

NEWS LETTER

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Vision of the Department

To impart technical competencies in Electrical Engineering and build a quality citizen to fulfill the need of the nation and globe.

Mission of the Department

M1: *To provide the basic and analytic knowledge in Electrical Engineering with an overall background suitable for building a successful engineer in industry, research or higher education.*

M2: *To enhance the problem-solving capability wherein students learn to develop communications and leadership abilities to unfold as a professional.*

M3: *To ensure that every graduate is aware of the roles and responsibilities of the professional engineer in society through exposure to ethics, equity, and safety.*

M4: *To develop life-long learning skills that allows them to be adaptive and responsive to change in society, technology, and the environment, as well as career demands.*

Program Educational Objectives (PEOs) of Department

PEO1: *Graduates will accomplish basic and practical knowledge with modern designing tools, technologies and software in Engineering.*

PEO2: *Graduates will have the expertise in problem analysis, solving, designing and equipped with necessary information for a successful career in the field of Electrical Engineering.*

PEO3: *Graduates will be outstanding in communication, teamwork and multidisciplinary approach related to engineering issues in national and global context.*

PEO4: *Graduates will excel in competitive environment towards leadership and life-long learning needed for a successful professional career.*

Program Specific Outcomes (PSOs)

Graduates will be able to:

PSO1: *Develop creative and competent skills in the field of design, research and operations of electrical systems.*

PSO2: *Apply technical knowledge effectively with modern software's for design and analysis of power network and systems.*

PSO3: *Implement the technical concepts and principles through experimentation and hardware realization.*

Engineers Day

Engineers Day 2021, Engineers' Day is celebrated every year on September 15 across India on the birth anniversary of Dr. M. Visvesvaraya to recognize his contributions in the field of science and technology. For his excellent work done in the field of engineering (dams, reservoirs and hydroelectric projects), he was honoured with Bharat Ratna in the year 1955. Therefore, **Department of Electrical Engineering**, celebrated the Engineer's Day 2021 with their faculty, staff and students.



Industry Institute Interaction Programme

An industrial visit at **Prayagraj Power Generation Company Ltd.** Vill - Khanshemra, Tehsil- Bara, and, Dist- Prayagraj (U.P) for 5th Sem. Electrical engineering Students on



12th Nov 2022.



It was organized with the prior permission and guidance of Head of the department Professor Niraj Kumar Shukla. It was coordinated by Assistant Professor Kuldeep Kumar Singh. 35 students of the Third Year visited PPGCL (3 x 660 MW) coal-based steam Power plant, on receiving the letter of permission from Prayagraj Power Generation Company Ltd. students with two faculties' member (Mr. Kuldeep Kumar Singh, Mr. R. K. Maurya) went on an industrial visit to the Prayagraj Power Generation Company Ltd. one on 12th Nov 2022. We left our college at 8:45 am on 12th Nov 2022 with a group of 35 students and reached Prayagraj Power Generation Company Ltd, Bara by 9:45 am. First, we headed to Prayagraj Power Generation Company Ltd, Bara.

PPGCL Members charge of production received us at the entrance and gave a brief introduction to the PPGCL. Visit started with a security rule briefing during which we were given our helmets and explained about the important safety rules to comply with at all times.

Events

Conference: Intelligent Systems and Smart Infrastructure (ICISSI-2022), May 21-22, 2022.

The International Conference on **Intelligent Systems and Smart Infrastructure (ICISSI-2022)** was jointly organized by Shambhunath Institute of Engineering and Technology, Prayagraj UP India, Institute of Engineering and Technology (IET) Lucknow, U.P India, and Manipal University Jaipur, Rajasthan India during May 21-22, 2022. A total of 249 research papers were received through the easychair system by researchers from India and abroad. Out of 249 research articles, 14 papers were received from Canada, Indonesia, Mexico, Pakistan, Singapore, and the United Kingdom. After recommendations by the reviewers, only 83 research articles were accepted for the publication in the book volume of the Talyor & Francis group. (Book ISBN No: 9781032412870)

Speaker Details:

1	Dr. Cher Ming Tan Chang Gung University, Taiwan	3	Dr. M V Reddy New graphite world (NMG), Montreal, Canada.
2	Dr. Sudhan Majhi Indian Institute of Science, Bangalore, India	4	Dr. Om Jee Pandey IIT, BHU, India



