

**DEPARTMENT OF APPLIED  
SCIENCES**

**COLUMBUS**

# MESSAGE FROM PRINCIPAL



**It gives me great pleasure to give my best wishes to the editorial committee of the Department of Applied Sciences, New Horizon College of Engineering. The students and faculty of the department are always enthusiastic learners and great thinkers embarking and enriching their knowledge to grow as our future entrepreneurs and be our future pillars of strength. I congratulate all the achievers, contributors and students for bringing out such a captivating newsletter. May this newsletter instill the best in you.**

**Regards, Dr. Manjunatha**

# MESSAGE FROM HOD

**DR. ANUSUYA DEVI V.S  
PROF. & HOD – APPLIED  
SCIENCES**



**I am delighted to share our collective achievements in this newsletter, highlighting the remarkable efforts of both our students and teachers. To our dedicated faculty members, Your commitment to excellence in teaching and research has been the cornerstone of our success. Your passion for the subject and tireless efforts to inspire and guide our students do not go unnoticed. Thank you for your invaluable contributions to our department. To our outstanding students, Your achievements this year have been truly impressive. Your curiosity, hard work, and commitment to academic excellence have set a standard for others to follow. We are proud of your accomplishments and look forward to witnessing your continued success in the future. As we celebrate these achievements, let us also acknowledge the collaborative spirit that defines our department. Together, we create an environment where excellence thrives. Thank you all for your dedication and contributions.**

# ABOUT THE DEPARTMENT

**Department of Applied Sciences was started in the year 2001. As a fundamental department, supporting all branches in 1st year of engineering,**

**laying emphasis on Basics of Sciences and Engineering Sciences along with Humanities.**

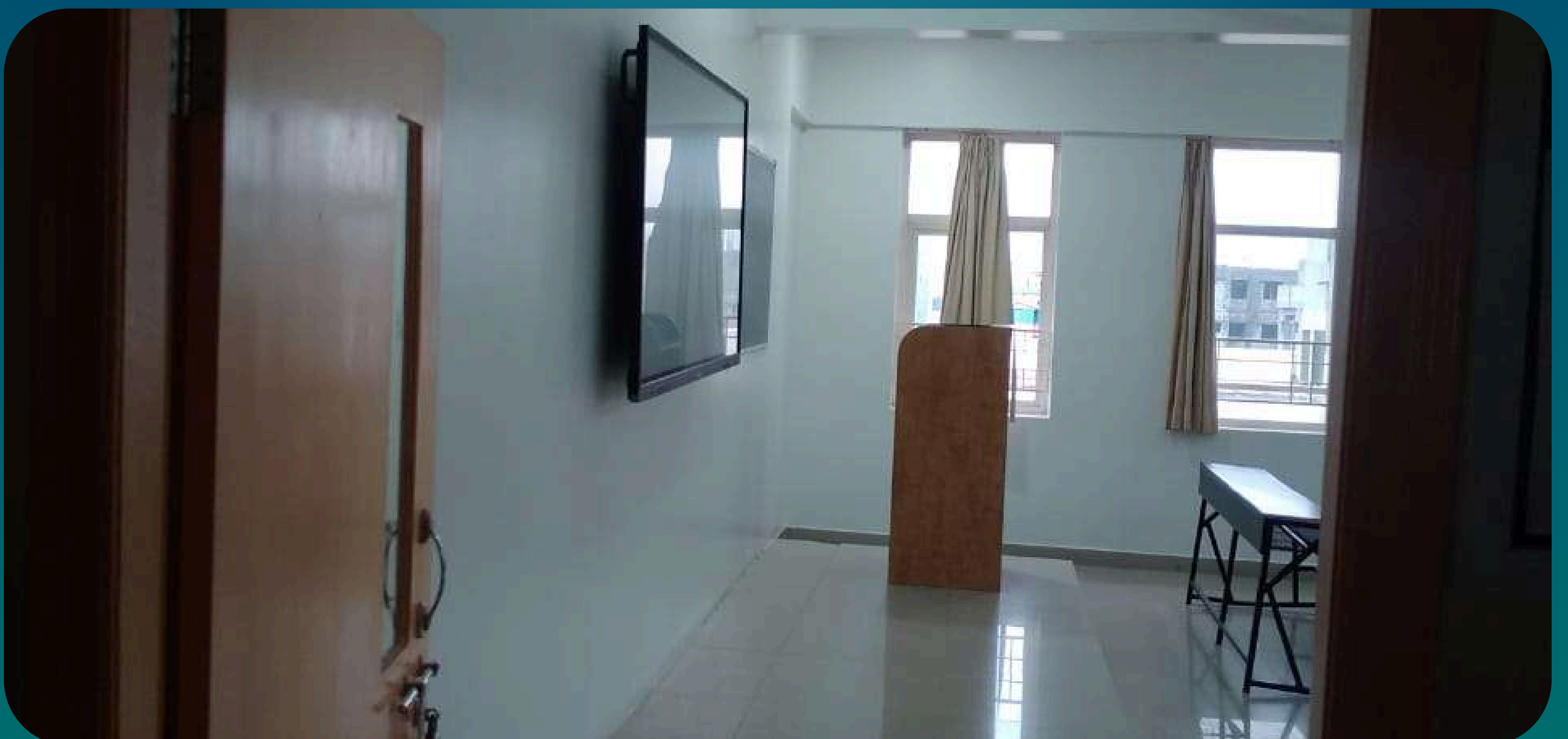


**Furthermore, it deals with applications of Basic Sciences in engineering discipline covering all the major domains of technology. Applied Sciences Department has many dedicated Professors, Associate Professors and Assistant Professors, who are actively involved in research activities. Their experiential insights of research are also reflected in classroom teaching.**



**Numerous research publications in leading National and International Journals have been produced to the credit of department. The department has well-equipped laboratories for Physics, Chemistry, CAED and Programming. The Department stands tall in developing scientific temperament among the budding engineers along with required elements of Humanities**

**f**



## **| VISION**

To build strong and sustainable platform for churning out quality students bearing appreciable conceptual knowledge and engineering mindsets to their respective branch department(s).

## **| MISSION**

→ To develop and nurture dedicated teaching-learning team equipped with strong personality traits towards application driven approach, encompassing all stakeholders.

## **| QUALITY POLICY**

To provide education services of the highest quality both curricular and co-curricular so that our students can integrate skills and serve industry and society equally well at the Global level.

## **| GOAL**

To set academic and allied environments amongst First year BE students for channeling their personalities towards their parent branches.



