginative minds. Anyone with access to the internet can share, build, and earn from their ideas. Platforms like YouTube, Substack, Etsy, or even GitHub allow people to publish content, sell products, and offer services without traditional gatekeepers. A designer can sell templates, a coder can license a plugin, and an educator can launch a course, all from home. The global dynamic economy is expanding, enabling individuals to turn side projects into sustainable income. In this open ecosystem, collaborations flourish as artists, engineers, marketers, and

## Vision Ascent



writers unite across borders to build collective visions that blend creativity with business sense. The power of creative thinking, once restricted to artists and dreamers, now belongs to anyone willing to explore and express.

As artificial intelligence and automation continue to advance, the distinct power of human ingenuity has become more vital than before. While machines replicate patterns and logic, they still cannot dream, empathize, or innovate in truly human ways. Ideas that touch emotion, challenge thinking, or reimagine possibility remain uniquely ours. As jobs become more automated, it is creativity that will secure human relevance in the future of work. Whether building sustainable solutions, reinventing education, or crafting cultural narratives, intellectual resource is the spark that drives progress. And to make that spark last, creators must also learn to package their vision with clarity, purpose, and impact.

In the end, monetized minds reflect a modern truth. Strategic vision is no longer just a personal gift, it is a professional asset, a cultural force, and an economic driver. When guided with purpose, it can inspire change, build empires, and shape the future. The challenge is to maintain the soul of creativity even as it becomes a product. As we move further into a world where mental skills outweigh physical ones, the ability to imagine will become the most essential human trait. Whether solving global challenges, launching a business or writing a story, Mental agility will remain the one element that cannot be automated, copied or replaced. To nurture it is to invest in a more thoughtful, original, and visionary future for all. Creativity, when respected and protected, becomes not only a tool of profit but a force for progress.



## Invention Trail

```
#include <stdio.h>
#include <stdlib.h>
int mystery(int x) {
    return (x ^ x);
}
int main() {
    char *alpha = (char *)malloc(27);
    for (int i = 0; i < 26; i++) {
        *(alpha + i) = 'A' + i;
    }
    *(alpha + 26) = '\0';
    alpha = realloc(alpha, 30);
    char *p = alpha;
    printf("%c", *(p + ((34 >> 1) - 2 + 1 * 2)));
    printf("%c", *(p + (((16 >> 2) - (4 << 0)))));
    printf("%c", *(p + (((57 - 9) >> 3) - 3)));
    printf("%c", *(p + ((72 >> 3) - 2)));
    printf("%c", *(p + ((5 << 0) - 1)));
    printf("\n");
    free(alpha);
    return 0;
}
```

What is the output of above C program?

COMPUTER SCIENCE  
AND ENGINEERING

A TCP connection has a congestion window of 12 MSS when a timeout occurs. If all segments in the next two RTTs are acknowledged, what will be the congestion window size (in MSS) during the third RTT?

INFORMATION TECHNOLOGY

Consider a continuous-time linear time-invariant system.  $x(t) = e^{-t} \cdot u(t)$  is the input applied and  $h(t) = (t + 2)e^{-2t} \cdot u(t)$  is the impulse response of the system. Using the Laplace transform, find the output of the system.

ELECTRONICS AND  
COMMUNICATION ENGINEERING

A liquid mixture contains 25 mol% of component A and 75 mol% of component B at a total pressure of 1 atmosphere. The vapour pressures of pure A and B are 500 mmHg and 200 mmHg, respectively. Assuming ideal solution behavior, calculate the mole fraction of A in vapour.

CHEMICAL ENGINEERING

A three-phase synchronous motor operating under steady-state conditions has a synchronous impedance of  $0.1 + j0.3$  per unit per phase. The motor corresponds to an excitation voltage (internal generated EMF) of 1.58 per unit. Assuming the motor is connected to an infinite bus with a terminal voltage of 1.0 per unit and that stator resistance is negligible compared to the synchronous reactance, determine the static stability limit of the motor in per unit.

