



# Reflection NEWSLETTER

2024

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### **LETTER FROM THE EDITOR**

It is our privilege to present the October–December 2024 issue of Reflection. This quarter has been marked by remarkable achievements, innovative research, and dynamic student and faculty activities across Ramdeobaba University.

Our faculty excelled in national and international conferences, published impactful research papers, and secured prestigious placements. Notably, several patents and copyrights were filed and granted during this period, underscoring the university's growing culture of innovation and intellectual property creation. Departments also organized training programs, workshops, industrial visits, and guest lectures, providing enriching learning experiences beyond the classroom.

We extend heartfelt appreciation to all contributors for their efforts in making this compilation possible. May this issue continue to inspire our community to aim higher and set new benchmarks of excellence.

Warm regards, Editorial Team

### **RCOEM-TATA-CIIIT**

### (Center for Invention Innovation Incubation & Training)

### [A] Training Programs:

1] One day training program on "Solid Modeling 3D Printing & Scanning and Internet of Things (IoT)" was conducted from 15<sup>th</sup> to 18<sup>th</sup> October 2024 for students of Bhavan's Vidya Mandir School, Trimurti Nagar, Nagpur from 10.30 am –5.30 pm, held at RCOEM-TATA-CIIIT. A total 156 students participated and was coordinated by Dr. Alok Jha, Dr. Himanshu Shukla for the solid modeling 3D printing and Dr. Bhumika Neole, Dr. Chitrajan Rajan, Prof. Lokesh Heda, Prof. Shruti Nair, Prof. Snehal Laddha, Prof. Anjankar for IoT and hands-on session by Mr. Shrikant Wankhede and Mr. Umendra Mukurane.













**2] One day training** program on "Solid Modeling 3D Printing & Scanning and Internet of Things (IoT)" was conducted on **22**<sup>nd</sup> October 2024 for students of Bhavan's Vidya Mandir School, Trimurti Nagar, Nagpur from 10.30 am –5.30 pm, held at RCOEM-TATA-CIIIT. A total **11** students participated and was coordinated by Dr. Alok Jha, Dr. Himanshu Shukla for the solid modeling 3D printing and Dr. Bhumika Neole for IoT and hands-on session by Mr. Shrikant Wankhede and Mr. Umendra Mukurane.













3] One Month training program on "Internet of Things (IoT) & Industry 4.0" was conducted from 20<sup>th</sup> September to 26<sup>th</sup> October 2024 for students of the Mechanical Engineering department of Shri Ramdeobaba College of Engineering & Management, Nagpur, from 2.00 pm to 6.00 pm, held at RCOEM-TATA-CIIIT. A total of 22 students participated, and training was given by Mr. Manish Maurya, Director & Technical Head, Makxenia Engineering Resource Pvt Ltd. and Technical Assistant Mr. Umendra Mukurane.







**4] One day training** program on "Artificial Intelligence & Machine Learning (AIML)" was conducted from **27th & 28th November 2024** for students of **Bhavan's Vidya Mandir School, Koradi, Nagpur** from 10.30 am –5.30 pm, held at Digital Tower in association with the RCOEM-TATA-CIIIT. A total 79 students participated, which was coordinated by Dr. Amit Pimpalkar for the Artificial Intelligence and Machine Learning and **Dr. Nisarg Gandhewar** has demonstrated and support staff, Mr. Rahul Srivas. The event was conducted by Dr. Y.M. Sonkhaskar and Dr. Nisarg Gandhewar, **Dr. Amit Pimpalkar.** 4-5 students gave encouraging feedback about the course.







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5] One day training program on "Solid Modeling 3D Printing & Scanning and Internet of Things (IoT)" was conducted on 09th December 2024 for students of Bhavan's Vidya Mandir School, Srikrishna Nagar, Nagpur from 10.30 am –5.30 pm, held at RCOEM-TATA-CIIIT. A total 21 students participated and was coordinated by Dr. Alok Jha, Dr. Himanshu Shukla for the solid modeling 3D printing and Dr. Chithraja Rajan for the IoT and hands-on session by Mr. Shrikant Wankhede and Mr. Umendra Mukurane.













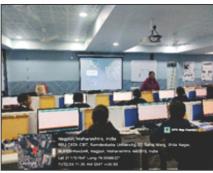
6] One day training program on "Solid Modeling 3D Printing & Scanning and Internet of Things (IoT)" was conducted on 11th, 17th, 18th, 23rd, 24th December 2024 and 2nd January 2025 for students of Bhavan's Vidya Mandir School, Srikrishna Nagar, Nagpur from 10.30 am –5.30 pm, held at RCOEM-TATA-CIIIT. A total 212 students participated and was coordinated by Dr. Alok Jha, Dr. Himanshu Shukla for the solid modeling 3D printing and Dr. Chithraja Rajan, Dr. Bhumika Neole, Dr. Shruti Nair for the IoT and hands-on session by Mr. Shrikant Wankhede and Mr. Umendra Mukurane.













7] One day training program on "Artificial Intelligence & Machine Learning (AIML)" was conducted from 27<sup>th</sup> & 23<sup>rd</sup> December 2024 for students of Bhavan's Vidya Mandir School, Ashti, Nagpur from 10.30 am –5.30 pm, held at Digital Tower in association with the RCOEM-TATA-CIIIT. A total 42 students participated, which was coordinated by Dr. Amit Pimpalkar for the Artificial Intelligence and Machine Learning and Dr. Nisarg Gandhewar has demonstrated and support staff, Mr. Rahul srivas. The event was conducted by Dr. Y.M. Sonkhaskar and Dr. Nisarg Gandhewar, Dr. Amit Pimpalkar. 4-5 students gave encouraging feedback about the course.







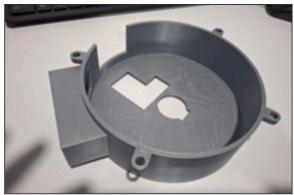
### [B] Consultancy & Project:

- Mr. Yash Agrawal, Mr. Chetan Sonkusre, & Mr. Prajwal Thaware, 4th Year Biomedical Engineering Students, printed 3D parts for the project of the "Decision support system for eye disease recognition" 3D software design model on Oct. 8, 2024.
- Mr. Hardik K. Jagyasi & Team from 2nd Year Mechanical Engineering Students printed 3D parts for the project through 3D software design model on Oct. 10, 2024.
- Mr. Sarvesh Zade from 4th Year EN Dept. Students printed 3D parts for the project using a 3D software design model on Oct. 16, 2024.

- Mr. Aneesh Thakre (Embedded Club Coordinator) from Electronics & Computer Science Engineering Students printed 3D parts for the project of the Techfest (Zonals) Competition Guide Dr. Vishal Rathee Club Incharge using a 3D software design model on Oct. 19, 2024.
- Mr. Om Kamatkar from 2nd Year ECS Dept. Students printed 3D parts for the project of the IIT TechFest Bombay Competition 3D software design model on Oct. 17, 2024.
- Mr. Arjun Singh, Captain, Team Trident Racing, from Mechanical Engineering Students, printed 3D parts for the "Dashboard Printing" 3D software design model on Nov. 06, 2024.
- Mr. Ganesh Moroliya, Ms. Ishita Jaiswal & Team from 4th Year ECE Dept. Students printed 3D parts for the project of the "Pill Dispensing Medicine Assistant" Guidance from Prof. V. S. Lande using 3D software design model on Nov. 13, 2024.
- Mr. Utkarsh Mall from the 1st Year Mechanical Dept. Students printed 3D parts for the project of the "Tesla Coil" using a 3D software design model on Nov. 25, 2024.
- Mr. Ashwajeeth Wase & Team from 4th Year AI Dept. from Priyadarshini J L College of Engineering, Nandanvan, Nagpur, printed 3D parts for the project of the "Weather Station" Guidance from Prof. Sakshi Jaiswal using a 3D software design model on Dec. 17, 2024.
- Mr. Arjun Singh Captain, Team Trident Racing from Mechanical Engineering Students, printed 3D parts for the "Data Acquisition System" with guidance from Dr. A K Jha using a 3D software design model on Dec. 09, 2024.
- Mr. Chaitanya Hadge from 3rd Year Mechanical Engineering Students printed 3D parts for the "Robotics Arm" using a 3D software design model on Dec. 26, 2024.















### [C] Guest Lecture & Lab Utilization:

- Utilization of Design Lab for the project by Shiwanjal Sorte, Aditya Kothiwade and team from 2nd year Mechanical Department on 1st Oct. to 3rd Oct. 2024.
- Utilization Design Lab for the project by shantanu Anantwar, Shloon Nioding, Sanvi Tripathi and team from 2nd year AIML, CSE, ECE Department on 1st Oct. 2024.
- Utilization Design Lab for the project by Ashwin Khobragade, Aditya Kothiwade and team from 2nd year Mechanical Department on 8th-11th Oct. 2024.
- Utilization Design Lab for the project by Manthan Gabrani, Sawroop Jichkar and team from 1st,2nd,3rd year Mechanical Department on 21st, 23rd, 25th Oct. 2024.
- Utilization Design Lab for the project by Sarvesh Nagulwar, Shreya Hiwale from 4th year Industrial Department on 28th Oct. 2024.
- Utilization Design Lab for the project by Rajat Moon from 3rd year Mechanical Department on 6th Nov. 24 and 3rd -4th Dec. 2024.
- Utilization Design Lab for the project by Amogh Reogaonkar Vineet Shah and team from 4th year Mechanical Department on 16th Dec. 2024.
- Utilization on Laser Cutting & Engraving machine for the project by Rishi Pande, Aditya Tiwari and team from RAC Club guide Dr. Alok Jha on 4th Oct 2024.
- Utilization on Laser Cutting & Engraving machine for the project by Harsh Gechode & vaidehi Barve from Design & Development of Biosensors on 8th, 10th, 15th Oct. 2024.
- Utilization on Laser Cutting & Engraving machine for the project by kartikeyan Venkatesh, Advait Deshmukh from Automatic Mobile Robot on 28th Oct & 12th Nov. 2024.
- Utilization on Laser Cutting & Engraving machine for the project by Rishi Pande,
- Utilization of Design Lab for the Solid Modeling on Delmmia & IoT for the 1st Year/1st sem Students of Mechanical Department on 19/10/2024.
- Utilization of IAM center for the Readers's Reverie Literary Club conduct shoot for the episode of reverie's Unplugged podcast at 19th December 2024.

### 4] Visit of Eminent Persons to RCOEM-TATA-CIIIT:



Rahul Naidu from DCS



Schneider Electric GM Mr. Atul Gupta

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### **Guest Visit at TATA CIIIT**













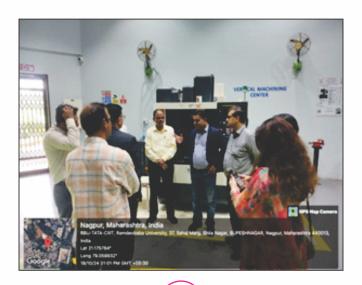
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### **Department of Information Technology**

## Faculty Corner Guest Lectures taken by faculty

- Dr. Purshottam J. Assudani delivered a lecture on "Cloud Architect Career: Must-Know Trends and Technologies in 2024" on 23rd October 2024 for Simplilearn.
- Dr. Purshottam J. Assudani delivered a lecture on "How AWS Solution Architects are Shaping the Future of Cloud Careers in 2025" on 06th November 2024 for Simplilearn.
- Dr. Purshottam J. Assudani delivered a lecture on "From Edge to AI: Cloud Innovations That Are Driving Career Opportunities in 2025" on 26th November 2024 for Simplilearn.
- Dr. Purshottam J. Assudani delivered a lecture on "Decide on Your AWS Path: Pick the Right Certification for 2025" on 10th December 2024 for Simplilearn.

### **Publications**

- Dr. D. S. Adane submitted a research proposal titled "Investigation of causes of obesity in children and development of evidence based preventive guidelines using machine learning" in Indian Council of Social Science Research on 25th October 2024.
- Dr. S. S. Balpande published a Book chapter on "3D printing technology for next-generation energy harvesters" authored by Suresh Balpande, M Junaid Khan and Gajanan Nikhade in 3D Printed Smart Sensors and Energy Harvesting Devices Concepts, fabrication and applications.
- Dr. S. S. Balpande worked as a Reviewer Springer International Journal of Electronic Materials, SCI indexed.
- Dr. R. K. Kadu published a paper titled "Enhancing Agricultural Water Management Through Sensor-Based Irrigation Systems" in Journal of Environmental Protection and Ecology (Vol. 25, Issue 7, pp. 2234–2244), November 2024, Scopus Indexed.
- Dr. Ashish Chandak published a paper titled "Present Situation of Water Quality and the advancement of Technology in Water Pollution Management" in Journal of Environmental Protection and Ecology, December 2024 edition. (Scopus Indexed).
- Dr. Ashish Chandak and Dr Rakesh Kadu presented a paper titled "System Attack Detection using Machine Learning" at 22nd OITS International Conference on Information Technology, December 12-14, 2024, SRM University
- Dr. Rakesh Kadu, Dr. Ashish Chandak and Dr. Purshottam J. Assudani presented a paper titled "Sign Language Recognition by Hand Gesture for Deaf and Speech Impaired Community using ML" at 22nd OITS International Conference on Information Technology, December 12-14, 2024, SRM University
- Dr. Shweta Bondre presented a paper titled "Electronic Health Monitoring System with Live Data Tracking using IoT" at 2nd International Conference on Self Sustainable Artificial Intelligence Systems (ICSSAS), October 23-25, 2024.
- Dr. Shweta Bondre published a Book chapter on "Deep Reinforcement Learning Algorithms: A Comprehensive Overview" with ISBN No. 9781394272587 on 4th October 2024.
- Dr. Shweta Bondre published a Book chapter on "Deep Reinforcement Learning in Robotics and Autonomous Systems" with ISBN No. 9781394272587 on 5th October 2024.