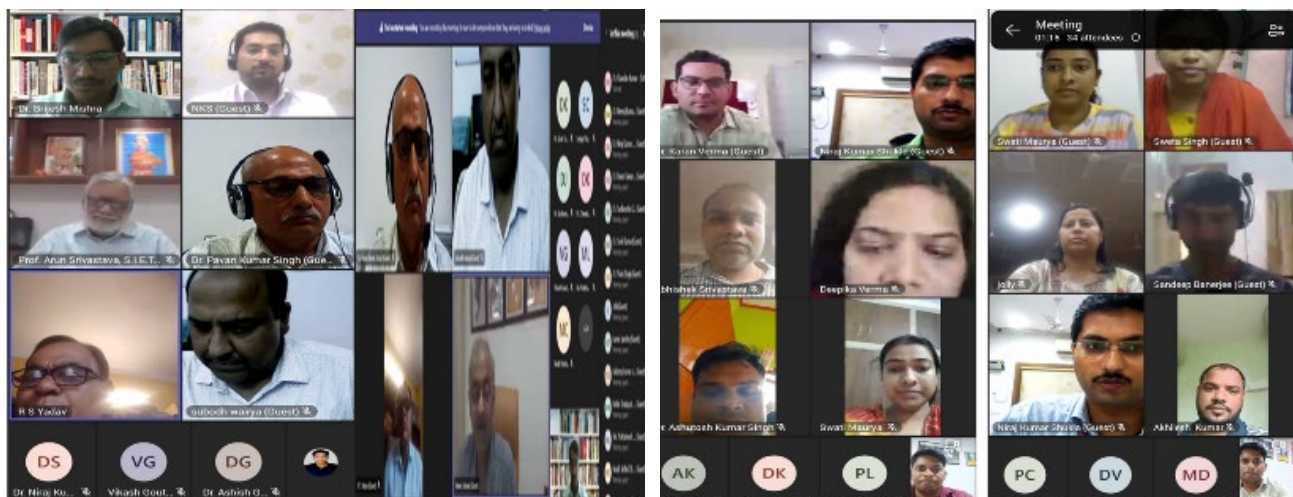
FDP: AI and ML applications in electrical and electronics engineering, August 20–25, 2022.

An online Faculty Development Programme on **AI and ML Applications in Electrical and Electronics Engineering** was organized during August 20–25, 2022. The FDP was jointly organized by the departments of Electrical Engineering and Electronics and Communication Engineering, SIET Prayagraj, the Department of Electronics and Communication Engineering, JK Institute of Applied Physics and Technology, Prayagraj, and the Department of Electronics and Communication Engineering, I.E.T., Dr. Rammanohar Lohia Avadh University, Ayodhya. This event was also technically supported by many professional bodies, such as the IETE Allahabad

chapter, the IEEE, student branch SIET, and the ISTE student chapter SIET. The FDP was inaugurated by Chief Guest Prof. Venit Kansal, Director, IET Lucknow, and Guest of Honor Prof. Subodh Waria, Dean, UG AKTU, as well as Prof. Ramapati Mishra, director of our collaborative institute (I.E.T., Dr. RMLAU, Ayodhya), and Prof. R. S. Yadav, head of department, JK Institute of Applied Physics and Technology, Prayagraj. In this FDP, speakers from IITs, NITs, and industry delivered expert talks.

Speaker Details:

1	Dr. Bhaskar Mandal Expert affiliation: NIT Patana	7	Dr. Nitin Singh Expert affiliation: MNNIT Allahabad UP
2	Mr. Mahesh Gour Expert affiliation: Data Scientist, Sivisoft Solution Pvt Ltd	8	Dr. Rajesh Kumar Expert affiliation: DTU, Delhi
3	Dr. Chandrashekhar Azad Expert affiliation: NIT Jamshedpur	9	Dr. Niraj Kumar Choudhary Expert affiliation: MNNIT Allahabad UP
4	Dr. Navneet Kumar Singh Expert affiliation: MNNIT Allahabad UP	10	Dr. Karan Verma Expert affiliation: NIT Delhi
5	Dr. Gurpreet Kaur Expert affiliation: IIIT Una	11	Dr. Asheesh Kumar Singh Expert affiliation: MNNIT Allahabad UP
6	Dr Arun Kumar Verma Expert affiliation: MNIT Jaipur	12	Dr. Bindeshwar Singh Expert affiliation: KNIT Sultanpur