ELECTRICAL ENGINEERING

A 2 kg ball is projected horizontally with a speed of 12 m/s from a point midway between two smooth vertical walls that are 20 meters apart. The wall on the left and right has a coefficient of restitution of 0.6 and 0.5, respectively. Assuming ideal conditions, find the total speed of the ball after 3 impacts.

MECHANICAL ENGINEERING

A rectangular RC beam of width 300 mm, effective depth 400 mm, is subjected to a factored shear force of 20 kN and a factored torsional moment. The equivalent shear force is found to be 68 kN as per IS 456:2000. Calculate the torsional moment (in kN·m).

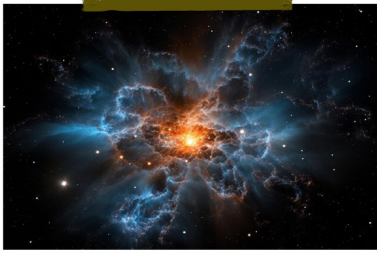
CIVIL ENGINEERING



Winner of the Tech inSights of Tiresia Volume 16, Issue 1 is Abhay Kumar, B.Tech 2<sup>nd</sup> Year, CSE.  
 Rest of the answers were either late or unsatisfactory.



# Cosmovista



## The Stellar Mirage

Pulsars are spinning remnants of massive stars that once exploded in fiery supernovae. These dense objects emit beams of radio waves with perfect rhythm, like cosmic lighthouses sweeping through the galaxy. Their steady signals help astronomers map the hidden corners of space.

~Yashvardhan Ojha, CSE 2<sup>nd</sup> year

## The Celestial Echo

Deep in the void, a faint glow lingers as the Cosmic Microwave Background (CMB), a whisper from the Big Bang. Discovered in 1965, it's the oldest light we can observe, a silent echo of the universe's fiery birth. As we decode its patterns, we glimpse how everything began.

~Vinayak Yadav, IT 2<sup>nd</sup> year



## Nova Bloom

When massive stars die, they explode in spectacular supernovae, lighting up the galaxy. This violent death forges heavy elements like iron and gold, seeding the universe with the building blocks of life. From destruction comes creation, forming a cosmic cycle.

~Ashmi Singh, EE 2<sup>nd</sup> year

## Aurora Waltz

Auroras shimmer near Earth's poles, born of solar wind and magnetic fields. Charged particles from the Sun crash into our atmosphere, painting the skies with glowing curtains of green, red, and purple. It's a planetary light show, born from the Sun's touch.

~Pragya Kumari, EE 2<sup>nd</sup> year



We invite all students to unveil the cosmic phenomena that captivate their imagination. Draft a concise description of the event and submit it to [literaryedb@mmmut.ac.in](mailto:literaryedb@mmmut.ac.in). The most compelling entries will be published in the next issue of **Tiresia**.

# स्पंदन

“

स्पंदन है चेतन गति, अनहद नाद समान।  
जिसे सधे अंतरमुखी, पावे ब्रह्म निदान॥

**ज**न्म से लेकर जीवन के प्रत्येक क्षण तक, हर जीव-जंतु के अस्तित्व का प्रमाण है - स्पंदन। यह केवल हृदय की धड़कन या भौतिक कंपन तक सीमित नहीं, अपितु चेतना की प्रथम, सूक्ष्म तथा अनाहत अभिव्यक्ति है, जो समस्त ब्रह्मांड में निरंतर प्रवाहित हो रही है। यह एक अदृश्य लय है, जो रक्त की धाराओं से लेकर आकाशगंगाओं की गति तक में व्याप्त रहती है। स्पंदन वह जीवंत ऊर्जा है जो प्राणी, वस्तु और प्राकृतिक प्रक्रियाओं को एक सूत्र में पिरोकर सामंजस्य स्थापित करती है। यह सृजन की मूल शक्ति है, जो संगीत की मधुरता से लेकर मानव मन की अर्थगर्भित भावनाओं एवं आध्यात्मिक अनुभूतियों तक प्रकट होती है तथा प्रत्येक तत्त्व में जीवन की गहराई, परिवर्तन एवं संतुलन का संकेत देती है।