### STTP / FDP / Other Training Attended by Faculty

- Dr. P. D. Adane completed a NPTEL course on "Ethical Hacking" with a score of 90%. She is among top 5% candidates who cleared the exam in the month of July-October 2024 conducted by IIT, Kharagpur.
- Dr. S. S. Balpande completed a One-week Faculty Development Program on Rare earth based novel nanomaterials / materials for various Applications from 9th to 14th December 2024 held at RCOEM, Nagpur.
- Dr. S. Bondre completed One week Faculty Development Program on Artificial Intelligence and Generative Models from 2nd to 6th December 2024 conducted by VIT, Pune.
- Dr. S. Bondre completed One week Faculty Development Program on Introduction to Generative AI
  Models and Applications from 20th to 25th January 2025 conducted by R.V.R. & J.C. College of
  Engineering.
- Prof. J. Nanwani completed One week Faculty Development Program on Artificial Intelligence and Generative Models from 2nd to 6th December 2025 conducted by VIT, Pune.
- Prof. P. Meshram completed One week Faculty Development Program on Generative AI and its Multidomain Use cases from 2nd to 6th December 2025 conducted by VIT, Pune.

### **Departmental Activities**

### **Parents Meet and Events**

• The Parent Teachers meet was organized by the Department of Information Technology on 5th October, 2024 for IV, VI and VIII semester IT. The academic Performance of the students was discussed with the Parents. Dr. S. S. Balpande, Head of the Department took the feedback and suggestions of the parents for overall improvement of the department.

### STTP organized in Department.

• School of CSE conducted a 1-week STTP on the topic "AI on Public Cloud Platforms" from 9th to 13th December 2024. Dr. Urmila Shrawankar and Dr. Purshottam J. Assudani worked as Coordinators for the STTP. The STTP received overwhelming response with more than 1100 participants and the resource persons were industry professionals from India and Abroad.

### **Guest Lectures organized in Department**

S.No.	Conference/STTP/Guest Lecture organised	Speaker (with Affiliation)	Duration	Date
1		, , , <sub>,</sub> ,	02 hours	24 <sup>th</sup> October
	Its Challenges	Pvt. Ltd, Hyderabad		2024

### **Student Achievements**

• Vedant Shirbhate and Samar Jadhav, students of 6th semester IT Won 2nd Prize in Hackverse 5.0 Hackathon held at NIT Surathkal, Karnatak Campus on 11th and 12th January 2025

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### Any other activity (s) **Beyond Academics**

- 75% of 2024-25 Batch eligible IT students got placed through campus drive.
- Top IT companies like D. E. ShawPorter, Nutanix, IBM, Accenture, C&R Software, IBM, VConstruct, Aspect Ratio, Go Comet, Global Logic selected 50 students from the Department.
- 31 students completed Full Time Internship in VIII semester.

The placement details of department for the session 2024-25 are as follows:













































### **Department of Computer Applications**

## **Faculty Corner Publications**

- 1. Prof. Punam Khandar has published a paper titled Novel Classification Approach for Thyroid Detection: Feature Enhanced AdaBoost Optimization with Max Voting in International Journal of Online and Biomedical Engineering, Open Access Volume 20, Issue 14, Pages 71 84, December 2024 (Scopus).
- 2. Prof. Pragati Dubey has published a paper titled An integrated machine learning and genetic algorithm approach for properties prediction of fly ash-based steel fiber- reinforced concrete in Asian Journal of Civil Engineering with ISSN 15630854 Issue Scopus.

### STTP/FDP/other Training Attended by Faculty

- 1. Prof. Aparna Gurjar, Dr. Shubhangi Mohod, Prof.Pragati Dubey and Prof. Bindiya Turkar have attended a STTP on "Generative AI: Tools, Techniques and Applications" from 02-Dec 2024 to 06-Dec 2024 organized by School of Computer Science and Engineering, Ramdeobaba University.
- 2. Dr. Shubhangi Mohod and Prof. Bindiya Turkar have attended a STTP on "AI on Public Cloud Platforms" from 09-Dec 2024 to 13-Dec 2024 organized by School of Computer Science and Engineering, Ramdeobaba University.
- 3. Dr. Sachin Upadhye, Dr. Shubhangi Mohod, Prof.Pragati Dubey, Prof. Bindiya Turkar, Prof. Achal Rokade and Prof. Abhijeet Jaiswal have attended Object Oriented Programming training Program from 6th Dec to 21st Dec 2024 organized by Ramdeobaba University.

### Departmental Activities

### **Parents Meet**

Parents - Teachers meet was conducted by the Department of Computer Applications on 19th October 2024 for MCA Semester-1 students, and 30th November 2024 for BCA Semester-1 students, 11:00 am onward. The main objective of this meet was to get the feedback from parent regarding the teaching learning process being followed by the Computer Application Department, get useful suggestions from them and also convey the ward's academic performance as well as college attendance.



Faculty members interacting with Parent of BCA student



Class teacher and subject teachers interacting with parent of MCA student.

### Conference, STTP and Guest Lectures Organized in Department

An expert session on utility of data in the IT Industry and applications of Amazon Cloud was conducted on 16th November 2024 for MCA and BCA students. Ajinkya Soitkar, 2009 alumni of Department of computer Science and Applications, is a Senior Database Specialist Solutions Architect (SA) based out of Amsterdam, Netherlands. He's currently working with Amazon Web Services and has more than 14+ years of industry experience.



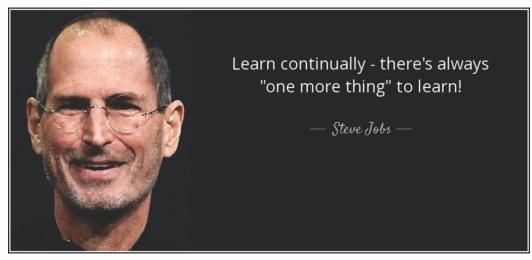
Ajinkya Soitkar delivering an expert lecture on utility of data in the IT Industry and applications of Amazon Cloud



Students' Corner Toppers List

Sr. No.	Second Year	CGPA
1	Mahek Pradeep Amesar (CGPA 10)	10
2	Atisha Fulsingh Chauhan (CGPA 9.75)	9.75
3	Paras Sitaram Bramhankar (CGPA 9.7)	9.70







### **Department of Electronics Engineering**

### **Guest Lectures Taken by Faculty**

- 1. Prof. Snehal V. Laddha has delivered a lecture on "IOT" on Date: 23/07/2024 at CIIIT Nagpur, RBU, Nagpur.
- 2. Prof. Smita Daware has delivered a lecture on "FPGA Architecture: Building Efficient Digital Systems" on Date: 10-09-2024 at S.B. Jain College of Engineering, Nagpur.
- 3. Prof. Snehal V. Laddha has delivered a lecture on "IOT" on Date:17/10/2024 at CIIIT Nagpur, RBU, Nagpur.

### Journal Publications

- 1. Prof. Rahul Dhuture, has published a paper titled "Design and Implementation of an Embedded Edge Processing Water Quality Monitoring System Based on Internet of Things" in INDIAN JOURNAL OF TECHNICAL EDUCATION, with ISSN 0971-3034, Volume 47 l Special Issue l No. 1, Date of Pub.: 01-05-2024 (UGC Care).
- 2. Prof. Rajesh Khobragade, has published a paper titled "Advanced Algorithmic Approaches for Accurate Classification and Statistical Analysis of Brain Tumors: Enhancing Diagnostic Precision, in the Journal of Advances in Nonlinear Variational Inequalities with ISSN: 1092-910X, Vol 27, Issue No. 3 (2024), Date of Pub.: 18/05/2024 (Scopus)
- 3. Prof. Rahul Dhuture, has published a paper titled "Design and Anaysis of Deep Learning frame work for Early Detection of Cancer Disease" in Mukt Shabd Journal, with ISSN: 2347-3150, Volume XIII, Issue VI, Page 304-308, Date of Pub.: 01-06-2024 (UGC Care).
- 4. Prof. Archana Tiwari, has published a paper titled "Quantitative Analysis of Urban Transformation using Remote Sensing Data and Machine Learning Approach" in Communications on Applied Nonliear Analysis, with ISSN: 1074-133X, Volume 31, Issue 25, Date of Pub.: 01-07-2024 (Scopus).
- 5. Prof. Poorvi K Joshi has published a paper titled "Precision Measurement of Tablet Characteristics: A Digital Device Approach" in International Journal of Electrical and Electronics Engineering with ISSN: 2348-8379, Date of Pub.: 24-07-2024 (Scopus).
- 6. Dr. Deepali M. Kotambkar, has published a paper titled "Innovative Insights: A Review of Deep Learning Methods for Enhanced Video Compression" in IEEE Access, with ISSN: 2278-9901, Volume 11, Issue 10, Date of Pub.: 01-09-2024 (Scopus).
- 7. Dr. Vicky Butram has published a paper titled "Improved PID based Adaptive Controllers for Denoising Biomedical Signals" in the International Journal of Electrical and Electronics Research, with ISSN: 2347-470X, Volume 12, Issue 3, Date of Pub.: 20-09-2024 (Scopus).
- 8. Prof. Snehal V. Laddha, Dr. Rohini S. Ochawar, has published a paper titled "Unveiling Precision in Abdominal Organ Segmentation: A Deep Dive into Emerging Deep Learning Paradigms for Single and Multi-Modal Image Segmentation" in SSRG International Journal of Electrical and Electronics Engineering, with ISSN: 2348-8379, Volume 11, Issue 10, Date of Pub.: 01-10-2024, (Scopus).
- 9. Jitendra B. Zalke, Dr. Manish Bhaiyya, Jayu Kalambe, Nitin P. Narkhede, has published a paper titled "A Machine Learning Assisted Non-Enzymatic Electrochemical Biosensor to Detect Urea Based on

Multi-Walled Carbon Nanotube Functionalized with Copper Oxide Micro-Flowers" in Biosensors MDPI Journal (Open Access) with eISSN: 2079-6374, Volume 14, Issue 10, Date of Pub.: 15-10-2024, (SCI)

- 10. Prof. Poorvi K Joshi has published a paper titled "Optimizing Pharmaceutical Tablets: A Comprehensive Analysis of Hardness, Diameter and Thickness" in the International Journal of Engineering Trends and Technology, with ISSN: 2231–5381, Volume 72, Issue 10, Date of Pub.: 24-10-2024 (Scopus).
- 11. Prof. Poorvi K Joshi has published a paper titled "3D Simulation-Based Comparison of Bulk Acoustic Wave FBAR and SMR Technology" in the International Journal of Electrical and Electronics Engineering, with ISSN: 2348-8379, Volume 11 Issue 10, Date of Pub.: 24-10-2024 (Scopus).
- 12. Jitendra B. Zalke has published a paper titled "Cost-effective Chemiresistive Biosensor with MWCNT-ZnO Nanofibers for Early Detection of Tuberculosis (TB) Lipoarabinomannan (LAM) Antigen" in the Journal of Microchim Acta, with ISSN: 0026-3672, Volume 191 Issue 10, Date of Pub.: 29-10-2024 (SCI).
- 13. Prof. Archana Tiwari, has published a paper titled "Connecting the Dots: CubeSat Communication for Emergency Response Services" in International Journal of Electronics and Communication Engineering, with ISSN: 2169-3536, Volume 12, Date of Pub.: 01-11-2024 (SCI).
- 14. Dr. Kanchan Dhote, has published a paper titled "Integrating Homomorphic Encryption with Blockchain Technology for Machine Learning Applications" in Journal of Machine and Computing, with ISSN:2788-7669, (Scopus).
- 15. Prof. Archana Tiwari has published a paper titled "An Intelligent Antenna Synthesis Method Based on Random Forest Machine Learning Model" in Journal of SSRG International Journal of Electrical and Electronics Engineering, with ISSN: 2348-8379, Volume 11 Issue 12, Date of Pub.: 24-12-2024 (Scopus).
- 16. Prof. Archana Tiwari and Dr. A.A. Khurshid has published a paper titled "Compact Wearable Microstrip Antenna design using Hybrid Quasi-Newton and Taguchi Optimization" in Journal of Scientific Reports, with ISSN:2045-2322, Date of Pub.: 25-01-2025 (SCI).
- 17. Dr. Vicky Butram has published a paper titled "A Soft Processor MicroBlaze-Based Adaptive Power Line Interference Canceller for Biomedical Signal Processing" in the Int. J. of Systems, Control and Communications, with ISSN: 1755-9359, Date of Pub.: Accepted.