Invited Talk/Special Lectures Organized by the Department:

S. N.	Name & Designation of Speaker	Title	Date(s)
1.	Mr. Ashish Rawat, Chairman of Softronic Automation	Five days' workshop on Relay Logic Control Circuit	11 th – 15 th April 2022
2.	Mr. Amritanjan, Senior Developer, Technobeam Technology	Two days' workshop on Transformer Design	06 th – 07 th May 2022
3.	Mrs. Khushboo Purwar, Technical Manager, Quarbz Info Systems, Kanpur UP India	Special Lectures, Typhoon Virtual HIL Software, 2021	30 November 2021

Faculty Publications

International/ National Journals

- **Niraj Kumar Shukla**; Rajeev Srivastava; Seyedali Mirjalili, “A Hybrid Dragonfly Algorithm for Efficiency Optimization of Induction Motors”, *Sensors*, 2022; 22(7):2594, Impact Factor: 3.576, ISSN: 1424-8220, DOI: <https://doi.org/10.3390/s22072594>.

International/ National Conferences

- S. Jain, M. Maheshwari, R. Gupta, **D. K. Singh**, and V. Varshney, “IOT Based Drainage Monitoring System Using Arduino Uno” *ICISSI 2022: 1st International Conference on Intelligent Systems and Smart Infrastructure*, Taylor & Francis, (**Accepted**).
- Mohd. Shadan, Hritik Goel, Aryan Singh Rana, M. M. Singh and **D. K. Singh**, “Junction-less Field Effect Transistor: A Technical Review” *ICISSI 2022: 1st International Conference on Intelligent Systems and Smart Infrastructure*, Taylor & Francis, (**Accepted**).
- Y. Saroya, K. Anand, and **D. K. Singh**, “A comparative study on MPPT techniques for PV system,” *ICISSI 2022: 1st International Conference on Intelligent Systems and Smart Infrastructure*, Taylor & Francis, (**Accepted**).

Faculty Participation in FDP's and Short-Term Courses

- Dr. Niraj Kumar Shukla, Participated & completed successfully AICTE Training and Learning (ATAL) Academy Online FDP on “Technology Trends in Smart City” from 09th August 2021 to 13th August 2021 at Indian Institute of Management Kashipur.
- Dr. Niraj Kumar Shukla, Participated & completed successfully AICTE Training and Learning (ATAL) Academy Online FDP on “Energy Storage: Science & Technology” from 20th September 2021 to 24th September 2021 at Motilal Nehru National Institute of Technology Allahabad.
- Dr. Niraj Kumar Shukla, Participated & completed successfully AICTE Training and Learning (ATAL) Academy Online FDP on “Advances in Power Electronics Converters for Distributed Generation and Industrial Applications” from 15th November 2021 to 19th November 2021 at Uday Prasad Uday Government Polytechnic, Durg.
- Dr. Niraj Kumar Shukla, Participated & completed successfully AICTE Training and Learning (ATAL) Academy Online FDP on “Power Electronic Converters and Control for Renewable Power and Microgrid Systems” from 14th December 2021 to 18th December 2021 at Indian Institute of Technology, Goa.
- Mr. Vikash Kumar Goutam Attended Five day online International Faculty Development Program on “Recent Trends in Power Electronics, Controllers and Power Systems” organized by Department of Electrical and Electronics Engineering of GMR Institute of Technology, Rajam during July 19th – 23rd, 2021.
- Mr. Kuldeep Kumar Singh, Participated & completed successful the five days online International Faculty Development Program on “Advanced Applications of Robotics and IOT” organized by Department of Electronics and Communication Engineering, Atria institute Technology, Bangalore, in Association with IEEE Bangalore Section, IETE Bangalore Section and IEEE Atria Student Branch during 29-04-2022 to 04-05-2022.
- Mr. Kuldeep Kumar Singh, Participated & completed successful the five days online International Faculty Development Program on “Sustainable Energy Research, Innovation & Business Plan” organized by Department of Electrical Engineering, National Institute of Technology, Silchar on 21-04-2022 to 25-04-2022.
- Mr. Kuldeep Kumar Singh, Participated & completed successful an AICTE Training and Learning (ATAL) Academy FDP on " Recent Trends of Control Systems in Power Electronics Converter" from 03/01/2022 to 07/01/2022 at National Institute of Technology Manipur.
- Mr. Kuldeep Kumar Singh, Participated & completed successful the five days online International Faculty Development Program on “Recent Trends in Power Electronics, Controllers and Power System” organized by

Department of Electrical & Electronics Engineering of GMR institute Technology on 19-07-2021 to 23-07-2021.