वेदांत के अनुसार, जब ब्रह्म पूर्ण रूप से शांत और अचिंत्य अवस्था में था, तब कोई द्वैत नहीं था, परंतु सृष्टि के आरंभ में एक सूक्ष्म स्पंदन उत्पन्न हुआ, जिसे नाद या लय अथवा ॐ कहा गया और उसी से 'अहं' अर्थात् स्वत्व तथा 'इदं' अर्थात् वस्तु का प्राकट्य हुआ। कश्मीर शैव दर्शन के प्रमुख ग्रंथ "स्पंदकारिका" में आचार्य वसुगुप्त तथा कल्लटाचार्य ने इसी भाव को अत्यंत सुंदर एवं प्रभावशाली ढंग से स्पष्ट करते हुए कहा है:

"येन स्पन्देनोत्थिता सर्वे, तेन स्पन्देन संस्थिताः।  
तस्मात्स्पन्दः परंतत्त्वं, सदा स्पन्दति यस्मिन् जगत्॥"

अर्थात्: जिस स्पंदन से समस्त सृष्टि की उत्पत्ति हुई और जिसमें वह स्थित है, वही परमतत्त्व है और उसी में यह सम्पूर्ण जगत् निरंतर स्पंदित हो रहा है। योग की गहन साधना में, जब साधक ध्यान की गहराई में प्रवेश करता है, तब वह बाह्य ध्वनियों से परे, भीतर उठते उस अनाहत नाद का अनुभव करता है जो न तो किसी वस्तु से उत्पन्न होता है और न ही किसी आघात से। यही आंतरिक ध्वनि आत्मा को परमात्मा से जोड़ने का मार्ग बनती है। यह स्पंदन मात्र गति या तरंग नहीं, बल्कि स्वयं शिव की चेतन लय है, जो प्रत्येक प्राणी, पदार्थ तथा भाव के भीतर सजीव रूप से विद्यमान है। यही सूक्ष्म, अनंत और जीवनदायी स्पंदन सम्पूर्ण ब्रह्मांड की आत्मा है।

आध्यात्म में स्पंदन वह सूक्ष्म चेतन ऊर्जा है, जिससे सृष्टि का आरंभ होता है और जो निरंतर ब्रह्मांड में जीवन का संचार करती रहती है, यही सूक्ष्म लयात्मक ऊर्जा आधुनिक अणु भौतिकी में पदार्थ की मूल प्रकृति 'कंपन' के रूप में प्रकट होती है। सृष्टि के प्रत्येक तत्त्व, चाहे वह निर्जीव वस्तु हो या सजीव प्राणी, सभी का आधार स्पंदन की सूक्ष्मतम



लयात्मक गति है। भौतिक जगत में जिसे हम ठोस एवं स्थिर समझते हैं, वह वास्तव में मूलभूत स्तर पर निरंतर, अनवरत कंपनशील ऊर्जा का रूप है। प्रत्येक कण, चाहे वह विद्युत् कण हो, सकारात्मक कण हो या कोई उपपरमाण्विक कण, स्वयं एक अणु स्पंदन के माध्यम से अस्तित्व में होता है। विज्ञान के अनुसार, सम्पूर्ण ब्रह्मांड एक निरंतर स्पंदित ऊर्जा का क्षेत्र है, जिसमें प्रत्येक कण उस क्षेत्र के क्षुद्र कंपन का स्वरूप है।