#### **Conference Publications**

- 1. Dr. Deepali M. Kotambkar, R. A. Mohammed Fahad, Saffalaya Purohit, Suyash Bhatnagar, Vinod M. Thakre, Karan Kapoor, has presented a paper titled "Development of Deep Learning Model for Cardiac Arrhythmia Detection from ECG", in Recent Advances in Intelligent Computational Systems (RAICS 2024), Date of Conference: 16-17 May 2024.
- 2. Dr. Deepali M. Kotambkar, Sankalp Kitey, has presented a paper titled "Visual Intelligence in Supply Chain Management with Power BI" in15th International Conference on Computing Communication and Networking Technologies (ICCCNT)2024, organized by IIT, Mandi, Date of Conference: 24-28 June 2024.

- 3. Dr. Deepali M. Kotambkar, Masum Mahajan, Khushali Bais, Khushi Paroha, has presented a paper titled "Security for the Internet of Things: A Comprehensive Review and Analysis" in 15th International Conference on Computing Communication and Networking Technologies (ICCCNT)2024, organized by IIT, Mandi, Date of Conference: 24-28 June 2024.
- 4. Dr. Kanchan Dhote, Esha Gawate, has presented a paper titled "Real-Time Attendance System with Liveness Detection and Multi-Face Recognition using Transfer Learning", in a 15th International Conference on Computing Communication and Networking Technologies (ICCCNT) 2024, organized by IIT, Mandi, Date of Conference: 24-28 June 2024.
- 5. Prof. Poorvi K Joshi, has presented a paper titled "Design of KNbO3 Thin Film Bulk Acoustic Wave Resonator for 5G Application", in 3rd International Conference on Emerging Applications of Material Science and Technology (ICEAMST 2024) Proceeding, organized by RV College of Engineering, Bengaluru, Karnataka, India, Date of Conference: 3 4 July, 2024.
- 6. Prof. Poorvi K Joshi, has presented a paper titled "Design and Optimization of Contour Mode Resonator (CMR) at 2.4GHz", in an 2nd International Conference on Emerging Applications of Material Science and Technology (ICEAMST 2024) Proceeding, organized by RV College of Engineering, Bengaluru, Karnataka, India, Date of Conference: 3 4 July, 2024.
- 7. Prof. Sandeep R. Pandey Dipti S. Dhande, Sonia Somkuwar, Chhay Korde, Rohit Pawar, Jitendra Zalke has presented a paper titled "Intrusion Detection System in Vehicle Automotive Network", in IEEE Mysuru Con-2024, organized by IEEE Mysuru Subsection, Date of Conference: 30-31 August 2024.
- 8. Prof. Poorvi K Joshi and Dr. M. A. Hasamnis has presented a paper titled "Performance Investigation Study of FBAR for 5G Applications", in "CIS 2024" (5th Congress on Intelligent Systems), organized by CHRIST University, Bengaluru and Liverpool Hope University, U.K, Date of Conference: 04-05, September 2024.
- 9. Prof. Poorvi K Joshi and Ruhina Quazi has presented a paper titled "Solidly Mounted BAW Resonator using KNbO3 thin film for 5G Application", in 6th International and 21st National Conference on Machines and Mechanisms (iNaCoMM 2023), organized by National Institute of Technology, Raipur, Date of Conference: 5 Oct 2024.
- 10. Prof. Shubham Anjankar, Abhishek Tripathi, Sethumadhavan R, Jujaru Sasi Kiran, Anish S, has presented a paper titled, "Development of Remote Health Monitoring System for Elderly using IoT and WSN", in an International Conference on Computing, Sciences and Communications (ICCSC) 2024, organized by Department of Computer Science at ABES Engineering College, Ghaziabad, India, Date of Conference: 24-25 OCT 2024.
- 11. Prof. Shubham Anjankar, Abhishek Tripathi, A. C. Deena, G. Vijayaragavan, T. R. Arvinthan, Subhashish Tiwari, Gireesh G Soni, has presented a paper titled "Experimental Investigation for Hybrid Energy Harvesting System for Remote Monitoring Applications", in an International Conference on Computing, Sciences and Communications(ICCSC) 2024, organized by Department of Computer Science at ABES Engineering College, Ghaziabad, India, Date of Conference: 24-25 OCT 2024.

## Reflection

- 12. Prof. Shubham Anjankar, Abhishek Tripathi, Addepalli Kavya Sree, Bhimavarapu Triveni, Alluru Rishitha, Batta Malleswari, has presented a paper titled, "Implementation of IoT-Enabled Automatic Solar Power Tracking System", in an International Conference on Computing, Sciences and Communications (ICCSC) 2024, organized by Department of Computer Science at ABES Engineering College, Ghaziabad, India, Date of Conference: 24-25 OCT 2024.
- 13. Prof. Lokesh Heda and Ms. Sejal Bodade, has presented a paper titled "YOLOv3 Based Deep Learning Model for Weapon Detection", in First International Conference on the Innovations in Communications, Electrical and Computer Engineering (ICICEC 2024), organized by Bapuji Institute of Engineering and Technology (BIET), Davangere, Karnataka, India, Date of Conference: 24 25, October 2024.
- 14. Dr. Pankaj Joshi Kanak Mishra, Harnoor Huda has presented a paper titled "A Short Survey of Truncated Multipliers", in IEEE International Conference on Intelligent Systems, Smart and Green Technologies (ICISSGT – 2024), organized by IEEE Vizag Bay Section, Date of Conference: 2-3 November 2024.
- 15. Prof. Lokesh Heda and Dr. Parul Sahare, IIIT Nagpur, has presented a paper titled "Tiny-YOLOv3 and SSD: Performance Evaluation for Human Detection in Crowded Images Under Various Conditions", in 3rd International Conference on the Paradigm Shifts in Communication, Embedded Systems, Machine Learning and Signal Processing 2024 (PCEMS 2024), organized by VNIT, Nagpur, Date of Conference: 11-12 November, 2024.
- 16. Dr. Pankaj Joshi and Pravin Zode has presented a paper titled "On-chip True Random Number Generator using System Monitor", in 2nd International Conference on Emerging Trends in Engineering and Medical Sciences (ICETEMS 2024), organized by Yeshwantrao Chavan College of Engineering, Nagpur, Date of Conference: 22-23, November 2024.
- 17. Prof. Vishal Rathee and Rishabh Thadani has presented a paper titled "IoT based protective face cover with body and environment vital parameters monitoring system", in International Conference on Intelligent Computing and Emerging Communication Technologies (ICEC 2024), organized by SRM University-AP, India, Date of Conference: 22-23, November 2024.
- 18. Prof. Anju Gupta Sandhini Peshkar, Sharvani Nandgaonkar and Vaishnavi Gautam, has presented a paper titled "Complete blood count based on microfluidics and dielectrophoretic force separation", in 3rd International Conference on Communication Control and Intelligent Systems (CCIS 2024), organized by the Electronics and Communication Engineering Department of GLA University, Mathura, Date of Conference: 6th-7th December, 2024.
- 19. Prof. Shubham Anjankar, Reddy, Sairam, Reddy, K. Manikanta, Reddy, B Kiran kumar, Nagajaynath, Sunkara, Dargar, ShashiKant, Goyal, Amit K, Tripathi, Abhishek, has presented a paper titled "Assistive Cane Featuring Vibration-Based Obstacle Detection for the Visually Challenged", in an International Conference on Sustainable Materials and Technologies in VLSI and Information Processing (SMTVIP, 2024), organized by Kalasalingam Academy of Research and Education, Tamil Nadu, India, Date of Conference: 13-14 December 2024.
- 20. Dr. Kanchan Dhote, Manan Agrawal, Om Nagpure, has presented a paper titled "Harnessing Big Data for Price Predictions in Oil and Gas Markets", in an IEEE 2024 2nd International Conference on Recent

Trends in Microelectronics, Automation, Computing, and Communications Systems (ICMACC-24), organized by VNR Vignana Jyothi Institute of Engineering and Technology, Hyderabad, Telangana, India, Date of Conference: 19-21 Dec 2024.

- 21. Prof. Poorvi K. Joshi, Tanvi Gillarkar, Pratham Warade, Bhaven Bubana, Yash Chetalangia, Sameed Qureshi, has presented a paper titled "AirTech Odyssey: Crafting the Future of Air Travel Reservations", in 3rd International Conference on Automation, Computing and Renewable Systems" ICACRS 2024, organized by Mount Zion College of Engineering and Technology, Pudukkottai, Tamil Nadu, India, Date of Conference: 19-21 Dec 2024.
- 22. Prof. Shubham Anjankar, Abhishek Tripathi, Madhu Mohan Rao, A. Parivazhagan, Abhishek Pahuja and Divyangna Gandhi has presented a paper titled "IoT-enabled smart gardening with precise soil type monitoring for horticultural crops", in Sixth International Conference on Futuristic Trends in Networks and Computing Technologies (FTNCT06) held in Uttarakhand, India, organized by GRAPHIC ERA HILL UNIVERSITY, HALDWANI CAMPUS, INDIA, Date of Conference: 23-24 Dec 2024.
- 23. Prof. Shubham Anjankar, Abhishek Tripathi, D Somu Venkata Naga, Ravi Kiran, D Jaya Chandra, M Bharath Kumar, A Surya Durga Sai Ram, K Suthendran, Nishit Malviya has presented a paper titled "Intelligent Sign Language Recognition for Real-Time Text Conversion to Aid Speech and Hearing Impaired", in Sixth International Conference on Futuristic Trends in Networks and Computing Technologies (FTNCT06) held in Uttarakhand, India, organized by GRAPHIC ERA HILL UNIVERSITY, HALDWANI CAMPUS, INDIA, Date of Conference: 23-24 Dec 2024.

### **Book Chapter Published**

- 1. Prof. Pravin Dwaramwar published a book chapter titled "Exploring the Cultural Impacts of Artificial Intelligence on Sustainable Entrepreneurship Development" Name of Publisher: IGI Global.
- 2. Prof. Pravin Dwaramwar published a book chapter titled "AI-Driven Energy Optimization in High-Performance Computing: Smart Solutions for Sustainable Efficiency" Name of Publisher: IGI Global.

### STTP / FDP / Other Training Attended by Faculty

- 1. Prof. R. H. Khobragade has attended a FDP on "Research Methodology: Tools and Techniques" from 07/10/2024 to 11/10/2024 organized by SVNIT, Surat.
- 2. Prof Archana Tiwari has attended a FDP on "Intelligent Microwave Devices" from 25/11/2024 to 29/11/2024 organized by VIT, Chennai.
- 3. Dr. Pankaj Joshi has attended a STTP on "Generative AI: Tools, Techniques and Applications" from 02/12/2024 to 06/12/2024 organized by School of Computer Science and Engineering, RCOEM/RBU, Nagpur.
- 4. Prof. Vishal Rathee has attended a STTP on "Generative AI: Tools, Techniques and Applications" from 02/12/2024 to 06/12/2024 organized by School of Computer Science and Engineering, RCOEM/RBU, Nagpur.
- 5. Prof. Lokesh Heda has attended a STTP on "Generative AI: Tools, Techniques and Applications" from 02/12/2024 to 06/12/2024 organized by School of Computer Science and Engineering, RCOEM/RBU, Nagpur.

- 6. Prof. Shubham Anjankar has attended a FDP on "Faculty development program on Embedded Linux Programming" from 16/12/2024 to 18/12/2024 organized by Maven Silicon.
- 7. Prof. Shubham Anjankar has attended a FDP on "Rare earth based novel nanomaterials /materials for various Applications" from 12/12/2024 to 14/12/2024 organized by RCOEM, Nagpur.
- 8. Dr. Pankaj Joshi has attended a FDP on "Faculty development program on Embedded Linux Programming" from 16/12/2024 to 18/12/2024 organized by Maven Silicon.
- 9. Prof Archana Tiwari has attended a FDP on "Advanced Computational Approaches for Antenna Pattern Synthesis and Intelligent Beamforming" from 03/01/2025 to 12/01/2025 organized by NIT, Warangal.
- 10. Dr. Kanchan Dhote has attended a FDP on "IOT Integration with Embedded System" from 06/01/2025 to 11/01/2025 organized by Atharva College of Engineering, Mumbai.

