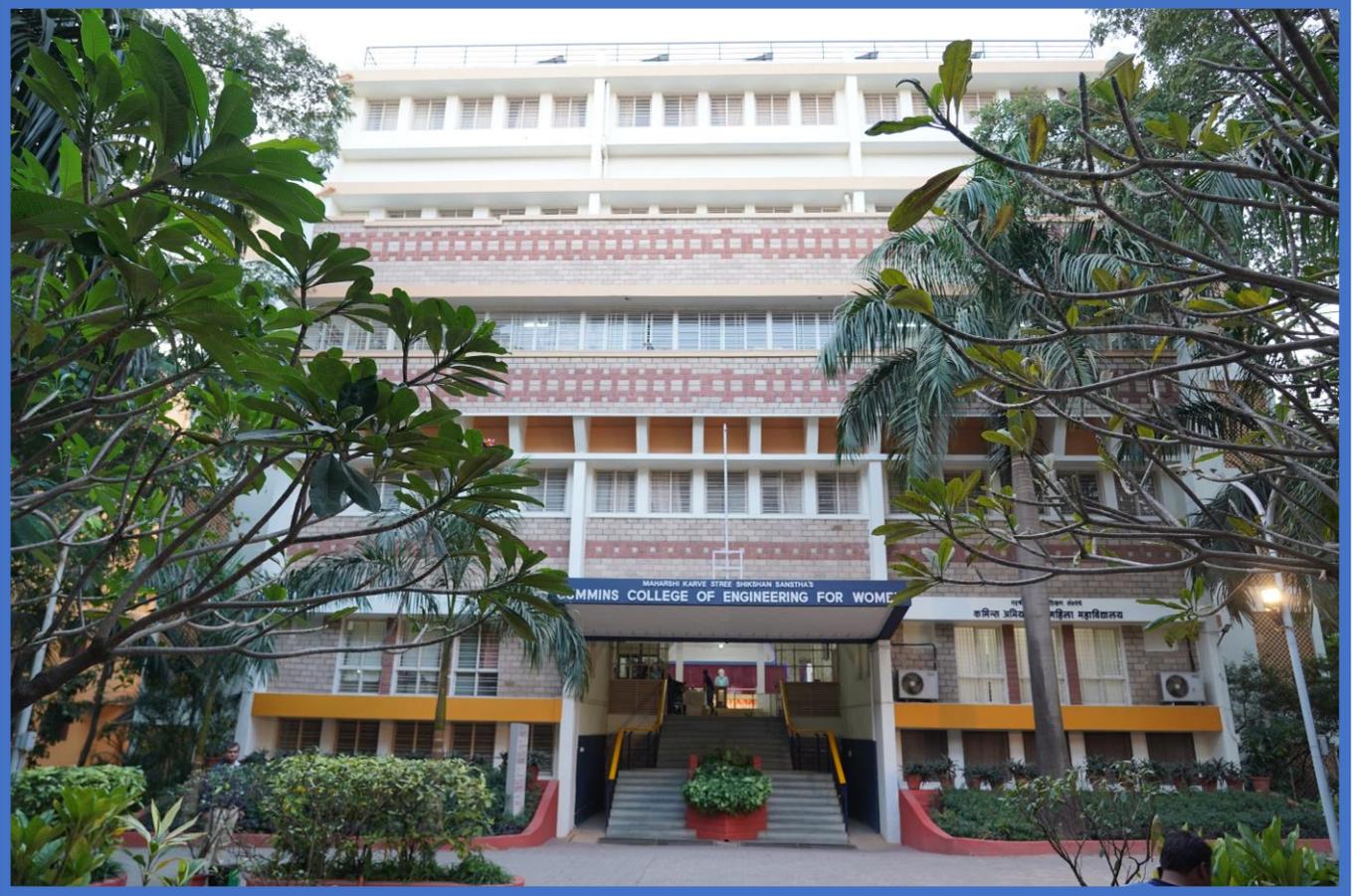


# ANNUAL ACTIVITIES REPORT

## AY 2021-22



## **Maharshi Karve Stree Shikshan Samstha's Cummins College of Engineering for Women, Pune**

**(An Autonomous Institute affiliated to Savitribai Phule Pune University)**

**Maharshi Karve Stree Shikshan Samstha's**  
**CUMMINS COLLEGE OF ENGINEERING FOR WOMEN**  
**Karvenagar, Pune 411052**

**ANNUAL ACTIVITIES REPORT**  
**FOR THE ACADEMIC YEAR: 2021-22**

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**Maharshi Karve Stree Shikshan Samstha's**  
**CUMMINS COLLEGE OF ENGINEERING FOR WOMEN**  
Karvenagar, Pune 411052

**ANNUAL ACTIVITIES REPORT**  
**FOR THE ACADEMIC YEAR: 2021-22**

**Vision:**

To be globally renowned institute for imparting quality education and to develop women leaders in engineering and technology.

**Mission:**

To develop women professionals who are academically and technically competent with strong professional ethics.

**1] Members of Governing Body 2022-25:**

<b>Sr. No.</b>	<b>Name</b>	<b>Affiliation</b>
1	Mr. Jayant Inamdar Management Committee Member, MKSSS	Chairman, MKSSS's Cummins College of Engineering for Women
2	Mr. Ravindra Deo Chairman, MKSSS	Member – Nominated by MKSSS
3	Shri. Rajendra Jog Trustee, MKSSS	Member – Nominated by MKSSS
4	Dr. Dhananjay Kulkarni Management Committee Member, MKSSS	Member – Nominated by MKSSS
5	Mr. Atul Nagras Management Committee Member, MKSSS	Member – Nominated by MKSSS
6	Dr. P.V.S. Shastry Secretary, MKSSS	Member – Nominated by MKSSS

7	UGC Nominee	University Grant Commission (UGC) Nominee
8	DTE Nominee	State Government Nominee (Ex-Officio)