भूकंप विज्ञान में पृथ्वी की अंदरूनी रचना को समझने के लिए भूकंपीय तरंगों का उपयोग होता है। ध्वनि वायु में उत्पन्न कंपन का ही रूप है, जो वाणी में कंठरज्जुओं के कंपन तथा श्रवण में कर्णपटलों द्वारा अनुभव किए जाते हैं। चिकित्सा क्षेत्र में अंतर्दृष्टि चित्रण हेतु अति-ध्वनि तथा चुम्बकीय अनुनाद जैसी विधियाँ शरीर के अंगों के सूक्ष्म कंपन का उपयोग करती हैं। प्रकृति एवं ब्रह्मांड की क्रमबद्ध क्रियाओं का अध्ययन हमें 'स्पंदन' की अर्थगर्भित संरचना को समझने में सहायक होता है। स्पंदन सूक्ष्म कणों से लेकर विराट ब्रह्मांड तक व्याप्त है और जीवन के प्रत्येक पहलू को प्रभावित करता है, क्योंकि प्रत्येक क्रिया में एक अनिवार्य लय एवं ताल निहित होती है। यह सामंजस्य केवल भौतिक रूप में ही नहीं, बल्कि मानसिक, भावनात्मक और आध्यात्मिक स्तरों पर भी स्पष्ट होता है। जैसे हृदय की धड़कन जीवन को गति देती है, वैसे ही ब्रह्मांड की गत्यात्मक प्रक्रियाएँ जीवों को सूक्ष्म ऊर्जा से जोड़ती हैं। इस व्यवस्था में परिवर्तन और स्थिरता का संतुलन सृष्टि को जीवंत बनाए रखता है। इसलिए, इन गतिशीलताओं का अध्ययन वैज्ञानिक जिज्ञासा के साथ-साथ आत्मा की गहन समझ और अनुभव

का भी मार्ग है, जो हमें अपने अस्तित्व के सूक्ष्म संबंधों और सार्वभौमिक ऊर्जा से जोड़ता है।

विशेषतः ध्वनि के स्पंदन हमारे मानसिक स्वास्थ्य पर अत्यंत प्रभावशाली होते हैं। मधुर संगीत, मंत्र और प्रकृति की सौम्य आवाजें मस्तिष्क को शांति प्रदान कर तनाव, चिंता और अवसाद को दूर करती हैं, वहीं तीव्र, अनियंत्रित या कर्कश ध्वनियाँ मानसिक बेचैनी, झुंझलाहट और अनिद्रा जैसी समस्याएँ उत्पन्न कर सकती हैं। जब हमारे भीतर का यह आंतरिक स्पंदन सामंजस्यपूर्ण और संतुलित होता है, तब मन में शांति, स्पष्टता और समरसता का भाव जागृत होता है परंतु यदि यह स्पंदन विक्षिप्त या असंतुलित हो जाए, तो मानसिक तनाव, अस्थिरता और व्यवहारिक उलझनों की स्थितियाँ उत्पन्न होती हैं। इसके अलावा, स्पंदन का प्रभाव केवल मानसिक स्वास्थ्य तक ही सीमित नहीं रह जाता, बल्कि शारीरिक स्वास्थ्य पर भी यह प्रत्यक्ष प्रभाव डालता है, जैसे हृदयागति, रक्तचाप तथा तंत्रिका तंत्र की कार्यप्रणाली भी प्रभावित होती है। भावनात्मक स्तर पर यह हमारे विचारों, भावनाओं और सामाजिक संबंधों को प्रभावित करता है, जबकि आध्यात्मिक स्तर पर यह आध्यात्मिक अनुभूति के उच्चतर आयामों तक पहुँचने में सहायक सिद्ध होता है। योग, ध्यान, प्राणायाम जैसे अभ्यास इस सूक्ष्म आंतरिक स्पंदन को नियंत्रित और संतुलित कर व्यक्ति को मानसिक स्थिरता, आंतरिक शांति और आध्यात्मिक उन्नति की ओर ले जाते हैं। अतः मनोवैज्ञानिक एवं आध्यात्मिक दोनों दृष्टिकोणों से स्पंदन को चेतना और अस्तित्व के मध्य एक जीवंत सेतु माना जाता है, जो हमारे संपूर्ण व्यक्तित्व, स्वास्थ्य और जीवन के स्वरूप को परिपूर्णता प्रदान करता है।





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Established by U.P. Act No. 22 of 2013 of U. P. Government  
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