# **STUDENT INDUCTION PROGRAM**



 **Student Induction Program 2024-25**

**Department of Applied Sciences - NHCE**

**The Department of Applied Sciences successfully organized the three-week Student Induction Program (SIP) for first-year B.E. students of the 2024-25 batch. The program, aligned with AICTE & VTU guidelines, aimed to ensure a smooth transition for freshers into college life through academic, cultural, and personal growth activities.**



## MODULE 1 - UNIVERSAL

### HUMAN VALUES (UHV):

**Sessions on compassion, empathy, and harmony guided students toward building responsible and value-driven lives. A motivational talk by Mrs. Sandeepa Guntreddy inspired students to embrace confidence, vision, and responsibility.**



## MODULE 2 - PHYSICAL ACTIVITY:

**Students actively participated in sports including cricket, volleyball, tennis, chess, and badminton, while also being introduced to NCC opportunities.**



## MODULE 3 - ORIENTATION & FAMILIARIZATION:

**The Principal, Dean Academics, Sr. Director CDC, HOD and faculty addressed students on academic excellence, teamwork, and life skills. A Library Orientation Program familiarized students with rich academic resources.**



## MODULE 4 - LOCAL VISIT:

**A one-day trip to the Isha Foundation,  
Chikkaballapur exposed students to yoga,  
meditation, and mindfulness practices.**



## MODULE 5 - EMINENT TALKS:

- **Guest Talk on Innovation encouraged creative problem-solving.**
- **Constitution Day Special Talk by Mr. M.G. Kodandaram (IRS Retd.) on Moving Towards Innovative India.**
- **Expert Talk on Sensors in IoT by Mr. Anush G.R. highlighted real-world applications.**



## MODULE 6 & 7 - PROFICIENCY &

### LITERARY ACTIVITIES:

**Over 1,200 students engaged in TEDx talk screenings, storytelling, extempore, group discussions, and impromptu speaking to strengthen LSRW (Listening, Speaking, Reading, Writing) skills.**



## MODULE 8 - CREATIVE PRACTICES:

**Students participated in SARGAM 2024, a national-level cultural fest themed BHARAT, with 10,000 participants from 365 colleges.**

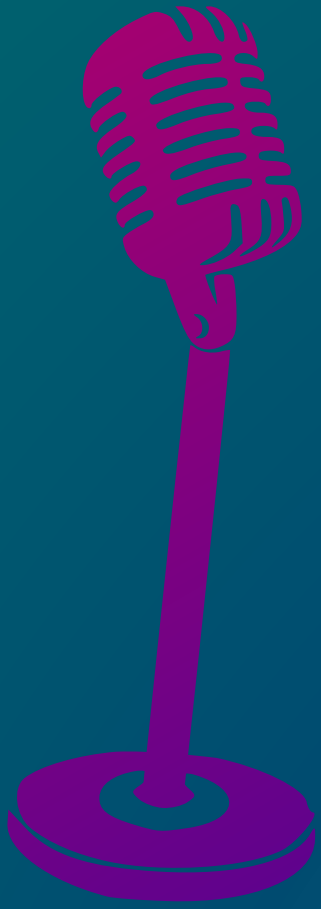
**Additionally, a Mentorship Program was**

**launched for first-year students.**



## MODULE 9 - EXTRACURRICULAR

### ACTIVITIES:



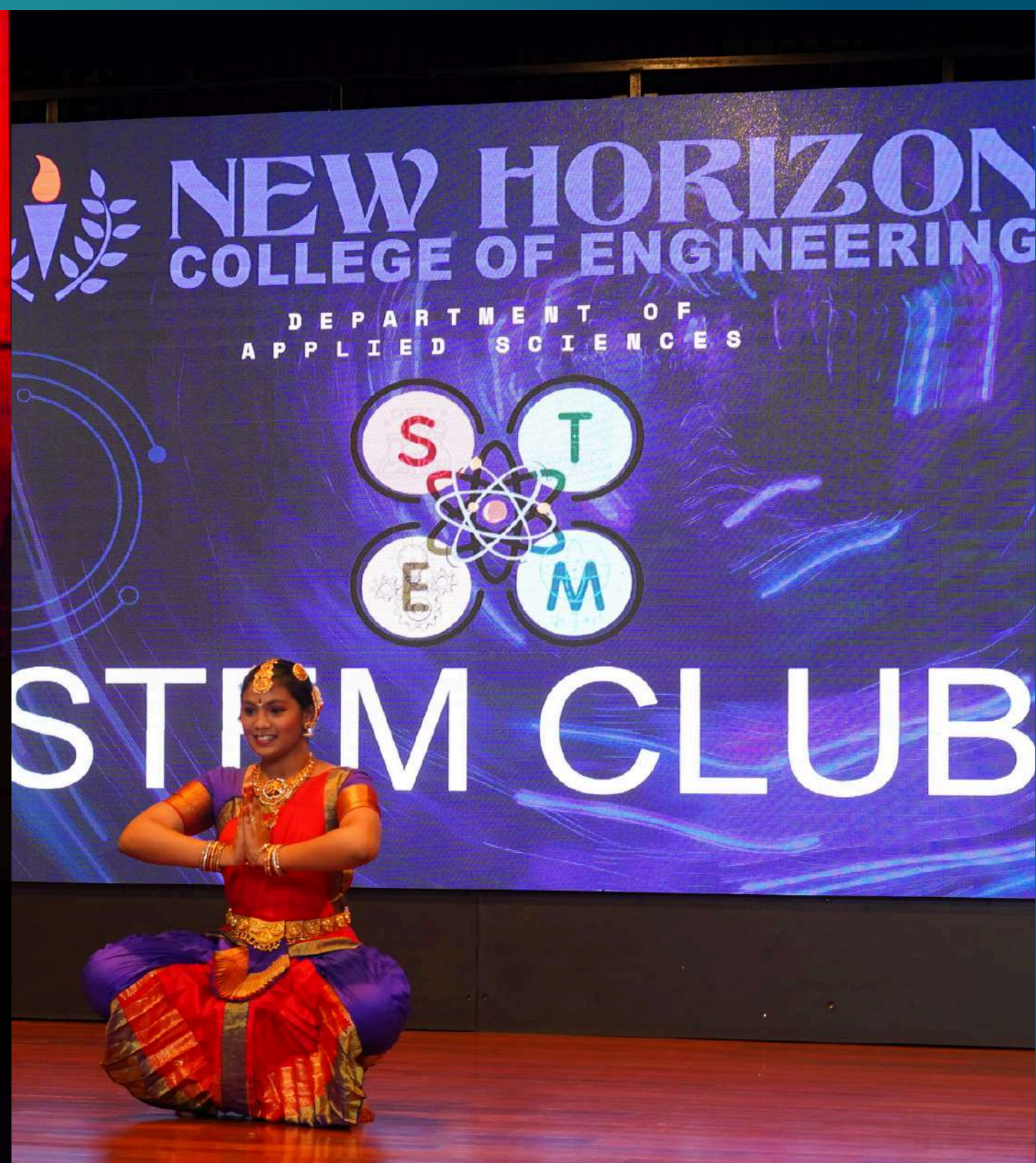
- **Toastmasters Open House introduced students to communication and leadership training.**
- **Club Investiture Ceremony empowered STEM club representatives.**
- **Talent Hunt & Cultural Performances showcased freshers' creativity.**