### STTP / FDP / Other Training Organized by Faculty:

1. Dr. Prashant Dwivedy and Prof. Lokesh Hreda has organized a Workshop on "LaTeX" during 7 Oct - 8 Oct 2024 at department of electronics engineering, RBU, Nagpur.

### Patents Filed / Published / Granted

S. No.	Title	Applicants / Inventor	Date of Filing	Year	Acad Session	Application No.	Grant Date	Granted Session	Filed / Granted
1.	Fluid Dispenser	Nikhil Chakole, Yash Wakde, B.Hardas, Smita Daware	18/06/2024	2024	2024-25	420429- 001	8-8-2024	2024-25	Granted
2.	An Automatic Tea Pot	Masum Mahajan, Komal Mahant, Deepali Kotambkar, Smita Daware	03/07/2024	2024	2024-25	2.02421 E+11			Published
3.	System and Method of Inductorless Impedance Matching Network And Its Connection Topology For Maximum Power Transfer In Piezoelectric Energy Harvesting Using Current Conveyor	Sandeep kumar Pandey, Jitendra Zalke	14/10/2019	2024	2024-25	2.01921 E+11	8-11-2024	2024-25	Granted

4.	A multicolor multiple LEDs flash light systems in mobile phone with app control"	Pravin Adishesh Dwaramwar, Rajiv Khaire, Satyam Mukesh Gupta	27/08/2019			2.01921 E+11	26/12/2024 Patent No. 556930.	2024-25	Granted
5.	An apparatus for counting Tablets	Poorvi K Joshi, Dr. Purushottam Gangane, Pawan Dilip Sorte, Harsh Devendra Mishra, Sachin Atal Pancheshwar, Atharva Ramesh Navghare		2024	2024-25	2.00242 E+12		2024-25	Published

### **Copyrights Filed / Published / Granted**

		Designation		Status till date	Status Specification Details
Sr.	Name of	of	Title of the	(Filed / Published /	
No.	Author(s)	Inventor(s)	Copyrights	Granted)	
1	Prof. Poorvi K. Joshi, Tanvi Gillarkar, Bhaven Bubana, Sameed Qureshi, Pratham Warade	Assistant Professor, Students	Flightease Pioneering Modernization In Airline Reservation System	Registered	Diary Number: 16010/2024- CO/L Registration Number:L- 151035/2024
2	Prof.Poorvi K. Joshi,Vishal Yadav,Piyush Tiwari,Rishabh Lohar,Animesh Kambhale	Assistant Professor, Students	Digital Device to Measure The Hardness, Thickness and Diameter of The Tablet	Registered	Diary Number:16006/ 2024-CO/L Registration Number:L- 151618/2024

### **Departmental Activities**

#### **Parents Meet**

The Parent-Teacher meeting of I semester Electronics and Computer Engineering, Biomedical Electronics was held on 26th October 2024. The Meeting was chaired by Dr. N.P. Narkhede, Head of Electronics Engineering Department. Dr. N.P. Narkhede shared the information about various efforts and initiatives taken by the department for overall development of students and also about the change that are happened with the implementation of Ramdeobaba University. The assessment method for internal theory/practical marks and academic policy was explained by academic Coordinator 3. Dr. Deepali M. Kotambkar. The performance of the student in the Test-I examination and attendance record was shown to the parents. The effort required to improve the academic performance of their ward was discussed by the respective subject teachers. The concerns expressed by the parents were addressed by Head of the department.

The Parents expressed their satisfaction over the efforts taken by the department and the institute. Prof. Jitendra B. Zalke, Parent-Teacher Meet Incharge conducted the proceedings of the meeting and proposed a vote of thanks.



Dr. N. P. Narkhede, HOD, Electronics Engineering department addressing parents during the PTM held on 26/10/2024



Class teachers of respective classes showing the performance of students to their parents during the PTM held on 26/10/2024

### **Student Activities**

S. No.	Date	Name of Activity	Level (State/ National/ International)	No. of Students Participated
1	9/10/2024	A one day workshop for V to IX class students on latest Technology in association with ATAL Tinkering Lab	State Level	87
2	23/10/2024	"Mind Sparkle" an online Quiz	I State Level	
3	2/12/2024	Stationary Donation	Departmental level	80
4	21/12/2024	Electrolitz Students' Society Installation "Enthrone"	Department Level	180



Enthrone



Workshop with Atal Tinkering Lab



### **Department of Electrical Engineering**

## Faculty Corner Guest Lectures Taken by Faculty

1. Prof. (Ms.) M. B. Gaikwad delivered a guest lecture on "Initial and Final Conditions (Network Theory)." on 4th October 2024 in MKSSS's Cummins College of Engineering, Nagpur for Second Year Students of Electronics and Telecommunication Engineering.





### **Publications**

- 1. Prof. Sheetal Umredkar, Dr. R. Keshri, Dr. V. B. Borghate and Dr. M. M. Renge have published a paper "Pole-Phase Modulation of Symmetrical 6-phase Induction Motor Drive for Electric Vehicle with 1:2 Speed Control" in IEEE access with Print ISSN: 2169-3536 Online ISSN: 2169-3536 and DOI:10.1109/ACCESS.2024.3498915 (SCI Journal).
- 2. Prof. Alok Ranjan, Dr. Sanjay Bodkhe, Dr. Gaurav Goyal, Dr. Archana Belge and Prof. Sneha Tibude have published a paper "Experimental Study on Heuristics Energy Management Strategy for Hybrid Energy Storage System"in Energies 2024,17(23),5850 and https://doi.org/10.3390/en17235850 22 Nov 2024 (SCI Journal).
- 3. Dr. Shankarshan Prasad Tiwari has published a paper titled, "An efficient protection scheme for critical fault detection in microgrid under uncertain scenarios using deep learning algorithm" in Electrical Engineering with ISSN 1432-0487, (SCIE Journal)
- 4. Dr. Shankarshan Prasad Tiwari has published a paper titled, "An efficient protection scheme for critical fault detection in microgrid under uncertain scenarios using deep learning algorithm" in Electrical Engineering with ISSN 1432-0487, Volumn 106 Issue 5, (SCIE Journal)
- 5. Dr. Shankarshan Prasad Tiwari has published a paper, "An intelligent protection scheme based on support vector machine for fault detection in microgrid using transient signals in protection scheme" in Serbian Journal of Electrical Engineering with ISSN 2217-7183, Vloumn 21, Issue 3 (Scopus Journal)
- 6. Prof. Prachi Salodkar, Prof. Vallabh Acharya and Prof. Krishna Nabira have published a paper "Implementation of a Wireless Energy Monitoring and Databasing System Using PLC"in 3rd IEEE International Conference on Power Electronics, Intelligent Control and Energy Systems, ICPEICES 2024 with ISBN: 979-8-3503-8719-3 (Scopus Conference)

- 7. Prof. Prachi Salodkar, Prof. Vallabh Acharya and Prof. Krishna Nabira have published a paper "Automatic Solar Tracking System Using Siemens PLC"in Advances in Clean Energy and Sustainability, Volume 1, Green Energy and Technology, BOOK CHAPTER, ICAER 2023 with ISBN: 978-981-97-5414-4 (Scopus Conference)
- 8. Prof. Sonali Rangari, Prof. Sanket Shelki, Prof. Chandradeo Rana and Prof. Sandeep Gaigowal have published a paper "Review on Topologies of Non-Isolated and Isolated Bidirectional DC-DC Converters" in AIP Conference Proceedings AIP Conference Proceedings Volume 3188, Issue 110 December 2024 (Scopus Conference)
- 9. Prof. Sonali Rangari, and Prof. Sandeep Gaigowal have published a paper "Multi-Functional Utility Grid Connected PV System"in AIP Conference Proceedings AIP Conference Proceedings Volume 3188, Issue 110 December 2024 (Scopus Conference)

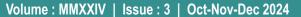
### **Faculty Recognition**

- 1. A design patent has been granted for an invention titled "Tube Light Cap 428641-001" filed by Dr. P.A.Salodkar on 25/10/2024
- 2. A design patent has been granted for an invention titled "Led light strip for tube light 428614-001" filed by Dr. P.A.Salodkar on 04/11/2024
- 3. A design patent has been granted for an invention titled "Digital Phoropter Glasses 429060-001" filed by Dr. P.A.Salodkar on 9/12/2024

### Students' Corner Toppers List

### B. Tech (Electrical Engineering) III Semester, Session 2024-25:

S.No.	Name of The Student	CGPA
1	Tapesh Narendra Baghele	10.0
2	Tanvi Anil Wankhede	9.29
3	Jiya Vij	9.25
4	Priyanshu Shukla	9.17
5	Manalee Manish Bhadang	8.86
6	Shrikrishna Umesh Rotkar	8.81
7	Adishree Shankar Ghime	8.76
8	Akshat Rajnish Khandelwal	8.68
9	Gaurav Madhukar Shinde	8.6
10	Vaibhav Narendra Raghorte	8.6



### B. Tech. (Electrical Engineering) V Semester, Session 2024-25

S.No.	Name of The Student	CGPA
1	Ritika Mishra	9.48
2	Kammya Bhupesh Paradhi	9.09
3	Tanushree Yogesh Waratkar	8.87
4	Ayush Sanjay Hood	8.74
5	Ishika Prakash Choudhary	8.64
6	Sujal Satish Bais	8.63
7	Shivam Vijay Rao	8.44
8	Vaishnavi Rajesh Agrawal	8.39
9	Prerna Devanand Patil	8.36
10	Parth Rajkumar Londase	8.28

### B. Tech. (Electrical Engineering) VII Semester, Session 2024-25

S.No.	Name of The Student	CGPA
1	Veena Jawrani	9.61
2	Sarthak Sunil Wankhede	9.36
3	Pawan Jagdish Wath	9.33
4	Gaurav Yogendra Thakur	9.29
5	Prajwal Pratap Sontakke	9.24
6	Praful Nandkishor Mishra	9.15
7	Gaurav Triveni Shukla	9.09
8	Ashutosh Chandrakant Tiwari	9.08
9	Aniket Avinash Kalamkar	8.97
10	Lalit Tejram Nikhade	8.85

### **Student Achievements**

- 2. Ishika Choudhary student of third year (EE), secured second position in THIRD BELL at IIT Bombay on 26th Dec 2024.
- 3. Amritraj Singh student of final year (EE), demonstrated exceptional talent in Ala Dance as the 1st runner-up at VNIT Nagpur, group dance competition under AAROHI held on 16th November 2024.
- 4. Om Wankhede student of second year (EE), A versatile talent with achievements in Boxing, representing the college at university games at Mankapur Stadium from October 24 to 26, 2024, and got Silver Medal. Additionally, he got Gold Medal in (Senior Boys Weight Category:67-71) Khasdar Mohotsav, at Mankapur Stadium.

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- 5. Sarthak Wankhede student of final year (EE) presented a research paper "Application of PLC using MQTT protocol and AWS services" in Fourth International Conference on Emerging Frontiers in Electrical and Electronic Technologies (ICEFEET 2024), organized at NIT Patna.
- 6. Sarthak Wankhede student of final year (EE) presented a research paper "Real-time Data Monitoring by PLC using MQTT protocol and AWS" in the 18th National Frontiers of Engineering (NatFoE) Symposium held at NIT Warangal.