- Mr. Kuldeep Kumar Singh, Participated & completed successful the five days online International Faculty Development Program on “Advanced Applications of Robotics and IOT” organized by Department of Electronics and Communication Engineering, Atria institute Technology, Bangalore, in Association with IEEE Bangalore Section, IETE Bangalore Section and IEEE Atria Student Branch during 29-04-2022 to 04-04-2022.
- Mr. Ajeet Kumar Rawat, attended short term course on “Development of Residential Micro grid (in collaboration with Typhoon)”, held Online at NITTTR, Chandigarh during July 07-11, 2021.
- Mr. Ajeet Kumar Rawat, attended short term course on “Power Quality and Harmonics (with Lulea University Sweden and Typhoon HIL)”, held Online at NITTTR, Chandigarh during 29 Nov-3 Dec, 2021.
- Mr. Ajeet Kumar Rawat, attended short term course on “MATLAB / Simulink and its Hardware Interface”, held Online at NITTTR, Chandigarh during Jan 17-21, 2022.
- Dr. Pavan Kumar Singh, Participated NPTEL-AICTE FDP (full FDP of one and half week) on Power Quality, during Jul-Oct 2021.
- Dr. Pavan Kumar Singh, Participated NPTEL-AICTE FDP (full FDP of one and half week) on Introduction to Machine Learning, during Jul-Oct 2021.
- Dr. Pavan Kumar Singh, Participated NPTEL-AICTE FDP (full FDP of one and half week) on Introduction to Artificial Intelligence, during Jan-Apr 2022.
- Dr. Pavan Kumar Singh, Participated NPTEL-AICTE FDP (full FDP of one week) on Data Mining, during Feb-Apr 2022.
- Dr. Dinesh Kumar Singh, attended Online short-term course on “UNPACKING E-MOBILITY TECHNOLOGIES FOR INDIA” from November 20 to 24, 2021, organized by Electrical Engineering Department, M. N. National Institute of Technology Allahabad, Prayagraj under the Scheme for Promotion of Academic and Research Collaboration (SPARC) of Ministry of Education, Govt. of India, for the project titled “E-Mobility: An Electricity Grid Perspective (P1542)”.
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Workshops Attended by Faculty

- Dr. Niraj Kumar Shukla, attended in the SERB sponsored one-week workshop on “Intelligent Control and Protection Techniques for Hybrid Microgrid (ICPT-2022)” from 5th March 2022 to 9th March 2022, organized by the Electrical Engineering Department, Motilal Nehru National Institute of Technology Allahabad.
- Mr. Vikash Kumar Goutam, attended in the SERB Sponsored One week (Online) Workshop on “Intelligent Control and Protection Techniques for HYBRID Microgrid (ICPT-2022)” organized by Electrical Engineering Department, Motilal Nehru National Institute of Technology Allahabad, Prayagraj, Uttar Pradesh, India, during 5th March – 9th March 2022.
- Mr. Vikash Kumar Goutam, attended in the five-day Online Workshop on “Sustainable Energy Research, Innovation and Business Plan” conducted by the Department of Electrical Engineering, National Institute of Technology, Silchar from 21st to 25th March 2022.
- Dr. Dinesh Kumar Singh, attended Online workshop on Applications of Machine Learning in Signal, Image & Computer Vision (AMALGAM-2021), “A discussion & collaboration forum for the Academic and Industrial Researchers working in the field of Machine Learning, Deep Learning and their various applications” from December 27 to 31, 2021, conducted and organised by IEEE Young Professionals Affinity Group UP Section, IEEE Signal Processing Society UP Chapter and BTKIT Dwarahat, Uttarakhand, India.

- Dr. Dinesh Kumar Singh, attended Online workshop on Intelligent Control and Protection Techniques for HYBRID Microgrid (ICPT-2022) from March 05 to 09, 2022, *organized by* Electrical Engineering Department, M. N. National Institute of Technology Allahabad, Prayagraj.