# **TALENT HUNT 2024 - STEM CLUB**

**The STEM Club at NHCE organized a vibrant Talent Hunt for first-year students on 7th October 2024, providing a platform for freshers to showcase their creativity and build connections. The event began with an introduction to the club's vision and activities, followed by an inspiring address from Dr. Anusuya Devi, HOD of Applied Sciences, who encouraged students to actively participate in extracurricular pursuits.**



**The highlight of the day was the array of performances, where enthusiastic singers and dancers captivated the audience with their talent and energy. The lively atmosphere kept everyone engaged, making the event a memorable experience. The club also recognized the contributions of the 2023-24 batch, presenting them with appreciation certificates.**





# **THE STEM CLUB**

## **vision**

**To cultivate a dynamic space for aspiring engineers and scientists to innovate, collaborate, and be creative.**

## **objective**

**Skill development - To promote the development of soft skills like teamwork, problem-solving, and critical thinking alongside technical skills.**

- Hosting innovative challenges - encouraging students to develop solutions to real-world problems and showcase their skills.**
- To be a Launchpad for students - propelling students into the endless field of STEM.**

## **functions**



- **Creating an interactive and inclusive platform that allows students to showcase their technical skills, creativity, and entrepreneurial mindset.**
- **Organizing interactive lectures, seminars, and panel discussions with the faculty of NHCE and guests.**
- **Organizing exhibitions, workshops, and talent hunts allowing students to discover and explore their skills.**
- **Commemorating and celebrating days that are of high importance in the field of STEM**

## **outcomes**



- Increased interest in STEM - Encouraging members to develop a greater interest in STEM and fostering a passion for scientific inquiry.**
- To promote collaboration - Fostering collaboration and teamwork among students allowing them to exchange their knowledge and ideas.**

# INVESTITURE

# CEREMONY



A graphic of a light blue folder with two white tabs, set against a dark teal background. The folder is slightly open, showing a darker teal interior. The text is centered on the front of the folder.

**STEM CLUB**

**EVENTS**

# **E-Wasted**

## **Round 1: Ideathon**

**Teams brainstormed and presented innovative solutions to e-waste problems, kickstarting the event with critical thinking and collaboration.**

## **Round 2: Trash Hunt**

**A high-energy scavenger hunt had participants solving clues and collecting hidden e-waste items across campus. The top six teams qualified for the final round.**



## **Round 3: Trash to Treasure Exhibition**

**On Day 2, finalists bid for extra materials and repurposed e-waste into impressive creations. Their work was showcased and judged, with top teams awarded for creativity and execution.**

**The event concluded with Dr. Anusuya Devi, HOD of Applied Sciences, emphasizing the importance of sustainable practices. As a lasting memory, participants left their thumb impressions on a commemorative sheet, symbolizing their shared commitment to a greener future.**



# Traffic 360

## **A Thrilling Drive Toward Traffic Awareness**

**The Traffic 360 event was a resounding success, blending traffic awareness with team-building through three interactive and high-energy rounds. Teams of two enthusiastically participated, showcasing their knowledge, coordination, and communication skills.**

### **Round 1: Traffic Trivia**

**Participants faced off in a fast-paced quiz on traffic rules and road safety. The audience stayed engaged as teams raced to answer questions correctly, emphasising the importance of traffic knowledge.**



## **Round 2: Red Light, Green Light**

**This round brought fun and focus as one teammate guided their blind-walking partner using colored signals to dodge obstacles. It was a true test of trust, quick thinking, and teamwork.**



## **Round 3: Final Destination**

**In the finale, blindfolded participants navigated a traffic-themed obstacle course with only their partner's voice as a guide. Communication was key in this thrilling end to the competition.**



**Traffic 360 not only educated participants on traffic safety but also strengthened their collaboration skills, leaving everyone with valuable lessons-and great memories.**





# **Road Safety & Traffic Awareness Program**

**Held at Falconry Hall, the Road Safety and Traffic Awareness Program drew active participation from students, aiming to educate them on essential road safety practices and traffic regulations.**

## **Key Speakers:**

- **Mr. Sagayaraj C, Divisional In-charge, Whitefield Division**
- **Mr. Virendra Kumar, Divisional In-charge, Whitefield Division**
- **Mr. Linganagouda Shivalli, Zonal In-charge, HAL Zone**
- **(All from TWO, Bangalore City Police)**

**Each speaker shared valuable insights on road safety, responsible driving, and traffic law enforcement. Their sessions emphasized the real-world consequences of negligence and the importance of compliance with traffic rules.**

**The event concluded with an interactive Q&A, where students engaged directly with the officers, clarifying doubts and gaining a deeper understanding of road safety.**

**The program was a resounding success, leaving students more informed and committed to safer road behavior.**



# NEW HORIZON COLLEGE OF ENGINEERING



# Nexus 2025



**On January 6th, 2025, the STEM Club brought math to life with Nexus, a high-energy event celebrating Mathematics Day through games, laughter, and teamwork—proving that math can be fun for everyone!**



## **Event Highlights:**

- Housie/Bingo: A lively ice-breaker where participants marked numbers and cheered each win—setting the tone for a joyful day.**
- 10-Second Riddles: Quick brain-teasers kept participants on their toes, solving fun riddles against the clock.**

- **DMs (Dance & Math): A creative mix of dancing and simple math challenges had everyone moving, solving, and smiling—the crowd favorite!**

### **A Celebration for All**

**Nexus was inclusive and engaging, encouraging teamwork and participation from all students, even those not usually fond of math. The spirit of collaboration and fun filled the room.**

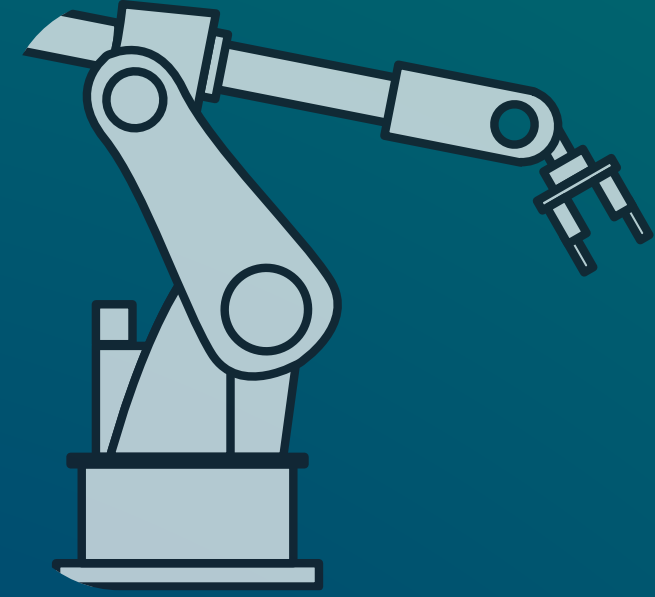
### **Wrapping Up**

**The event ended with cheers and applause for the organizers and participants. Nexus turned math into a celebration and created lasting memories—undoubtedly one of the most enjoyable events of the year!**





# **Robo Genesis 2025**



**On January 13th, 2025, the Departments of Applied Sciences and Mechanical Engineering jointly hosted “Robo Genesis: Exploring the Future of Robotics”, a vibrant exhibition that showcased the creativity and innovation of first-semester Physics Cycle students.**