### Student Placements Undergraduate Students VII semester

S.No.	Name of Company	Name of Students
1	ZS Associate (Internship + Placement)	Mr. Zeeshan Ahmed
2	Solar (Internship + Placement)	Mr. Praful Mishra
3	Shapoorji Pallonji & Company Private	Mr. Darshan Nagpure
	Limited	Mr. Siddharth Chawre
4	Infosys	Mr. Harsh Taiwade
		Mr. Pavitra Mahakulkar
		Mr. Prajwal Sontakke
5	Accenture	Mr. Sarthak Wankhede
6	Capgemeni	Mr. Veena Jawrani
7	Attentive AI	Ms. Indrani Shende
		Mr. Avishkar Pathe
		Ms. Kadambari
		Punwatkar
		Mr. Karan Jaiswal
		Mr. Priyanshu Korekar
		Ms. Sojwal Mendhekar





### **Department of Electronics and Communication Engineering**

### **Publications**

- 1. Dr. S. B. Pokle and Prasheel Thakre published a research paper titled, "Resource Management in NOMA-based Wireless Communication using Hybrid Transit Search Archimedes Algorithm" International Journal Communications on Applied Nonlinear Analysis, ISSN: 1074-133X, Vol. 32, No. 4s(2025), Dec. 2024, pp 190-195. (SCOPUS Index).
- 2. Dr. Rohini S. Ochawar and Snehal V. Laddha have published a paper titled "Unveiling Precision in Abdominal Organ Segmentation" in SSRG International Journal of Electrical and Electronics Engineering, Volume 11, Issue 10, pages 10-21, October 2024. (Scopus), DOI: https://doi.org/10.14445/23488379/IJEEE-V11110P102ISSN:2348-8379.
- 3. Dr. Rohini S. Ochawar, Vrushabh Parsawar, Krity Shrivastava, Apurva Ochawar, Vinita Kumari, Vanshika Dayani, and Kusum Singh, presented a paper titled "Dynamic Clustering for Multi-Depot Capacitated Vehicle Routing with Time Windows: A CW Heuristic Approach" at the 22nd International Conference on Information Technology (OCIT), held at SRM University, Andhra Pradesh, from 12th to 14th December 2024.
- 4. Dr. Rohini S. Ochawar, Kedar Somani and Sanjay Balamwar, presented a paper titled "Mangrove Density Sprawl Analysis Using Multispectral Images of Revas Beach, Uran Taluka in Raigad District" at the First IEEE International Conference for Women in Computing (INCOWOCO 2024), held at the Symbiosis Institute of Computer Studies and Research on 14-15 November 2024.
- 5. Dr. Bhumika Neole and Gaurav Kumar Bharti have published a paper titled "Compact broadband optical filter with perturbed Bragg gratings in silicon-on-insulator waveguide" in Optical Engineering, Volume 63, Issue 9, 2024. (SCIE) DOI: 10.1117/1.OE.63.9.095101 ISSN: 0091-3286.
- 6. Dr. Bhumika Neole, Manish Chawhan, and Minal Patil have published a paper titled "A Survey Paper on Mobility and Energy based Clustering Algorithm in MANET" in SSRG International Journal of Electronics and Communication Engineering, 2024. (Scopus) DOI: 10.14445/23488549/IJECE-V1119P123, ISSN: 2348-8549.
- 7. Dr. Bhumika Neole and Dr. A.H. Harkare published a paper titled (2025) "Analysis of Dynamic Power Allocation Strategies in Non-orthogonal Multiple Access for 5G Wireless Communication" in Lecture Notes in Electrical Engineering, vol 1211. Springer, Singapore. https://doi.org/10.1007/978-981-97-4359-9 56 (Scopus).
- 8. Dr. P. R. Selokar, and Sadnyani Gomkar, has published a paper titled "Improvement of Iconicity in Signed and Spoken Vocabulary through Convolutional Neural Network" in the 3rd International Conference on Paradigm Shifts in Communication, Embedded Systems, Machine Learning, and Signal Processing (PCEMS 2024), organized at VNIT Nagpur on 11-12 November 2024. (Scopus).
- 9. Dr. P. R. Selokar, and Dr. P. D. Patil, has published a paper titled "Design & Analysis of Optical Ring Resonator with Circular Cavity as Adddrop Multiplexer" in the 7th International IEEE Conference IEEE PUNECON-2024, organized by the Defence Institute of Advanced Technology, Pune, and IEEE Pune Section, held on 13-15 December 2024. (Scopus).

- 10. Dr. Prasanna P. Deshpande, Dr. B. Nagarajan, Ayinala Naga Sai, Chitturi Ram Prasad, Dr. Smita Jadhav, and Bhavana Singh have published a paper titled "Development of Intelligent Nanomaterials for Enhanced Performance in Medical Engineering Applications" in Nanotechnology Perceptions, November 2024. (Scopus) DOI: https://doi.org/10.62441/nano-ntp.vi.3547 ISSN: 1660-6795.
- 11. Dr. Prasanna P. Deshpande, Dr. Ajay Kumar Boyat, Dr. John Babu Guttikonda, Ajay Tiwari, Dr. Jitendra Kumar, and Mr. Srikanth Sawant have published a paper titled "Enhancing Predictive Accuracy in Machine Learning: Techniques for Model Optimization and Feature Selection" in Nanotechnology Perceptions, October 2024. (Scopus) DOI: https://doi.org/10.62441/nano-ntp.vi.3993, ISSN: 1660-6795.
- 12. Mr. Nishant Madhukar Borkar and Dr. Pallavi Keshavrao Parlewar has published a paper titled "Design and Development of a Quad Mode Circular Millimeter-Wave Patch Antenna for Breast Tumor Size Detection and Localization" in the Panamerican Mathematical Journal with ISSN 1064-9735. Scopus Indexed.
- 13. Dr. A.H. Harkare published a paper titled "Automated Liver Segmentation in MR T1 In-Phase Images Transfer Learning Technique" in Lecture Notes in Networks and Systems, vol 1107. Springer, Singapore. https://doi.org/10.1007/978-981-97-6581-2\_6.
- 14. Dr. A.H. Harkare, Kalyani Bobade, Ishika Patne, Anshika Jain, Bhumika Neole, and Vaijyanti H. Panse, presented a paper titled "Design and Optimization of a 6 GHz Circular Patch Antenna Using Machine Learning Algorithms" at the 3rd International Conference on Paradigm Shifts in Communication, Embedded Systems, Machine Learning, and Signal Processing (PCEMS 2024), held at VNIT Nagpur on 11-12 November 2024. Proceedings published by Springer and indexed in Scopus.
- 15. Dr. A.H. Harkare, Khushi Agrawal, Krushna Chitangle, and M.P. Abegaonkar, presented a paper titled "Microstrip Patch Antenna Design with Improved Gain Using Geometric Optimization" at the 3rd Microwave, Antennas, and Propagation (MAPCON) 2024 Conference, held in IEEE, Hyderabad, from 9th to 13th December 2024. Published by IEEE and indexed in Scopus.
- 16. Dr. A.H. Harkare, Shraddha Hiranwar, Shamnam Quadri, and M.P. Abegaonkar, presented a paper titled "Optimization and Mathematical Analysis for Mosaic Patch Antenna for Improved Gain" at the 3rd Microwave, Antennas, and Propagation (MAPCON) 2024 Conference. The event was held in IEEE, Hyderabad, from 9th to 13th December 2024. Published by IEEE and indexed in Scopus.
- 17. Dr. A.H. Harkare, Nikhil Kakde, Piyush Pandit, Narendra Dhakate, Ashwin Kothari, and Ankit Bhurane, presented a paper titled "Design and Optimization of Rectangular Dielectric Resonator Antenna for C-Band Frequencies Using Machine Learning Techniques" at the 3rd Microwave, Antennas, and Propagation (MAPCON) 2024 Conference, held in IEEE, Hyderabad, from 9th to 13th December 2024. Published by IEEE and indexed in Scopus.
- 18. Dr. Jagdish D. Kene has published a paper titled "An Efficient Classification and Detection of COVID-19, Pneumonia, and Tuberculosis Using Visual Attention Gated Networks" in SCI Journal named International Information and Engineering Technology Association (IIETA) with ISSN 1258-5769, Volume 41, Issue 6.
- 19. Dr. Jagdish D. Kene, Sachin S. Khade, Chitra V. Bawankar, and Shilpa Gabhane, presented a paper titled "Smart Wearable Device for Alzheimer's Patients: Enhancing Quality of Life and Caregiver

- Support" at the AIP Conference Proceedings, held at YCCE, Nagpur, on 23–25 November 2023. The paper, published online with DOI: 10.1063/5.0240320, is indexed in SCOPUS.
- 20. Dr. Ajinkya Nilawar, Nita Nimbarte, Megha Chakole, Sanjay Balamwar, Suresh Kurumbanshi, and Rajendra Rewatkar have published a paper titled "Quantitative Analysis of Natural Calamities for Disaster Management through Machine Learning Techniques Using Satellite Data" in the Panamerican Mathematical Journal, November 2024. (Scopus) DOI: https://doi.org/10.52783/pmj.v35.i2s.2572, ISSN: 1064-9735.

### STTP / FDP / Other Training Attended by Faculty

- 1. Dr. S.B. Pokle Participated in one day UGC Western Zone conference for autonomous colleges on 'Implementation of NEP 2020' organized by UGC and IIM Nagpur on 23 October 2024.
- 2. Dr. P. K. Parlewar attended a Short-Term Training Program (STTP) on "AI on Public Cloud Platforms" at Ramdeobaba University (RBU), Nagpur (MH), India, School of Computer Science and Engineering from 09-Dec-2024 to 13-Dec-2024.
- 3. Dr. P. K. Parlewar has successfully completed the one-week national Short-Term Training Program on "Generative AI Mastery: From Foundations to Applications" organized by the Indian Institute of Information Technology, Nagpur, from 18th to 22nd November 2024.
- 4. Dr. P. R. Selokar has successfully completed one-week industry oriented Short-Term Training Program on "Generative AI: Tools, Techniques and Applications" organized by School of Computer Science and Engineering from 02-Dec 2024 to 06-Dec 2024.
- 5. Prof. V. S. Lande has successfully completed one-week industry oriented Short-Term Training Program on "Generative AI: Tools, Techniques and Applications" organized by School of Computer Science and Engineering from 02-Dec 2024 to 06-Dec 2024.
- 6. Mr. Nishant M. Borkar attended seminar on "IEEE IISC Microwave, Antennas, Symposium & Propogation Symposium (IIMAPS 2.0)" held on December 16th & 17th December 2024, organised by the IEEE-IISc MTT/AP-S Student Branch in collaboration with the IEEE-IISc VLSI Chapter and Dept. of ECE IISC Banglore.
- 7. Mr. Nishant M. Borkar attended Seminar on "Substrate Integrated Waveguide and Dielectric Image Line Based Circuit Components and Antennas" by Prof. Animesh Biswas IIT Kanpur organized by IEEE IISc MTT/AP-S Student Branch Chapter of IISC Banglore, on Dec 6 2024.
- 8. Ms. Puja S Agrawal attended an STTP "AI on Public Cloud Platforms" at Ramdeobaba University (RBU), Nagpur (MH), India School of Computer Science and Engineering from 9 13 Dec 2024.
- 9. Dr. Ankita Harkare attended ATAL FDP from 23-28 Dec 2024 on Reconfigurable Intelligent Surfaces for 6G Wireless Communication: Fundamentals to Future Research Directions at National Institute of Technology, Tiruchirappalli.
- 10. Dr. Ankita Harkare attended STTP from 02 06 Dec 2024 on Generative AI: Tools, Techniques and Applications at School of Computer Science and Engineering, RBU, Nagpur

### **Departmental Activities**

#### **Industrial Visits**

On 17th October, the second-year students of the Electronics and Communication Engineering (ECE) Section B had the privilege of visiting Sensor and System Industrial Solutions in MIDC Butibori, Nagpur. The visit aimed to provide students with hands-on exposure to industrial applications in the fields of automation, sensor technologies, and industrial systems integration. The company specializes in providing advanced sensor solutions, system integration, and automation services to a wide range of industries. The visit was organized under the guidance of faculty members Dr P.R. Selokar, Dr P. P. Deshpande, Prof. D.D. Shrivastavaand V. S. Lande along with 51 students.



EC students with Faculty at Sensor and System Industrial Solutions



Felicitation of Sensor and System Industrial Solutions staff

### STTP and Guest Lectures organized in Department.

Dr. Mridula Korde organized a Career guidance session on "Navigating the Future in AI" by the distinguished alumnus, Mr. Ashish Pande (EN 2004), on 17th December 2024. Mr. Ashish Pande, currently working as Product Manager in UK, shared invaluable insights



into artificial intelligence, highlighting emerging trends, potential career paths, industry demands, and strategies for aspiring professionals to excel in this dynamic field.

A Career guidance session on "Navigating the Future in AI" by Mr. Ashish Pande

### **Student Achievements**

First Student from RBU Participating in South West Zone/Inter University Competitions under the structure of Inter University Sports Board (Association of Indian University-AIU). We are delighted to inform you that Harsh Samarth a First-Semester ECE student from our RBU, will be representing our institution in the prestigious Southwest Zone Inter-University Judo Men's Championship held at L.N.C.T. University, Bhopal. He will compete in the 81 kg weight category. Let us extend our best wishes and support to Him as he embarks on this remarkable journey and aims to bring laurels to our institution.



Harsh Samarth a First-Semester ECE student from our RBU, Nagpur

### Any other activity(s):

1. Department Secures RGSTC Funding for Innovative Electric Wheelchair Project from the Rajiv Gandhi Science and Technology Commission (RGSTC) for the project titled "Voice-Controlled Movement of Electric Wheelchair for Differently-Abled Individuals." This groundbreaking project is aimed at creating a user-friendly, voice-operated electric wheelchair to support the mobility of differently-abled individuals in need.

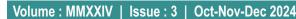
Team Members: Interns: Shivam Pawar, Sanchit Tondre,

Mentor: Prof. Vipul Lande

2. Dr. P. P. Deshpande won a First Prize Vermeil Medal (Gold Medal) in a District Level Philatelic Exhibition-NAGPURPEX 2024 held during Nov 29-30, 2024.



3. Mr. Nishant M. Borkar has been granted a design patent for "SOLAR WATER HEATER" related arrangment on 27th December 2024.





### **Department of Mechanical Engineering**

### **Faculty Corner**

### Awards received by Faculty of department

Dr. M. P. Joshi, Dr. Y. M. Sonkhaskar and Dr. Vishal Shukla received prestigious awards for their outstanding contributions in their research and IPR during the The University's Foundation Day celebrations of the Ramdeobaba University.