9	Prof. Shruti Tambe Head, Department of Sociology Center for Advanced Studies Savitribai Phule Pune University Director, Euroculture, Savitribai Phule Pune University, Pune	Savitribai Phule Pune University Nominee
10	Dr. Pradheepam Ottikkutti Executive Director & Chief Technical Officer, Cummins India Ltd.	Member – Industry expert nominated by MKSSS
11	Shri. Nagarajan Balanaga Vice President – HR Cummins India Ltd.	Member – Industry expert nominated by MKSSS
12	Dr. Anand Bewoor Dean Academics	Member
13	Dr. Sandeep Musale Associate Dean Administration	Member
14	Dr. Madhuri Khambete Principal, Cummins College	Member – Secretary MKSSS's Cummins College of Engineering for Women

## 2] Members of College Development Committee

SN	Name	Affiliation
1	Mr. Jayant Inamdar	Chairperson of the Management MKSSS's Cummins College of Engineering for Women
2	Dr. P.V.S. Shastry	Secretary of the Management (MKSSS)
3	Dr. Ajit Bhosale	Head of the Department nominated by the Principal
4	Dr. Sandeep Musale	Three Elected Teachers
5	Dr. Swati Madhe	
6	Prof. Vishal Deore	
7	Mr. Chetan Kumbre	Elected Nonteaching Employee
8	Mr. Ravindra Deo	Local Members Nominated by the Management in the field of Education / Industry / Research / Social Service
9	Mr. Rajendra Jog	
10	Dr. Dhananjay Kulkarni	
11	Mr. Atul Nagras	
12	Ms. Meghana Vaidya	Nominated Alumnus
13	Dr. Vikram Athalye	Co-ordinator - Internal Quality Assurance Cell
14	Miss. Anushka Chikhale	Technical Secretary
15	Miss. Yamini Dongaonkar	Operations Secretary
16	Miss. Anshika Dubey	Cultural Secretary
17	Dr. Madhuri Khambete	Principal of the College - Member Secretary