## **Innovation in Action**

**The event featured a wide range of student-built robotic models, integrating mechanics, electronics, and programming. It provided a platform for students to apply classroom concepts to real-world challenges, highlighting their problem-solving skills, teamwork, and practical understanding of robotics.**

## **Guest of Honor**

**The event was graced by Mr. Narasimha Naidu, CEO and Founder of STEMX Innovative Studio for Kids. His inspiring interaction with students and words of encouragement motivated them to explore further in the field of robotics and STEM.**

## **Impact**

**Robo Genesis was more than just an exhibition—it was a celebration of curiosity, creativity, and collaboration. The event successfully bridged theory and practice while sparking a passion for robotics and automation among the participants.**

**The departments aim to continue nurturing young innovators through more such experiential learning events in the future.**





**WORKSHOPS AND  
SEMINARS**

# **MODERN BATTERY TECHNOLOGY**

**The Department of Applied Sciences had organized a guest talk on 19/12/2024. The Guest speaker for the session was Dr. Ramesh TN, Associate Professor, University College of Science, Tumkur University, Tumkur. The speaker highlighted the importance of modern batteries in various applications, from portable electronics to large-scale energy storage. While lithium-ion batteries currently dominate the market, innovations such as solid-state and sodium-ion batteries show promise for safer, more sustainable, and cost-effective solutions. However, challenges related to cost, recycling, and supply chain sustainability remain significant hurdles. The students were inspired by the topic and encouraged to pursue research in their future studies.**



# **CRITICAL THINKING AND INNOVATION**

**The Department of Applied Sciences organized a guest lecture on “Critical Thinking and Innovation” for first-year B.E. students on 26th September 2024. The speaker Mr. Dhiraj A Rao, Managing Director of AANS**

**Technologies stressed the concept of critical thinking and various thought processes, urging students to think beyond traditional boundaries. He stressed the distinction between critical thinking and simply depending on textbook knowledge, highlighting how creative thinking sets individuals apart. The session featured engaging videos on critical thinking and smarter problem-solving strategies, with the speaker keeping the audience captivated through humor and interactive puzzles.**

# SENSORS IN IOT



**The Department of Applied Sciences organized a guest talk on “Sensors in IoT” for first-semester students on October 23, 2024. The session was led by Mr. Anush G R, Head Architect (Hybrid Solution) at Frontier Business Systems.**



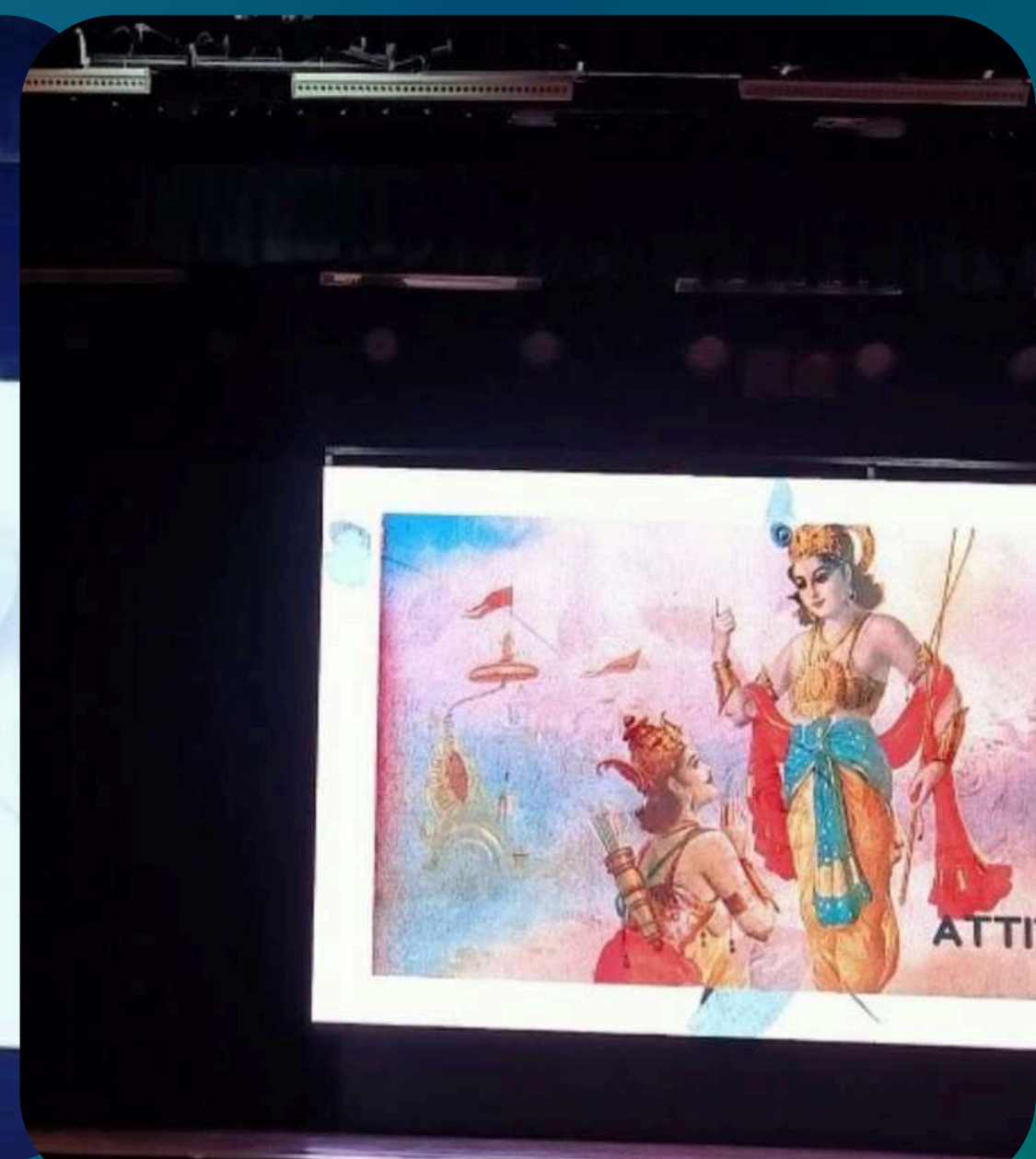
**Mr. Anush discussed real-world applications of IoT, showcasing how sensors are revolutionizing data collection, cloud-based data transfer, and processing across various sectors. He highlighted IoT's transformative impact on smart homes, healthcare, agriculture, and industry, demonstrating how it enhances efficiency, responsiveness, and intelligence in these domains.**



**VISION  
VALUE &  
VICTORY**

**The Department of Applied Sciences organized an inspiring talk on “Universal Human Values” for first-year B.E. students on 26th September 2024.**