#### **Publications**

- 1. Dr. Sachin S. Pund published a paper titled "Optimizing Thermal Analysis and Heat Transfer in Mechanical Design Using an Advanced Hybrid WHO-MFDNN Method" in International Journal of Computational Methods, indexed in SCI, December 2024.
- 2. Dr. P.S.Deole has presented a paper titled "Exploring Surface Roughness And Tool Vibration Through Experimental Investigation And Modelling With EDM-Textured Cutting Tools" in national Conference on Condition Monitoring (NCCM-2024)VNIT Nagpur,4-5th October 2024.
- 3. Mr. Purushottam S. Barve (Research Scholar), along with co-authors Dr. Y. V. Deshpande, Dr. D. R. Zanwar, and Dr. S. S. Pund, published a paper titled "Development of an Innovative Assembly Fixture for Machining Synchronization of Multi Fuse Parts on Vertical Machining Center and Productivity Enhancement" in the Journal of Scientific and Industrial Research, indexed in SCIE, in November 2024.
- 4. Mr. Om Prakash Bohrey, along with co-author Dr. A. S. Chatpalliwar, published a paper titled "Application of Reliability-Centered Maintenance in Improving Aircraft Availability with Preventive Maintenance Intervention" in the Journal of Advanced Research in Applied Sciences and Engineering Technology, indexed in SCIE, in December 2024.
- 5. Dr. Mangesh Joshi, along with co-author Dr. P. M. Khandekar, published a paper titled "Selection of Health Insurance Policy: Using Analytic Hierarchy Process and Combined Compromised Solution Approach Under Spherical Fuzzy Environment" in the International Journal of Information Technology and Computer Science, indexed in SCOPUS, in October 2024.
- 6. Parthib Majumdar (Student, Mechanical), along with co-authors Prof. Sachin S. Deshmukh, Manav Pande, and Amir Hussain, published a paper titled "Generation of Brown Gas as an Alternative Fuel for Combustion Engines" in the International Journal of Innovative Research in Technology, in November 2024.
- 7. Dr. Mangesh Joshi published a paper titled "Developing Sustainable Consumer Practices: A Framework for Managing Refurbished Electronic Goods in India" in the Journal of Scientific and Industrial Research, indexed in SCIE, in December 2024.
- 8. Dr. Mangesh Joshi published a paper titled "Primary School Selection in India: An Empirical Study using Spherical Fuzzy Analytic Hierarchy Process with MARCOS Method" in the Journal of Scientific and Industrial Research, indexed in SCIE, in October 2024.
- 9. Vedant Pachpohar (Student, Industrial), along with co-authors Dr. Mangesh Joshi and Sachin Upadhaye, published a paper titled "MCDM Framework for Ranking Barriers to Green Roof

Implementation in India" in the EVERGREEN Joint Journal of Novel Carbon Resource Sciences & Green Asia Strategy, indexed in SCOPUS, in December 2024.

- 10. Dr. Yogesh V. Deshpande, along with co-author Dr. Vishal Shukla, published a paper titled "Exploring Safety of Fall Arrester Link Using Simulation and Optimization Approach" in the Journal of Dynamics and Control, in November 2024.
- 11. Purushottam S. Barve (Research Scholar), along with co-authors Dr. Yogesh Deshpande, Dr. Dinesh Zanwar, and Dr. Tarachandra Madankar, published a paper titled "Installation of a Unique Fixture for Positioning Several Fuse Parts on the VMC Pallet to Enhance Productivity" in the Journal of Dynamics and Control, in November 2024.
- 12. NIkhade G. R. and Jha A K published a paper titled "Dynamic Simulation and Torque Analysis of a 5-DOF SCORBOT ER-IV Manipulator for Welding Operations Using ATLAB-SimMechanics" in Mechanical Engineering International Conference (MEICON 1.0) organized by department of Mechanical Engineering, School of Engineering, OP Jindal University, Raigarh on 19-20 Dec, 2024.

### STTP / FDP / Other Training Attended by Faculty

- 1. Dr. P. S. Deole has attended an ATAL FDP organised by O. P. Jindal University, Raigarh, India, on Advancement in Metal Forming Technology: Innovations, Future scope and Challenges from 2 6 Dec 2024.
- 2. Dr.P.S.Deole has attended an ATAL FDP organised by MKSSS'S CUMMINS COLLEGE OF ENGINEERING FOR WOMEN Nagpur, on 21st Century Materials: Advancements in Material Science and Technology, from 9 14 Dec 2024.
- 3. Nith Gudadhe has attended Faculty Development Program organised by O. P. Jindal University, Raigarh, India, on Advancement in Metal Forming Technology: Innovations, Future scope and Challenges from 2 6 Dec 2024.
- 4. Nitin Gudadhe has attended One Week Faculty Development Program on "Smart Manufacturing: The Confluence of Automation and Intelligence" organized by the Department of Mechanical Engineering, SEMR, DY Patil International University, Akurdi, Pune from 16th December to 20th December 2024.
- 5. Dr. Y.M. Sonkhaskhar and Dr. Alok Jha participated in the NVH Learning Laboratory FDP, organized by Dassault Systems in Pune.

### **Departmental Activities**

#### **Industrial**

A team from the Mechanical and Electrical Engineering Departments visited Pune from December 19–22, 2024, to explore internship and placement opportunities Dr. Vishal Shukla and Dr. Gaurav Goyal accomplished some of the activities like Industry networking with talent acquisition teams from DS Foundation, Tata Motors, Dassault Systems, Wipro Pari, Varroc, and Skoda Automotive Volkswagen, Primus Techsystems to discuss internship and placement and training opportunities.



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#### Parents Meet, Alumni Meet and Departmental Installations or Events

Parent Teacher Meet for First Year Students - A vibrant Parent-Teacher Meet was held for first-year students, encouraging a collaborative approach to academic success. Faculty members shared insights into student progress and provided guidance to parents. Dr. A. K. Jha Coordinated the meet.

#### Conference, STTP and Guest Lectures Organized in Department

A one-week FDP on SAP was conducted for faculty members of the MBA and Mechanical Engineering departments. 11 Faculty members from Mech Engg attended the FDP.

### Any other activity (s):

**Strategic Collaborations -** An MOU with Carier Technologies Limited was signed, opening new avenues for student training and internships, and further enhancing our institution's industry-academic partnerships.

**AI-Driven Interview Preparation Tool -** Remasto AI-based interview preparation software was made accessible to the 2025 batch, empowering students with advanced resources to excel in their placement endeavours.

#### Industry Co-teaching -

- Mr. B.N. Raghvendra, an industry expert, co-taught the Material Science and Testing course for third-semester Mechanical Engineering students, offering practical insights.
- Mr. Manish Maurya, Director Makxenia, an IoT and Industry 4.0 specialist, engaged seventh-semester students, sharing emerging trends in technology.

**Green Campus Initiative** - The University has operationalized an additional 150 kW PV Solar Power Plant on the MBA building rooftop. Coordinated by Dr. Vishal Shukla, this initiative underscores our commitment to sustainable energy and environmental responsibility.

**Industry Involvement in Evaluation -** External Examiners for Final-Year Projects Industry experts, including Mr. Nilesh S. Sahare, Mr Sanjay Kulkarni and Mr. Sanjay Tiwari, evaluated final-year projects, providing critical feedback and insights to students.



# Reflection

# **Department of Humanities**

### **Faculty Corner**

#### Guest Lectures taken by faculty

- 1. **A.** Dr. Deepshikha Mehra was invited as a special guest for a STEM Workshop conducted by Pratham (an NGO working on skill development in Pench Tiger Reserve since 2005). The workshop on STEM related activities was for school children from villages around Pench Tiger Reserve, Maharashtra and was conducted on 28th October 2024 at Sillari Pench.
  - **B.** Dr. Deepshikha Mehra was invited as a judge at an event titled "Literary Voices: A celebration of Expressions" an inter school competition for teachers. It was organized by Bhavan's Bhagwandas Purohit Vidya Mandir, Koradi on 30th November 2024
- 2. Ms. Pratishruti Singh Agarwal was invited as the Chief Guest and Keynote Speaker at St.Charles Seminary, Nagpur on 2nd October 2024 for the 'Gandhi Jayanti Extension Lecture' to speak on the topic, 'Mahatma Gandhi as a Public Communicator'.
- 3. A. Dr. Vinod Asudhani Attended a two day Advanced Workshop on Poetry on 14 and 15 October organised by Gujrarat Sahitya Academy at Ahmedabad.
  - B. Attended a two day basic workshop on poetry on 23 and 24 November 2024 organised by Bhagwanti Nawani Chartable Trust at Ulhas Nagar, Thane .
  - C. Was invited as a Guest Speaker at National Academy of Direct Taxes for IRS officers, Nagpur on 22 November 2024 for 'National level IRS officers programme' to speak on the topic, 'Effective Official Communication'.
  - D. Was invited as a Trainer at Kids' World School, Nagpur on 2 December 2024 for a 'Seminar on Parenting' where he guided the audience on, 'Parenting styles and Rearing of Children'.
  - E. Was invited as a Trainer at Madhya Pradesh Sindhi Sahitya Academi, on 25 and 26 December 2024 for a two day basic workshop on poetry writing, where he gave an orientation on basic skills of poetry writing.

#### **Publications**

- 1. Mr. Arjun's research paper 'Economic Openness and the Behaviour of Great Ratios in G20 Countries' was published in the journal 'Arthaniti: Journal of Economic Theory and Practice by Sage' (Scopus Indexed-Unpaid) in the month of October 2024.
- 2. **A.** Dr. V.H.Asudani's research papers titled 'Problems Associated with Designing, Execution and Evaluation of English Curricula in Technical Institutes' was published in the journal 'Indian Literature Sahitya Akademi's Biomonthly Journal' (UGC Care listed) in the month of December 2024.
  - **B.** 'Theories of Aqusition of English as Second Language' was published in the journal 'Indian Literature Sahitya Akademi's Biomonthly Journal' (UGC Care listed) in the month of December 2024.
  - C. 'Problems Associated with Designing, Execution and Evaluation of English Curricula in Technical

# Reflection .

Institutes' was published in the journal 'The Criterion' ISSN no. 0976-8165, Impact Factor - 8.67 (UGC Care listed) in the month of December 2024.

3. Ms. Jasleen Rihan has published a book chapter titled 'Group Dynamics and It's Role in IT Project Timeline' as a part of conference proceedings with ISSN 2367-3370/ ISSN 2367-3389 (electronic), ISBN 978-3-031-70788-9, ISBN 978-3-031-70789-6 (eBook), Volume 2, (Springerpublication / Scopus indexed)

### STTP / FDP / Other Training Attended by Faculty

- Ms. Pratishruti Singh Agarwal attended an online FDP on 'Action Research for Language Teachers' from 9th December 2024 to 14th December 2024, organized by B.R.B. College of Commerce, Raichur, Karnataka.
- 1. Ms. Asifa Ebrahim attended and presented a paper online in a Hybrid National
  - Conference 'Neocolonialism: Re-Presenting Narratives, Realities and Responses' conducted by Kristu Jayanti College (Autonomous), Bengaluru. The paper was titled as 'A link between Colonialism and Neocolonialism through the Parables in The Nutmeg's Curse by Amitav Ghosh'. The Conference was held on 8th and 9th November 2025.
- 2. Dr. Smita Choudhury attended four online FDPs 1. 'Teach English Now! Technology Enriched' 22nd.December 2024.(18hrs. Course. Self paced) 2. 'Teach English Now! Foundational Principles' 24th.December 2024.(18hrs. Course. Self paced) 3. 'Teach English Now! Theories of Second Language Acquisition' 30th.December 2024.(18hrs. Course. Self paced) 4. 'Technical English for Engineers', 8 Weeks (19th August to 11th October 2024) Exam on 27th October 2024. All of these courses were from Arizona State University offered by Coursera.
- 3. Dr. Deepti Jain Thakre attended an online FDP 'Teach English Now! Foundational Principles' from Arizona State University offered by Coursera, 27th. December 2024.(18hrs. Course. Self paced)
- 4. Ms. Priya Vishal Belsare attended -
  - A. Five Days Online Short Term Training Program on "Gender Equality is a Myth!" organized by Department of Basic Sciences, IIIT Nagpur from 30th December 2024 to 3rd January 2025.
  - B. Five Days Online Faculty Development Program: "How To Write A Research Paper In Scopus Listed Journal" from 15 October To 19 October 2024 GNIOT Institute Of Professional Studies, Meerut.

# Conference, STTP and Guest Lectures Organized in Department

1. An informative and interactive lecture on Mastering Content Writing: Types, Tools and Strategies was organized by the Department of Humanities for students of B.Tech. First Year enrolled in Liberal Arts: Creative and Content Writing course on 23rd November 2024 from 2:00 PM to 4:00 PM. Around 45 students of various branches of B.Tech. First Year attended the lecture. The speaker of the session was Ms. Nikita Sawarkar, Technical Content Writer, Nagpur. The guest lecture offered an insightful and practical understanding of writing for web and digital platforms, providing students with valuable skills. Ms. Jasleen Rihan, Faculty Coordinator, warmly welcomed the Speaker, Ms.Nikita Sawarkar, and the students to the session.