Webinars Attended by Faculty

- Dr. Niraj Kumar Shukla, attended webinar on "Software defined radio and future of 5G" Shambhunath Institute of engineering and Technology, Prayagraj, on 24 July 2021.
- Dr. Niraj Kumar Shukla, participated in the online Webinar on “Investigation on Modelling Spatial Extent of Source in Virtual Reality” organized by Department of Electrical Engineering, Eshan College of Engineering & Management, Mathura, Uttar Pradesh, India, on 26th Feb 2022.

Faculty NPTEL Course Certification

- Mr. Kuldeep Kumar Singh, Participated & completed successfully NPTEL course on “Control System”, Conducted by IIT Madras, (12 Weeks), July- October 2021.
- Dr. Pavan Kumar Singh, attended & completed successfully NPTEL course on “Power Quality”, Conducted by IIT Madras (Coordinator – IIT, Delhi), (12 Weeks), July- October 2021.
- Dr. Pavan Kumar Singh, attended & completed successfully NPTEL course on “Introduction to Machine Learning”, Conducted by IIT Madras (Coordinator – IIT, M), (12 Weeks), July- October 2021.
- Dr. Pavan Kumar Singh, attended & completed successfully NPTEL course on “Data Mining”, Conducted by IIT Madras (Coordinator – IIT, Kharagpur), (8 Weeks), Feb-Apr 2022.
- Dr. Pavan Kumar Singh, attended & completed successfully NPTEL course on “Introduction to Artificial Intelligence”, Conducted by IIT Madras (Coordinator – IIT, Delhi), (12 Weeks), Jan-Apr 2022.

Faculty Industrial/Awareness Training

- Dr. Niraj Kumar Shukla, one day IP Awareness/Training program under National Intellectual Property Awareness Mission (NIPAM) on May 18, 2022 organized by Govt. of India, Ministry of Commerce and industry.
- Dr. Dinesh Kumar Singh, one day Intellectual Property (IP) Awareness/Training program under National Intellectual Property Awareness Mission (NIPAM) on May 18, 2022 *organized by govt. of India, Ministry of Commerce and industry.*

Faculty other Awards/Achievements

- Dr. Niraj Kumar Shukla, Certification of Achievement for Outstanding Contribution in the Field of Education on Teachers Day by chairman of UP Higher Education Council in Shambhunath Group of Institution, Prayagraj, U.P in 2021.
- Dr. Niraj Kumar Shukla, Awarded as Best Faculty of Electrical Engineering Department in 2021 by Secretary of SIET, Prayagraj, U.P.
- Dr. Dinesh Kumar Singh, Online session chair in International Conference on Intelligent Systems and Smart Infrastructure (ICISSI 2022), on May 21 to 22, 2022, jointly *organized by* Shambhunath Institute of Engineering and Technology, Prayagraj UP India, Institute of Engineering and Technology (IET) Lucknow, U.P India, and Manipal University Jaipur, Rajasthan India.
- Dr. Dinesh Kumar Singh, Program Coordinator (PC Member) in International Conference on Intelligent Systems and Smart Infrastructure (ICISSI 2022), on May 21 to 22, 2022, jointly *organized by* Shambhunath Institute of Engineering and Technology, Prayagraj UP India, Institute of Engineering and Technology (IET) Lucknow, U.P India, and Manipal University Jaipur, Rajasthan India.

- Dr. Dinesh Kumar Singh, Reviewer of “*Bulletin of Electrical Engineering and Informatics*” Scientific Journal, (Scopus) in the field of *Power System Protection*, December 2021.
- Dr. Dinesh Kumar Singh, A reviewer at the 7th students conference on engineering and Systems 2022 (SCES-2022) from 1st to 3rd July 2022, organized by the Department of Electrical Engineering, Motilal Nehru National Institute of Technology Allahabad Prayagraj UP, India.
- Dr. Dinesh Kumar Singh, A reviewer at the 1st IEEE International Conference on Advances In Computing & Future Communication Technologies (ICACFCT-2021) from 16-17 December, 2021, organized by Meerut Institute Of Engineering & Technology, Meerut, UP, India.

Faculty Patents Granted/ Filed/ Applied

- Pratiksha Meshram, **Dr. Niraj Kumar Shukla**, Sushil Kumar Singh, Dr. Ashish Manohar Urkude, M Thenmozhi, M.S. Ravi Teja, Pravin R. Kshirsagar, Hariprasath Manoharan, Indian Patent Design Application on “Contactless medical testing device”, Application Number: 365363-001, Cbr Number: 202305, Cbr Date: 03/06/2022, Application Status: Application Accepted, Certificate of Design not Generated.
- Dr. Pavan Kumar Singh, et. al, Patent granted with entitled “A Solar Powered on Grid DC Fast Charging System” vide certificate Sl. No. 20 2022 102 515, IPC: B60L 53/50, Dated 20.5.2022.