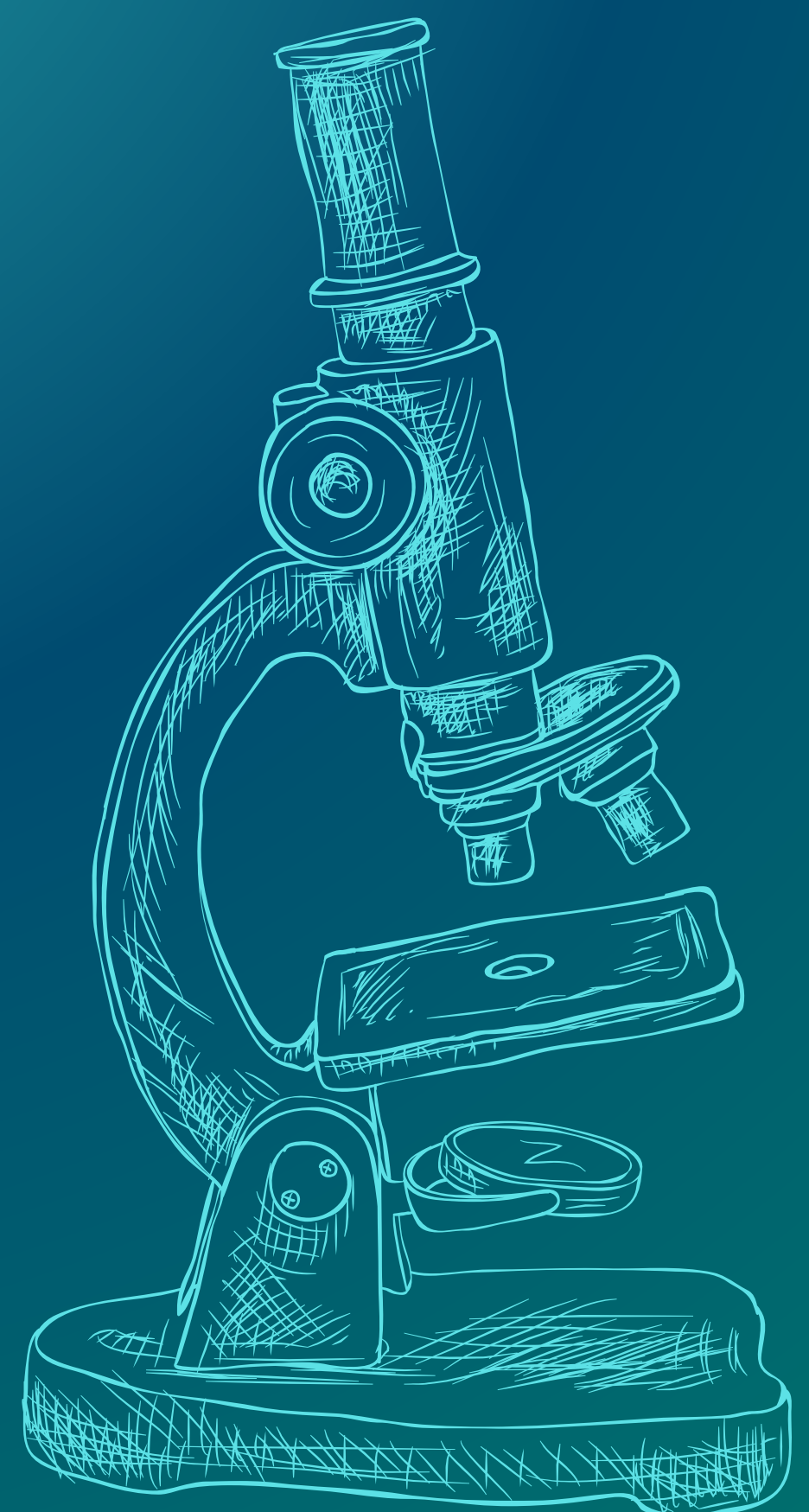
**The session was led by author and life coach Mrs. Sandeepa Guntreddy, who shared insightful perspectives on Vision, Values, and Victory, aimed at helping students develop confidence and a sense of responsibility. The talk provided valuable guidance for students to navigate life’s challenges effectively. A key highlight of the session was the excellent interaction and engagement from the students.**