### 3] Members of Academic Council 2022-2025

SN	Name	Affiliation
1	Dr. Madhuri Khambete Principal, MKSSS's Cummins College	Chairman
2	Dr. B.B. Ahuja Director, College of Engineering, Pune.	Savitribai Phule Pune University nominees
3	Dr. Sunil Thakre Principal, Anantrao Pawar College of Engineering Pune.	
4	Dr. Kalyani Joshi Principal, Progressive Education Society's Modern College of Engineering, Pune.	
5	Dr. Bhalchandra Puranik Hod, IIT-Bombay [Academic Expert, Mechanical Engineering Domain]	
6	Dr. Pradeep Kurulkar Director, D.R.D.O., Pune [Expert from National Research Lab – Electrical & Electronics Domain]	Governing Body Nominees
7	Dr. Nilesh Powar Cummins Ind. Ltd. [Industry Expert – AI & ML (Comp/IT) Domain]	
8	Mr. Ajay Deshmukh Executive Director, PWC (India) [Industry Expert – Instr. & Control Domain]	
9	Dr. Prachi Mukherji	
10	Dr. Supriya Kelkar	Chairman, BoS, Computer Engineering
11	Dr. Anagha Panditrao	Chairman, BoS, Instrumentation & Control
12	Dr. Anagha Kulkarni	Chairman, BoS, Information Technology
13	Dr. Gautam Chandekar	Chairman, BoS, Mechanical Engineering

14	Dr. Madhuri Purandare	Chairman, BoS, Basic Sciences & Humanities
15	Prof. Amit Rajurkar	T&P Officer
16	Dr. Anand Bewoor Dean Academics	A faculty member nominated by the Principal (Member Secretary)
17	Dr. Ajit Bhosale	Dean Examination
18	Prof. A.N. Muchrikar	Dean Student Affairs
19	Dr. Sunita Jahirabadkar	Dean R&D
20	Dr. Vikram Athalye	Dean Quality Assurance
21	Dr. Anita Patil	Assistant Professor (E&TC)
22	Dr. Sandeep Musale	Associate Dean Administration

#### 4] Members of Internal Quality Assurance Cell

SN	Post	Name	Designation
1	Chairperson	Dr. Madhuri Khambete	Head of Institution
2	Teachers	Dr. Anand Bewoor	Dean, Academics
		Prof. A.N. Muchrikar	Dean, Student Affairs
		Dr. Ajit Bhosale	Dean, Examination
		Dr. Sunita Jahirabadkar	Dean, Research & Development
		Dr. Mrudul Dixit	Dean, Alumnae
		Dr. Dipali Ramdasi	Associate Dean, Quality Assurance
3	Member from Management	Dr. Kishor S. Desarda	Member, Management Committee of MKSSS
		Dr. P.V.S. Shastry	Secretary, Management Committee of MKSSS
4	Senior Administrative Officer	Ms. Revati Gore	Registrar
5	Nominee from the Local Society / Trust, Students & Alumni	Ms. Meghana Vaidya	President, Alumnae Association
6	Nominee from Employers / Industrialists / Stakeholders	Mr. C' Shekhar Dhamankar	Industry Expert
7	Student Member	Miss. Anushka Chikhale	Technical Secretary
8	Student Member	Miss. Yamini Dongaonkar	Operations Secretary
9	Student Member	Miss. Anshika Dubey	Cultural Secretary
10	Senior Teacher as the Coordinator	Dr. Vikram Athalye	Dean, Quality Assurance

## 5] Academics (Programmes and intake) and Enrolment of First Year Students

The college offers five undergraduate programs

1. B.Tech. (Electronics & telecommunication)
2. B.Tech (Computer engineering)
3. B.Tech (Instrumentation & control engineering)
4. B.Tech (Information technology)
5. B.Tech (Mechanical engineering)