CCW JR

2. Department of Humanities organized three days English Camp for the slow learners on 11th, 12th, and 13 th November 2024. There were one-hour sessions on all three days in which students were intervened on the topic 'Subject-Verb Agreement'. Mr. Lalit Kane and Ms. Asifa Ebrahim contributed as resource persons as well as session coordinators.



English Camp

3. A Soft Skills training workshop 'Campus to Corporate' was designed to equip 193 engineering students of the first year Computer Science and Engineering on 18 November 2024. Department of Humanities invited Mrs. Arifa Bunglowala, Corporate Trainer, Indore, as the guest speaker for the occasion. The workshop was based on industry-relevant soft skills, enhancing the students' employability upon graduation. It focused on hands-on training in areas like Resume Writing, Group Discussions, and Interview Techniques, delivered through a mix of lecture, presentation, and activities. This was a 7 hour long workshop.





Campus to Corporate Workshop

4. Dr. Deepshikha Mehra along with three faculty members of the Department of Humanities, successfully conducted "Nature Camp" a Liberal Arts course at Bor Tiger Reserve from 13th to 16th November 2024 for 98 students of B.Tech. and BCA first year. During the course, three batches of students underwent various activities to understand the importance of wildlife conservation and the challenges associated with it. Various experts like Shatnaik Bhagwat, Divisional Forest Officer, Gorewada Project, Nagpur; Dr. Narendra Chandewar, Deputy GM, Ecotourism Board, Nagpur and the forest officials of Bor Tiger Reserve shared their experiences on wildlife and environment management with the students. The camp was successfully organized in coordination with Hon. Widlife Warden, Shri Avinash Londhe.





Nature Camp



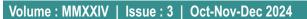
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# **Department of Mathematics**

# **Faculty Corner**

#### **Publications**

- 1. Dr. R. G. Ghumde has published a paper titled On Essential M-Artinian modules in conference Proceedings of The ICRTMPCS International Conference 2023 (Advances in Mathematical and Computational Sciences) with ISSN: 2456-9968, Issue Oct-24, indexed with Scopus.
- 2. P. A. Saoji has published a paper titled Prevalence and Determinants of Hair Fall, Hair Loss and Premature Graying in Young Adults: A cross-sectional study in Afr. J. Biomed Res. with ISSN: 1119-5096, Vol 27(3s), 5454-5460, Issue Dec-24, indexed with Scopus.
- 3. P. A. Saoji has published a paper titled Pattern of edible consumption and practice of reuse: a health concern in Journal of Family medicine and primary care with ISSN: 2249-4863, Issue Dec-24, indexed with ESCI.
- 4. P. V. Lepse has published a paper titled Accelerating cosmological f (R,Lm,T) gravity model along with bulk viscous fluid in Afr. J. Biomed Res. with ISSN: 1572-946X, Vol doi -"10.1007/s10509-024-04386-4", 369-120, Issue Dec-24, indexed with SCIE.
- 5. P. V. Lepse, M. Kotewar has published a paper titled Unravelling the Mathematical Marvels: Exploring the Inertia of Pattern-Based Matrics and Their Behaviour under Operator Concave and Convex Function in Afr. J. Biomed Res. with ISSN: 1119-5096, Vol 27(4s), 2017-2020, Issue Nov-24, indexed with Scopus.
- 6. P. A. Saoji has published a paper Logistic Regression in Healthcare: Predictive Modeling for Enhanced clinical decision-making in Journal of Chemical Health Risks, Issue Dec-24, indexed with Scopus.





## **Department of Physical Education**

# **Faculty Corner**

Prof. Vinisha Nitnaware completed the various SWAYAM NPTEL online certification courses conducted by IIT Madras in October 2024. The names of various courses are mentioned below:

- Fundamentals of Sports Training, Load Management & Recovery.
- Introduction to Exercise Physiology & Sports Performance.
- Sports & Performance Nutrition.
- Sports Psychology.

### **Sports Activities**

# All India University/ West Zone Meet: RCOEM Students Participation:

The Students of RCOEM excelled in the Inter-Collegiate Tournament and were selected in the RTMNU's Team for the AIU Inter-University West Zone Championship. The Following students of RCOEM represented Nagpur University in the West Zone:

Sr No	Game	Level of Participation	Name	Branch	Year	Date	Venue
1	Volleyball (W)	West Zone	Mahi Tiwari	EE	III	27/10/2024 - 30/10/2024	Shri. Kushal Das University, Hanumangarh
2	Taekwondo (M)	All India University	Rishikesh Pandey	EN	IV	06/11/2024 - 09/11/2024.	Guru Nanak Dev University, Amritsar
3	Fencing (W)	All India University	Disha Sharma	ENCS	III	06/11/2024 - 10/11/2024.	University of Jammu.
	Basketball	West Zone	Devashree Ambegaonkar	CSE	IV	26/11/2024 - 30/11/2024	ITM University, Gwalior
4		West Zone	Arya Dongre	EC	IV	26 /11/2024 - 30/11/2024	ITM University, Gwalior
4	(W)	West Zone	Preeti Sathawane	EC	II	26/11/2024 - 30/11/2024	ITM University, Gwalior
		West Zone	Sharvari Nene	CSE	II	26/11/2024 - 30/11/2024	ITM University, Gwalior
5	Basketball (M)	West Zone	Parth Borkute	DS	II	15/11/2024 - 20/11/2024	ITM University, Gwalior
6	Lawn Tennis (W)	West Zone	Radha Giradkar	МЕСН	IV	25/11/2024 - 27/11/2024	Hemchandrachary a North Gujarat University
7	Lawn Tennis (M)	West Zone	Anand Marathe	ECU	IV	07/11/2024 - 11/11/2024	ITM University, Gwalior







Fencing (W)

Taekwondo (M)

Lawn Tennis (W)







Basketball (W)

Volleyball (W)

Basketball (M)

### **RBU Student Participation:**

RBU Students Participated for the first time in South West Zone/Inter University & All India Inter University Competitions under the structure of Inter University Sports Board (Association of Indian University-AIU) after Ramdeobaba gets University Status. The details of the students are given in the table below:

Sr No	Game	Level of Participation	Name	Branch	Year	Date	Venue
1	Archery	All India University	Aditi Gupta	CSE (AIDS)	Ι	24/12/2024 - 27/12/2024	KIIT University, Bhubaneshwar
1	(W)	All India	Vedika	AI &	I	24/12/2024 -	KIIT University,
	Judo	University South West	Sahu Harsh	Robotics	_	27/12/2024 27/11/202-	Bhubaneshwar LNCT
2	(M)	Zone	Samarth	EC	Ι	30/11/2024	University, Bhopal





Judo (M)



Archery (W)



### **RTMNU Inter-Collegiate:**

In a remarkable show of sportsmanship, students from RBU enthusiastically took part in the RTMNU's Inter-Collegiate Tournament across various events. A detailed information can be found in the table below. This strong representation not only highlights the athletic prowess of RBU but also emphasizes the commitment of its students to excel in diverse sporting competitions.

#### **Achievements:**

- RBU Basketball (W) team won First position in RTMNU
- RBU Taekwondo (M) team won First position in RTMNU
- RBU Chess (M) team won First position in RTMNU
- RBU Chess (W) team won First position in RTMNU
- RBU Lawn Tennis (W) team won First position in RTMNU
- RBU Fencing (W) team won Third position in RTMNU

- RBU Volleyball (W) team won Second position in RTMNU
- RBU Swimming (W) team won Second position in RTMNU
- RBU Lawn Tennis (M) team won Second position in RTMNU
- RBU Fencing (W) team won Third position in RTMNU
- RBU Shooting (W) team won Third position in RTMNU
- RBU Football (M) team won Third position in RTMNU

Sr No	Game	Date	Venue	No. of Participants	Rank
1	Shooting (M)	3/10/24-4/10/24	Priyadarshini College	1	Third
2	Basketball (W)	3/10/24-5/12/24	RTMNU Court	12	First
3	Taekwondo (M)	3/10/24-5/10/24	Bhiwapur Mahavidlaya	1	First
4	Kabaddi (M)	5/10/24-8/10/24	Nabira Mahavidyalaya, Katol	12	Participation
5	Basketball (M)	7/10/24-9/10/24	RTMNU Court	12	Participation
6	Fencing (W)	8/10/24-9/10/24	Institute of Science	1	Third
7	Chess (M)	15/10/24-16/10/24	Institute of Science	6	First
8	Chess (W)	15/10/24-16/10/24	Institute of Science	6	First
9	Lawn Tennis (M)	24/10/24	NDHAT Tennis Ground	3	Second
10	Lawn Tennis (W)	24/10/24	NDHAT Tennis Ground	3	First
11	Kho Kho (M)	24/10/24	Mahila Mahavidyala, Nandanvan	12	Participation
12	Athletics (M)	4/12/24- 7/12/24	RTMNU Track	15	Participation
13	Athletics (W)	4/12/24- 7/12/24	RTMNU Track	5	Participation
14	Karate (M)	9/10/2024-10/10/2024	Subhedar Hall	1	Participation
15	Karate (W)	9/10/2024-10/10/2024	Subhedar Hall	1	Third
16	Volleyball (M)	7/10/2024 -8/10/2024	Priyadarshini College	12	Participation
17	Volleyball (W)	11/10/2024 - 15/10/2024	Institute of Science	10	Second
18	Powerlifting (M)	13/11/24	Tirpude College	1	First
19	Swimming (W)	30/11/2024	Datta Meghe Recreation Centre	1	Second
20	Football (W)	1/12/24-4/12/24	SK Porwal College, Kamptee.	16	Third







Kabaddi (M)

Football (M)

Athletics (M & W)







Lawn Tennis (M)

Volleyball (W)

Powerlifting (M)







Chess (M & W)

Fencing (W)

Kho-Kho (M)

3. INTER BRANCH SPORTS CUP: The Inter Branch Sports Cup was organized by the Dept. of Physical Education at RBU, which took place from 8th October to 26th December 2024. The event witnessed active participation from students, making it a memorable and successful event. The students competed fiercely showcasing their talents and skills. The event not only promoted physical fitness and well-being but also emphasized the importance of sportsmanship, teamwork and healthy competition.

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Sr. No.	Event	Date	No of Teams	No of Participants	I Position	II Position
1	Table Tennis (M)	8-10 oct, 2024	11	44	ECE	CIVIL
2	Table Tennis (W)	8-10 oct, 2024	10	38	EN/BIO	ECE
3	Chess (M)	10-15 oct 2024	10	30	AIML	ECE
4	Chess (W)	10-15 oct 2024	09	27	ECE	DS
5	Basketball (W)	22-25 oct 2024	07	53	CSE	EN/BME
6	Cricket (W)	14-17 oct 2024	10	93	ECE	EN/BIO
7	Throwball (W)	08-10 oct 2024	10	97	ENLT	MBA
8	Volleyball (M)	14 – 17 oct 2024	12	117	MECH	AIML
9	Badminton (M)	23- 26 Dec 2024	11	54	MBA	EE
10	Badminton (W)	23-26 Dec 2024	8	36	DS	MBA

#### 4. INTER-COLLEGIATE INVITATIONAL TOURNAMENT:

**DNC Krida Mahotsav :** The students of RBU actively participated in the DNC's Krida Mahotsava which was held at Dhanwate National College from 1st October to 4th October 2024. Student's showcased their active involvement and secured prizes across various events.

Sr. No	Game	Date	Venue	No. of Participants	Rank
1	Football (M)	30/9/24-3/10/24	DNC College	18	Participation
2	Badminton (M)	1/10/24-3/10/24	DNC College	5	Participation
3	Badminton (W)	1/10/24-2/10/24	DNC College	6	Participation
4	Table Tennis (M)	2/10/24-4/10/24	DNC College	6	Participation
5	Table Tennis (W)	2/10/24-4/10/24	DNC College	4	First
6	Chess (Mix)	1/10/24-3 /10/24	DNC College	5	First
7	Basketball (M)	1/10/24-2/10/24	DNC College	12	Participation
8	Kabaddi (M)	1/10/24-2/10/24	DNC College	12	Participation
9	Volleyball (M)	1/10/24-2/10/24	DNC College	12	Participation
10	Volleyball (W)	1/10/24-4/10/24	DNC College	12	Second
11	Cricket (M)	7/10/24 - 14/10/24	DNC College	16	Participation



Chess (M & W)



Table Tennis (W)

# Reflection

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Volleyball (W)

#### **NSS ACTIVITIES**

#### Aarambh:

Ramdeobaba University celebrated Gandhi Jayanti on 2nd October, 2024 with a special event combining the national campaigns "Swachhata hi Seva" and "Ek Ped Maa ke Naam" under the joint leadership of the Department of Physical Education and the National Service Scheme (NSS), in collaboration with the REEF Club. A total of 74 NSS volunteers, including 33 girls and 41 boys, actively participated in the cleanliness drive, which was conducted across four key locations on the university campus. The Swachhata hi Seva Campaign 2024 and Ek Ped Maa ke Naam initiatives not only celebrated Gandhi Jayanti but also promoted an ongoing commitment to cleanliness and afforestation. This event set a remarkable example of how small steps towards cleanliness and environmental care can lead to significant community and national-level impacts.