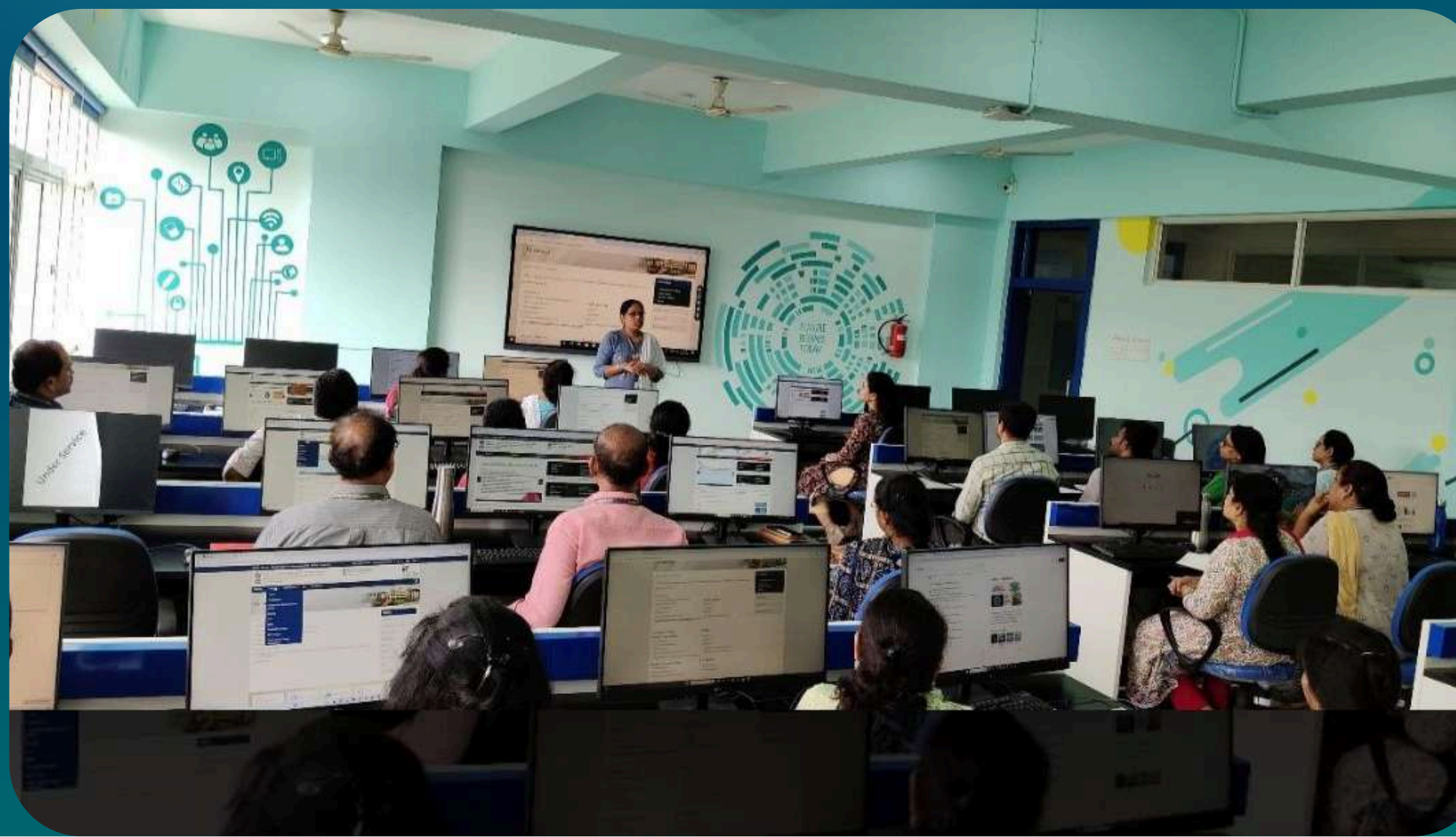
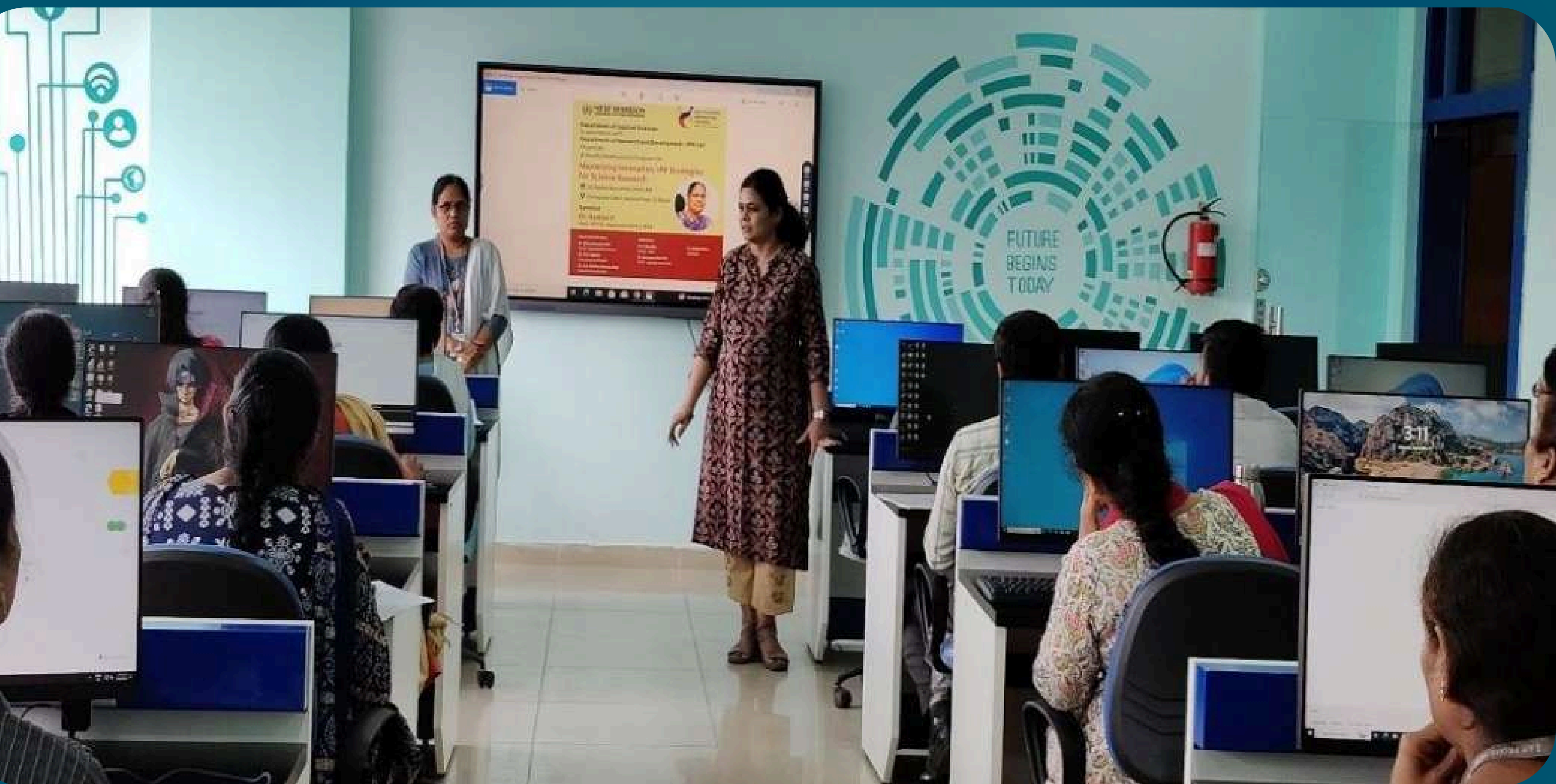


# **FDP-MAXIMIZING INNOVATION: IPR STRATEGIES FOR SCIENTIFIC RESEARCH**

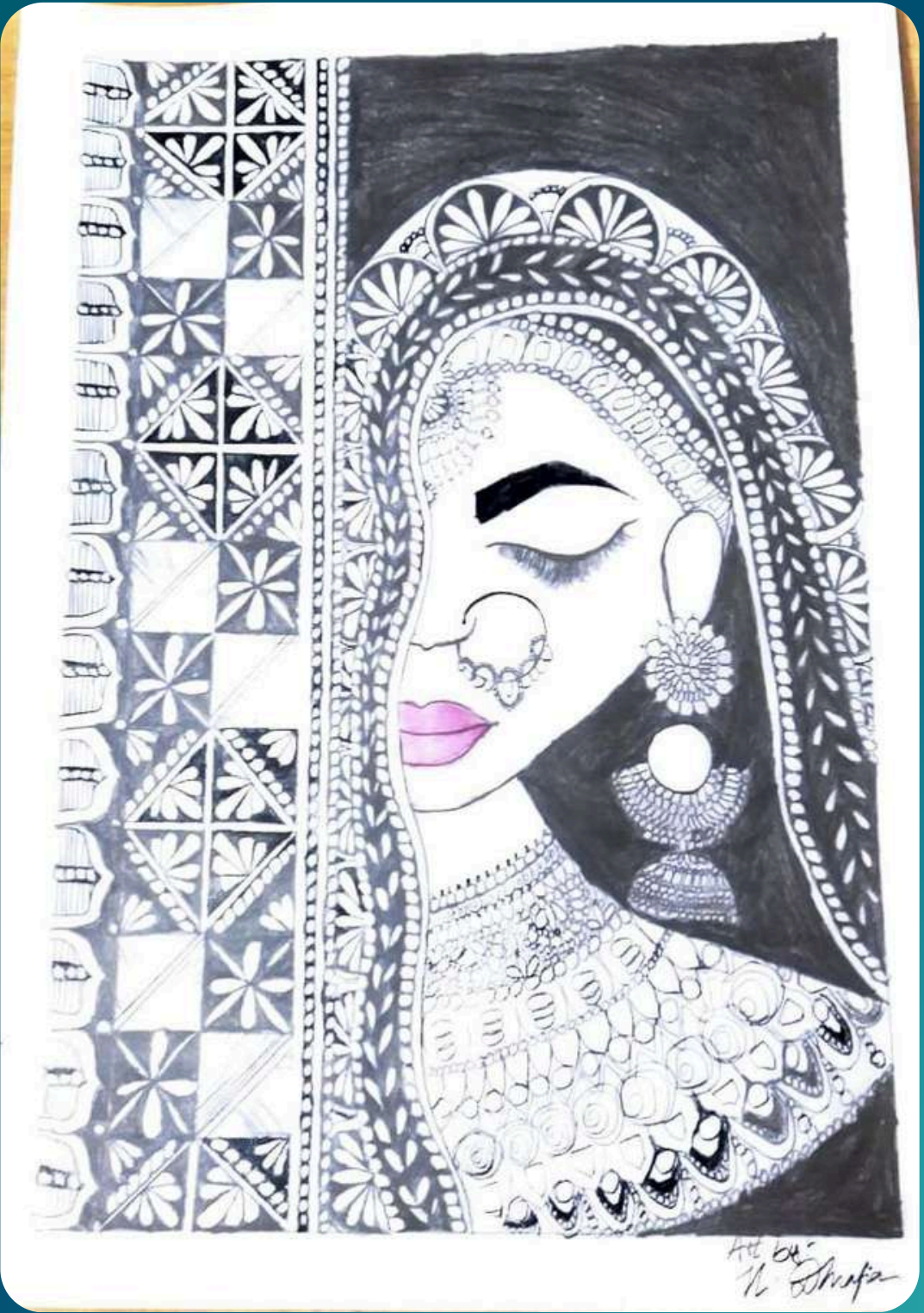
**The Department of Applied Sciences,  
in collaboration with the Department  
of Research and Development and the  
IIC Cell, organized a Faculty  
Development Program (FDP) on  
“Maximizing Innovation: IPR  
Strategies  
for Scientific Research” on 2/09/ 2024.**