PLACEMENTS

A total of **25** students of B.Tech. (EE) are placed in software and hardware companies like RIALTO ENTERPRISES PVT. LTD., HCL TECHNOLOGIES, IGT SOLUTIONS, JUSTDIAL LTD. during Academic Year 2021-2022.

PLACEMENTS REPORT ACADEMIC YEAR 2021-2022

S. No	Name	Roll Number	Company	Pay Package
1.	Siddharth Tiwari	1816220020	WIPRO	3.67 LPA
2.	Akriti Singh	1816220001	Signity Corporate Solution Pvt. Ltd.	4.5 LPA
3.	Divyansh Gautam	1816220004	Dhoot Transmission Ltd.	2.50 CTC
			Ring Plus Auqa Ltd. (Raymond Group)	2.40 LPA
4.	Jayesh Kumar Maurya	1816220005	Dhoot Transmission Ltd.	2.50 CTC
			Ring Plus Auqa Ltd. (Raymond Group)	2.40 LPA
			Rang Technologies Ltd.	3 LPA
5.	Navnish Kumar	1816220009	Dhoot Transmission Ltd.	2.50 CTC
			Ring Plus Auqa Ltd. (Raymond Group)	2.40 LPA
			Rang Technologies Ltd.	3 LPA
6.	Rajnish Kumar Kushwaha	1816220010	Dhoot Transmission Ltd.	2.50 CTC
7.	Akash Rao	1901620209001	Dhoot Transmission Ltd.	2.50 CTC
			Ring Plus Auqa Ltd. (Raymond Group)	2.40 LPA
8.	Pandey Chandramohan	1901620209006	Dhoot Transmission Ltd.	2.50 CTC
9.	Ria Mishra	1901620209011	Dhoot Transmission Ltd.	2.50 CTC
10.	Sanjeev Mishra	1816220014	Dhoot Transmission Ltd.	2.50 CTC
11.	Ravi Shankar Maurya	1901620209010	Dhoot Transmission Ltd.	2.50 CTC
			Ring Plus Auqa Ltd. (Raymond Group)	2.40 LPA
12.	Shivam Mishra	1901620208001	Dhoot Transmission Ltd.	2.50 CTC
13.	Rajarshi Shukla	1816220011	Dhoot Transmission Ltd.	2.50 CTC
14.	Sunil Yadav	1901620209016	Dhoot Transmission Ltd.	2.50 CTC
			Ring Plus Auqa Ltd. (Raymond Group)	2.40 LPA
15.	Pankaj Yadav	1901620209007	Dhoot Transmission Ltd.	2.50 CTC
			Ring Plus Auqa Ltd. (Raymond Group)	2.40 LPA

16.	Sanjay Yadav	1816220013	Dhoot Transmission Ltd.	2.50 CTC
			Ring Plus Auqa Ltd. (Raymond Group)	2.40 LPA
17.	Shubhanshu Tiwari	1816220019	Dhoot Transmission Ltd.	2.50 CTC
			Ring Plus Auqa Ltd. (Raymond Group)	2.40 LPA
18.	Shashank Mishra	1816220017	Dhoot Transmission Ltd.	2.50 CTC
			Ring Plus Auqa Ltd. (Raymond Group)	2.40 LPA
19.	Mukesh Prajapati	1816220007	Dhoot Transmission Ltd.	2.50 CTC
20.	Mohit Gautam	1816220006	Dhoot Transmission Ltd.	2.50 CTC
			Ring Plus Auqa Ltd. (Raymond Group)	2.40 LPA
21.	Anurag Mishra	1816220003	Ring Plus Auqa Ltd. (Raymond Group)	2.40 LPA
22.	Diwakar	1901620209003	Signity Corporate Solutions Pvt Ltd	3 LPA
23.	Nancy Singh	1816220008	Signity Corporate Solutions Pvt Ltd	3 LPA
24.	Saurabh Nirala	1816220015	Signity Corporate Solutions Pvt Ltd	3 LPA
25.	Shobhit Kumar	1901620209014	Signity Corporate Solutions Pvt Ltd	3 LPA