Total sanctioned intake of UG programs is 540

The college offers three Post graduated programs

1. M.Tech. (E&TC - Artificial Intelligence)
2. M.Tech. (Instru – Automation)
3. M.Tech. (Mechanical Engineering Design)

Total sanctioned intake of PG programs is 66

Enrollment details for AY 2021-22 are given below

Programme Name	Programme Code	Sanctioned Intake	Number of Students admitted
B Tech. Electronics and Telecommunication	EC	180	<b>201</b>
B. Tech Computer Engineering	CE	180	215
B. Tech Instrumentation and Control Engineering	IN	60	50
B. Tech Information Technology	IT	60	69
B. Tech. Mechanical Engineering	ME	60	44
M. Tech. E&TC - Artificial Intelligence	ECAI	18	1
M. Tech. Instru - Automation	INA	18	0
M. Tech. Mech - Mechanical Engineering Design	MED	30	5
		<b>606</b>	<b>585</b>

## 6] Summary of graduating students with CGPA details for the academic year 2021-22

Following is the summary of students graduating from all departments with passing CGPA details.

	<b>No. of students appeared</b>	<b>% of students in CGPA 5-6 band</b>	<b>% of students in CGPA 6-7 band</b>	<b>% of students in CGPA 7-8 band</b>	<b>% of students in CGPA 8-96 band</b>	<b>% of students with CGPA above 9</b>	<b>% of ATKT</b>	<b>% of FAIL</b>
Final Yr B TECH COMP	223	0	9.42	22.42	56.95	9.87	0.45	0.9
Final Yr B TECH E & TC	209	0	9.09	37.8	43.54	7.18	1.44	0.96
Final Yr B TECH E & TC	69	0	18.84	39.13	36.23	5.8	0	0
Final Yr B TECH IT	77	0	11.69	22.08	55.84	10.39	0	0
Final Yr B TECH MECH	73	0	13.7	42.47	35.62	2.74	2.74	2.74

## 7] Student Achievements

- ‘Cummins Meritorious student award’  
Program toppers i.e. UG students with the highest CGPA in each program received ‘Cummins Meritorious student award’. The award is in the form of Rs.10, 000/- cash.

Recipients of ‘Cummins Meritorious student award’. For the 2021-22 are

1. Siddhi Khopade (E&T/C)
2. Anaya Gadre (COMP)
3. Dipika Deogadkar (Instru)
4. Priyal Ekhande (IT)
5. Manali Deore (Mech).

- Cummins - Excellence Award for Best Outgoing Student  
Final year outgoing students from each department is selected for this Award. Academic performance, achievements in co-curricular / extra-curricular activities, peer group feedback & teachers' feedback are the Criteria for the Best Outgoing. The award is in the form of Rs.10, 000/- cash.

Recipients of ‘Cummins excellence award’. For the 2021-22 are

1. Ishita Rathod (E & T/C)
2. Sai Ghule (Comp)
3. Dipika Deogadkar (Instru)
4. Tanvi Shroff (I.T.)
5. Eshwari Gudhate (Mech)

- Every year, students are selected for the Cummins Fellowship Program at Purdue University for a Masters Degree. The program allows the sponsorship of two students each year for masters degree in Mechanical Engineering at Mechanical Engineering School, Purdue University. This year Rahee Kulkarni and Tanvi Arey were selected for the Purdue program.

### ☒ International Level achievements:

1. Samruddhi Pravin Deode, was winner of SWE (Society of Women Engineers) Local Rising Star Award 2022, an international event organized by SWE (Society of Women Engineers) Chicago, Illinois, USA.
2. Arya Vyavahare (Final Year Mechanical), Chair of the ASME Cummins Student Section, Pune has been selected for the prestigious ASME Charles T. Main Student Leadership Award- Vermeil (first place) Gold Medal for 2021-22. The Award comes with a cash prize of \$3000, Gold medal and certificate.

### ☒ National Level:

1. Ananya Joshi secured All India Rank 1 in IPTSE (Intellectual Property Talent Search Examination) conducted by IPETHICON (An Educational Academy)
2. Aditi Oak from E & T/C won All India ranks 8 in Intellectual Property Talent Search Examination (IPTSE) in National level technical event.