**Dr. Agalya V, Head of the IPR Cell,  
conducted a session on patent  
searching and drafting for the faculty  
members. The session was highly  
informative, providing valuable  
insights into innovation and the  
process of filing patents for their  
research contributions**





# HORIZONITE'S HIVE



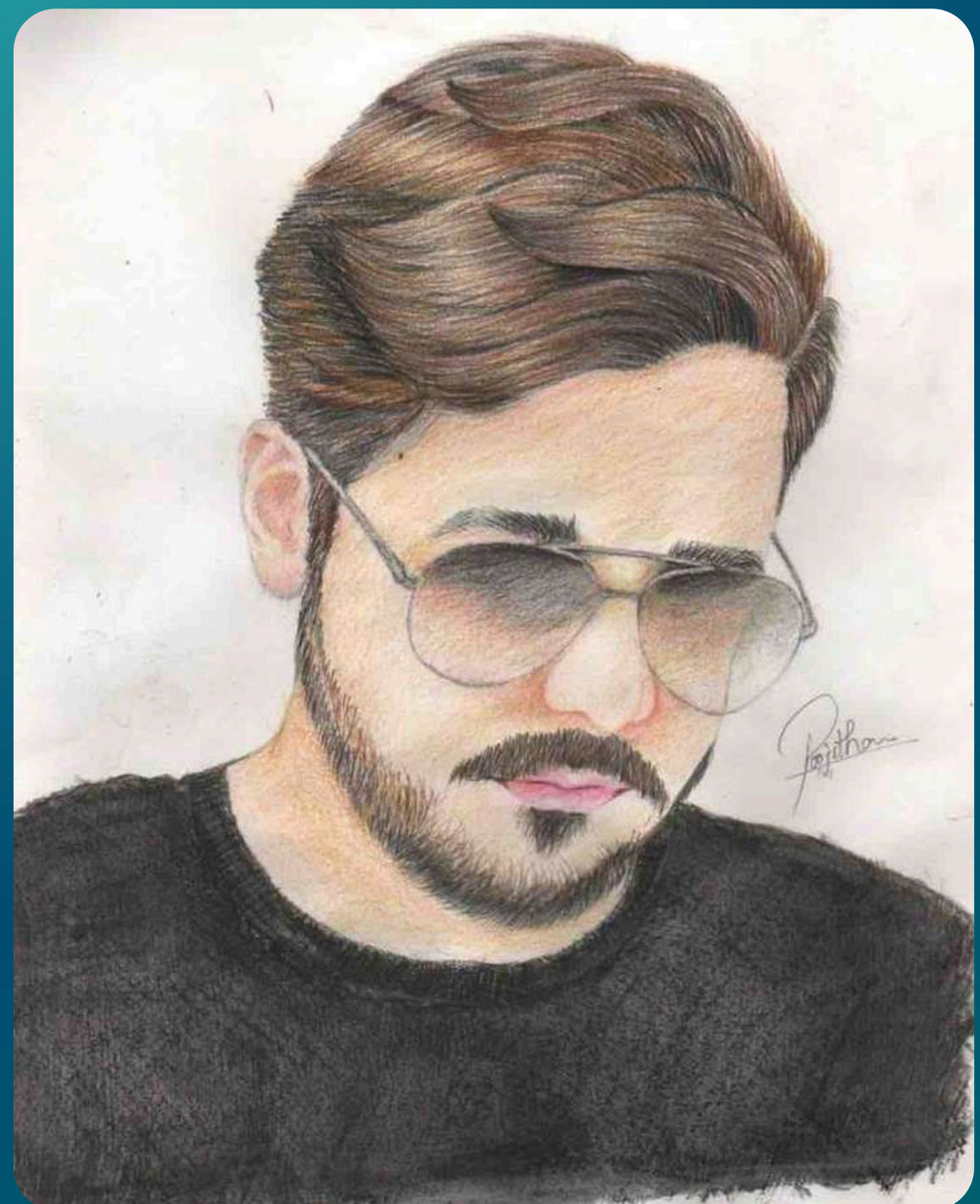
**Hussain Gari**  
**CSE G Sectioni**



**Hussain Gari**  
**CSE G Sectioni**



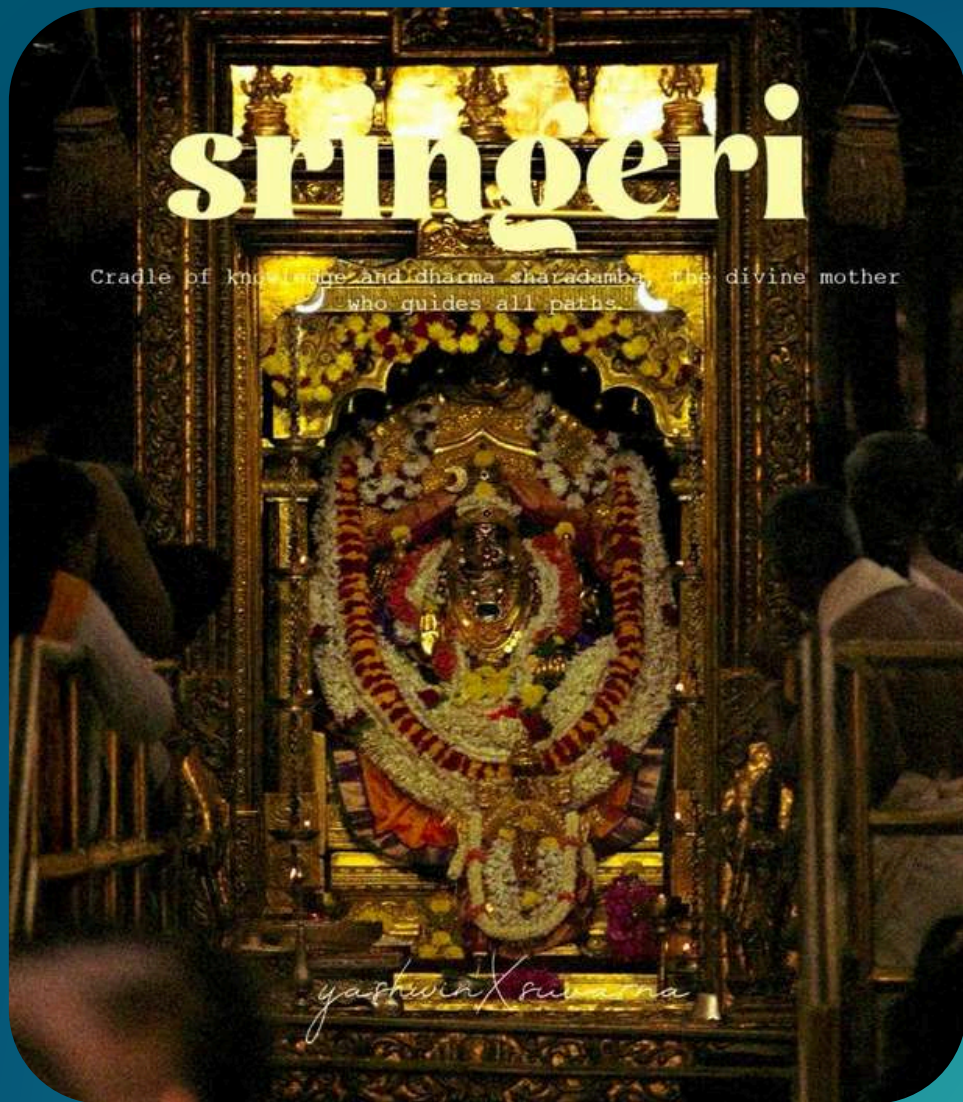
**Deepak DK**  
**ECE Q Section**



**Poojitha Subramanyam**  
**CSE E Section**



# HORIZONITE'S HIVE



**Yashwin**  
**CSE H Section**



**Yashwin**  
**CSE H Section**

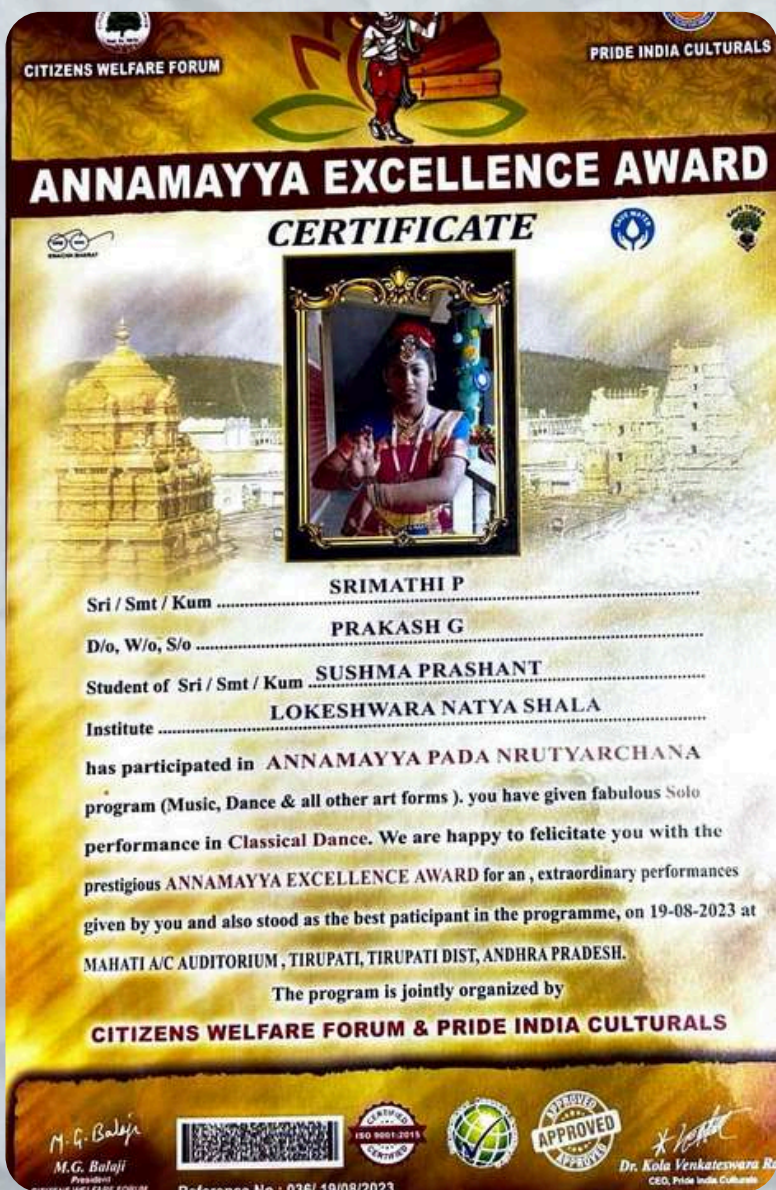


**Darshan DK**  
**CSE B Section**



**Darshan DK**  
**CSE B Section**

# STUDENTS ACHIEVEMENTS



**Srimati P**  
**CSE G Section**

# STUDENTS ACHIEVEMENTS

*The Measure of*

**BAVNEET SINGH CHHABRA**

DELHI PUBLIC SCHOOL, DHANBAD, JHARKHAND

Student of Class 8th has participated and acquired 12th position in the  
class, secured 63 state rank and achieved 2,191 Olympiad rank  
obtaining 34.0432 Marks/100.



DIRECTOR

**International Social Studies Olympiad 2019**

Organized by

**SilverZone Olympiads**

Presented by SilverZone, New Delhi, India

B-2, Ansal Chamber - 2, Bhikaji Cama Place, New Delhi- 110066



**Bavneet  
Singh  
CSE B  
Section**



## **EDITORIAL TEAM :)**

**SNIGDHA**

**LALITHA**

**DRISHYA**

**SOUMYA**



# THANK YOU



mail, postage extra  
n's Silk Hat, \$5.00  
Men's Very Quality  
prevailing price \$5.00