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### **NCC**

The NCC cadets from our college have displayed exceptional performance in the various NCC camps they participated in. Their dedication, discipline, and commitment have been evident in every camp. Below is a comprehensive list of the students who attended different NCC camps, along with the specific details of each camp they participated in.

Sr No	Name	Branch	Year	Battalion	Camp	Date
1	Ashlesha Pathak	CSE	III	2 MAH Artillery (Army Wing)	IGC 2025	20 Oct – 29 Oct 2024
2	Aditi Singh	Industrial	IV	4 MAH Naval Unit	CATC	21 Nov – 30 Nov, 2024



**Aditi Singh** 



Ashlesha Pathak



# **Department of Dean Students**

# **Student Achievements**

Sr.		Name of the Student	Name of the Event	Achievement
No.	1	C-11 C +		
1	1.	Gokul Gupta		
	2.	Sneha Thakur		
	3.	Nandini Joshi		С . Е. (
	4.	Urshita Rahate	A A D O LILIZA A A D HT	Securing First
	5.	Aman Jhariya	AAROHI'24, VNIT	Position
	6.	Vitthal Dhawale		(Group Dance)
	7.	Neenad Uttarwar		
	8.	Jai Pamnani		
	9.	Harshvardhan Khajuria		
	10.	Amit Raghuse		
	11.	Vedika Bokade		
2	12.	Amritraj Singh		
2	1.	Sumedh Chaudhary		
	2. 3.	Rudra Garge Siddhant Shukla		
	4. 5.	Gargi Singh		
	6.	Harsh Dayaramani		
	7.	Priyangshu Bhowmick,		
	8.	Shubham Indani, Harsh Thakur,		
	9.	Madhura Ambadkar,	Mood Indigo 2024,	2nd Position
	10.	Ishika Choudhary,	IIT Bombay	ZIIG FOSITIOII
	11.	Rahul Motwani	III Domoay	
	12.	Palak Bang		
	13.	Shradha Nakhate		
	14.	Shraddha Naidu		
	15.	Pragati Nagwani		
	16.	Harshit Dwivedi,		
	17.	Nayan Bhutada,		
	18.	Teertha Akhare		
	19.	Tanishq Buradkar		
	20.	Harsh Taiwade,		
	21.	Rishi Lunkad,		
	22.	Aryan Chhangani,		
	23.	Harsh Kaley,		
	24.	Aryan Kakde,		
	25.	Ashleesha Gaydhane,		
	26.	Rishi Parashar,		
	27.	Venushree Sharma,		
	28.	Sanskruti Kshirsagar,		
	29.	Siya Ambekar,		
	30.	Nishika Manglani,		
	31.	Shreya Rathi		
	32.	Aryan Kothari		





#### Other Activities



#### Garba Night

Date: 5th October 2024

The Garba Night, organized by the Students' Representative Council, was a spectacular success. The event attracted a total of 578 participants, including students from the first, second, third, and fourth years, representing various branches and specializations.

#### Garba Workshop:

In preparation for the event, the SRC conducted a 5-day Garba workshop from 28/09/2024 to 04/10/2024. The workshop was held in two daily slots: 4:00 PM to 5:00 PM and 5:00 PM to 6:00 PM, giving students ample opportunity to refine their Garba skills. The workshop followed a vibrant color theme, fostering a sense of unity and festivity during the practice sessions.

#### Garba Night

The Garba Night itself took place across two venues on campus: the Basketball Ground and the IT Parking area. Students from the second, third, and fourth years gathered at the Basketball Ground, while first-year students celebrated at the IT Parking area. For smooth operations, the entries were bifurcated into two sections:

First-year students entered from the canteen side.

- Second, third, and fourth-year students were directed from IT Square.

The entry process was well-organized, with a two-step authentication system:

- 1. **Checkpoint 1:** Confirmation mail verification.
- 2. Checkpoint 2: QR code scanning for seamless and secure entry.

The event was graced by Mr. Ayush Baroha, Mr. Shreyash Jaiswal and Mrs. Sudhalaxmi Paraye, the instructors from the Garba workshop, who danced alongside the students, contributing to the event's festive atmosphere. Their presence added a special touch and was greatly appreciated by all attendees.

The SRC members played a vital role throughout the event, managing the crowd, directing entries, and ensuring smooth operations at the checkpoints. Even the students Enjoyed as well as learned. Their efforts were crucial in ensuring the event ran seamlessly from start to finish.

# Reflection -

#### **Conclusion**

The Garba Night provided an unforgettable experience, fostering a strong sense of community, celebration, and tradition among the students. The success of the event was a testament to the hard work and dedication of the SRC and Dance Club, leaving participants with lasting memories of this joyous occasion.









# Role No. 8 Report

'Role No.' is a show organized by the club specially for the new batch of first years of the college. The show is set just before the yearly club auditions, to let the freshers be acquainted with the art of dramatics. The eighth edition of the show, was organized at Main Auditorium, on 11th October 2024. The show was held in two slots from 1 to 3pm and 4 to 6pm respectively. It was conducted with the guidance of Ms. Jasleen Rihan, Prof. Yogesh Thakare and Prof. Snehal Laddha and was arranged by Mr. Rahul Motwani Drama Club Coordinator, SRC. A total of 4 short plays were performed.

#### Short plays performed were:

- 1. Bye Belwa
- 2. Timeless
- 3. Rorschach Morse Remorse
- 4. Vidya Vyapaar

# Reflection -

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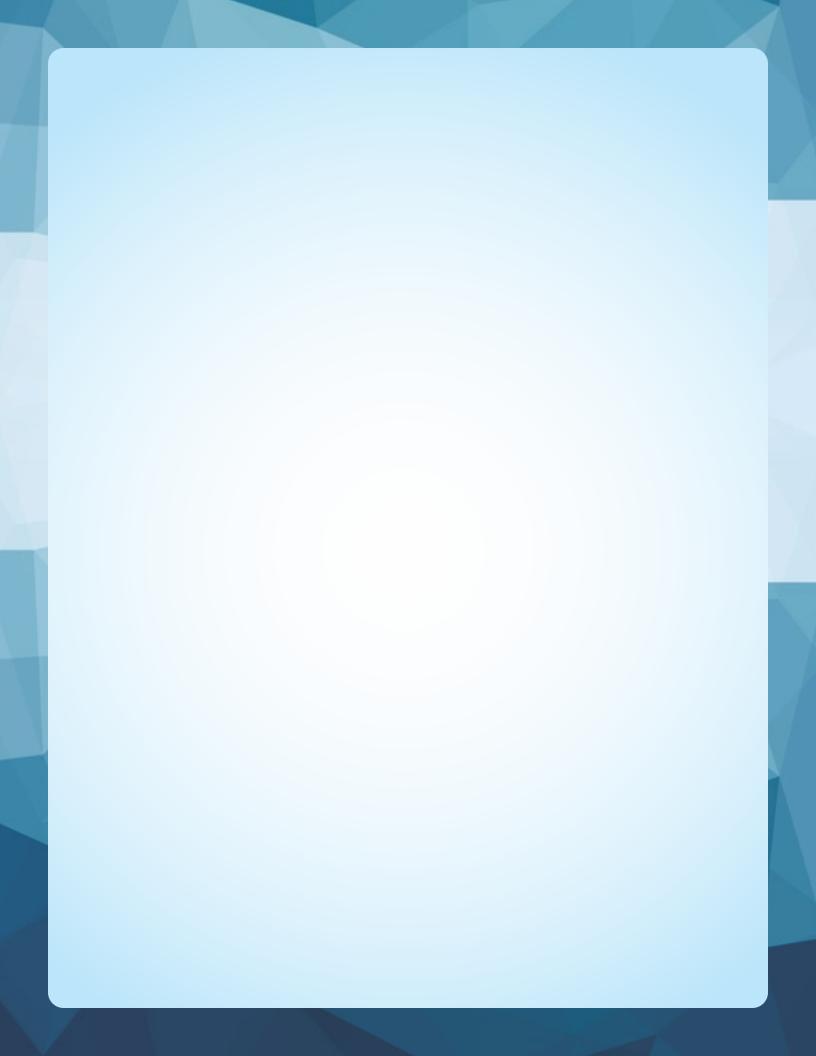


The show was very well executed and received an overwhelming response.



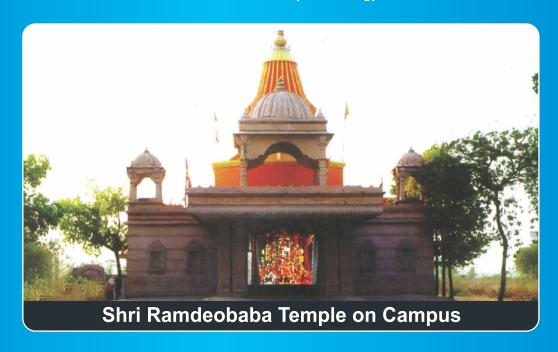
### **TEMPLE REPORT**

DATE	EVENT	ACTIVITY
01-10-2024	Sunderkand	Sunderkand By Shri Ramdeobaba Bhakt Kirtan Mandal
04-10-2024	Baba Ki Duj	Bhajan Sandhya By Shri Ramdeobaba Bhakt Kirtan Mandal
		Flower Decoration By Local Artist
08-10-2024	Sunderkand	Sunderkand By Shri Ramdeobaba Bhakt Kirtan Mandal
15-10-2024	Sunderkand	Sunderkand By Shri Ramdeobaba Bhakt Kirtan Mandal
16-10-2024	Kojagiri	Celebrated With Distribution Of Milk
22-10-2024	Sunderkand	Sunderkand By Shri Ramdeobaba Bhakt Kirtan Mandal
25-10-2024	Bhajan Sandhya	Bhajan Sandhya By Shri Ramdeobaba Bhakt Kirtan Mandal
29-10-2024	Sunderkand	Sunderkand By Shri Ramdeobaba Bhakt Kirtan Mandal
31-10-2024	Deeputsav	Deeputsav Was Celebrted With Lighting of Earthen Lamps In Temple
		Premises
03-11-2024	Baba Ki Duj	Bhajan Sandhya By Shri Ramdeobaba Bhakt Kirtan Mandal
		Flower Decoration By Local Artist
11-11-2024	Annkoot	Celebrated with Distribution of Prasad and offered Chhapan Bhog
		To Baba Flower Decoration By Artist From Vrindavan
12-11-2024	Sunderkand	Sunderkand By Shri Ramdeobaba Bhakt Kirtan Mandal
16-11-2024	Bhajan Sandhya	Bhajan Sandhya By Shri Ramdeobaba Bhakt Kirtan Mandal
19-11-2024	Sunderkand	Sunderkand By Shri Ramdeobaba Bhakt Kirtan Mandal
23-11-2024	Bhajan Sandhya	Bhajan Sandhya By Shri Ramdeobaba Bhakt Kirtan Mandal
26-11-2024	Sunderkand	Sunderkand By Shri Ramdeobaba Bhakt Kirtan Mandal
30-11-2024	Bhajan Sandhya	Bhajan Sandhya By Shri Ramdeobaba Bhakt Kirtan Mandal
02-12-2024	Baba Ki Duj	Bhajan Sandhya By Shri Ramdeobaba Bhakt Kirtan Mandal
		Flower Decoration By Local Artist
07-12-2024	Bhajan Sandhya	Bhajan Sandhya By Shri Ramdeobaba Bhakt Kirtan Mandal
10-12-2024	Sunderkand	Sunderkand By Shri Ramdeobaba Bhakt Kirtan Mandal
13-12-2024	Dutt Jayanti	Flower Decoration By Local Artist
14-12-2024	Bhajan Sandhya	Bhajan Sandhya By Shri Ramdeobaba Bhakt Kirtan Mandal
17-12-2024	Sunderkand	Sunderkand By Shri Ramdeobaba Bhakt Kirtan Mandal
21-12-2024	Bhajan Sandhya	Bhajan Sandhya By Shri Ramdeobaba Bhakt Kirtan Mandal
24-12-2024	Sunderkand	Sunderkand By Shri Ramdeobaba Bhakt Kirtan Mandal
31-12-2024	Sunderkand	Sunderkand By Shri Ramdeobaba Bhakt Kirtan Mandal



# Reflection NEWSLETTER

# RAMDEOBABA UNIVERSITY, NAGPUR





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