3. Indrajya Patil from Instrumentation got International society for Automation (ISA) Education Foundation Scholarship award of 3000 USD.
4. Maithili Deshpande from COMP won the poster presentation competition conducted by the American Society of Mechanical Engineers (ASME), Pune chapter.
5. Nutan Lagad was awarded a Certificate of Appreciation in the National event ED Chat 3.0 (Thermax Campus Ambassador) organized by ED Chat Thermax.
6. Aabha Kulkarni, Adishri Desai, Aditi Durge, Aditi Khaire, Akanksha Chodankar, Amita Jambhale, Anusha Patil, Avani Pande, Chaitrali Kelkar, Disha Shinde, Gargi Jain, Neha Deodhar, Neha Kolhe, Pragalbha Kurane, participated in BAJA SAEINDIA 2022, National event organized by SAE India and received the 7<sup>th</sup> Overall All India Rank, in Dynamics category: 1<sup>st</sup> prize in Sledge Pull, 2<sup>nd</sup> prize in Acceleration, in Statics category: 3<sup>rd</sup> prize CAE (Computer Aided Engineering).
7. Shreya Pawaskar, received the certificate, trophy and cash prize of Rs. 75000 in National event TechGig Geek Goddess Amex AI/ML Hackathon 2021 organized by TechGig India.
8. Ankita Chandavale received Student Member Volunteer of The Year 2021 Award, Outstanding Student Section Volunteer of the Year 2021 Award and Innovator/Researcher Person of the Year 2021 Award in IEEE (Institute of Electrical and Electronics Engineers) Pune Section Annual Awards, at District level organized by IEEE (Institute of Electrical and Electronics Engineers), Pune Section, Maharashtra, India.
9. Shruti Gawas filed a patent titled “Automated Baby Monitoring system” in January 2022
10. Vanshika Agarwal and Shruti Gawas received the international “Avery Dennison foundation InvEnt” scholarship of 1300 USD in July 2021. The Avery Denison Foundation Spirit of Invention Scholarship program recognizes and rewards the high achieving students for their invention, innovation and excellence studying science, engineering & technology.
11. Team Aaveg represents our college for Robocon competition each year under the guidance of professor Dr. Atul Joshi. Robocon is a robotic contest organized by Asia-Pacic Broadcasting Union (ABU) which consists of over 20 countries of the Asia Pacic Region. The robot is conceptualized, designed, tested, fabricated and operated by the students in the team. In the year 21-22 team scored 92 marks out of 100 in stage-1 in Robocon competition and achieved a full score 40/40 for 3- D cad models of robots.

## 8] Student Co-curricular and Extra Curricular Activities including clubs

The college encourages students to participate in various state, national and international level competitions, workshops, conferences. Our students show remarkable performance in these co-curricular events.

### List of paper publications by students:

1. Pranjal Jadhav, Anushka Zagade, Mayuree Sawal, Prerna Kamble presented 'Overview of Document Image Denoising and Restoration Techniques', in World Research Forum for Engineers and researchers, on 25<sup>th</sup> March 2022.
2. Tanvi Oka, Prachi Patankar, Shivani Rege, presented 'Text Summarization of News Articles' in ICT for sustainable development, 5-6 August 2021.
3. Amruta Pomane, Swaliha Sanadi, Aishwarya Shinde, published a paper on 'Covid-19 Detection Using Chest X-ray' in International Journal of Advanced Technology in Engineering and Science (IJATES), on July 2021.
4. Meghna Raje, Nikhita More, Shivangi Sinha, published a paper on, 'Object tracking by adaptive fusion of thermal infrared and visible spectrum imaging using particle filter and structural similarity index metric' in Journal of Applied Remote Sensing, Oct-Dec.2021.
5. Tanvi Takavane, Rishima Mathur, Trisha Shah, published a paper on, 'Stocks and Cryptocurrency Price Prediction using Long short-term memory' in International Journal of Engineering Research and Technology, May.2022.
6. Isha Bhasme, Supriya Malkar, Aayushi Mohod, published a paper on 'Fuel Consumption Prediction of Cars Using Machine' in the GIS SCIENCE JOURNAL, May.2022.
7. Trupti Bhapkar, Siddhi Dhamale, Arati Dhawale, published a paper , 'Recognition of real time Indian Sign language, gestures for Cafeteria' in Dikensian Journal, May.2022.
8. Jahanvi Ashok Singh, Pranita Bhagwatrao Dhakne and Madhura Rohit Pansare, published an article on 'Covid-19 Prediction Model using LSTM' in the GIS SCIENCE JOURNAL in May2022.
9. Rutuja Soni, Ritvi Mishra, Rutuja Shreshthi, published the article, 'Generation of Art for Mental Health Detection and Aid' in the Dikensian Journal in May2022.
10. Aditree Jaiswal, Prachi Ghalsasi, Aabha Jain, Misha Batra, published the article on 'Classification of Handwritten Indic scripts using Deep Learning in 5th World conference on Smart Trends in System, Security and Sustainability in 5th World conference on Smart Trends in System, Security and Sustainability, London, UK.
11. Shreeya Patil, Pranoti Pote, Tanvi Vaishnav, Mrinali Jaiswal, Rucha Tatawar published the article on 'Use and Implementation of Gamification in Enterprise Systems' in International Research Journal of Engineering and Technology (IRJET) e-ISSN: 2395-0056 Volume: 08 Issue: 07 July 2021 p-ISSN: 2395-0072.
12. Pooja Raut, Akanksha Mishra, Shreya Rao, Saloni Kawoor published the review article on 'Review on Log-Based Anomaly Detection Techniques' in Springer conference on

"Second International Conference on Sustainable Expert Systems (ICSES 2021)".

13. Dipashree Patil, Shivani Patil, Shreya Patil published the article on 'Financial Forecasting of Stock Market Using Sentiment Analysis and Data Analytics' in Springer conference on "Intelligent Sustainable Systems", [https://link.springer.com/chapter/10.1007/978-981-16-6369-7\\_38](https://link.springer.com/chapter/10.1007/978-981-16-6369-7_38).
14. Sonali Bhushan Ambadkar, Prachi Shekhar Kulkarni, Swarali Mukund Patil, Rashmi Vishwanath Papulwar published the article, Prediction and Prognosis of Lung Cancer using Machine Learning Techniques in International research journal of engineering and technology (IRJET).
15. Reetika Poosarla, Sanjivani Tikar, Swapnali Gunjawate published the article 'Creating Helm Charts to ease deployment of Enterprise Application and its related Services in Kubernetes in International Conference on Computing, Communication and Green Engineering (CCGE).
16. Avani Sathe, Malvika Menon published the article, Creation of Knowledge graph for client complaint management system in SCOPUS 6th International Conference on Data Management, Analytics & Innovation.
17. Shambhavi Pandey, Pooja Patel, Kshitija Choudhari published the article, Generalized Named Entity Recognition Framework in SCOPUS 2021 Asian Conference on Innovation in Technology (ASIANCON).
18. Rachana Raut, Ritika Deore, Saloni Bobade published the article, Optimization and Enhancement of Space Object Identification Algorithms and Implementation Using Deep Learning Network in SCOPUS 2021 Asian Conference on Innovation in Technology (ASIANCON).
19. Mitali Patil, Harsha Kalmath, Khushboo Chamedia, Shreya Pandey published the article, OpenStack Cloud Deployment For Scientific Applications in the International Conference on Computing, Communication and Green Engineering (CCGE21).
20. Madhura Shekhar Potnis, Sanjyot Kedar Sathe, Purva Govind Tugaonkar, Gayatri Laxmikant Kulkarni published the article, Hybrid Intrusion Detection System for Detecting DDoS Attacks on Web Applications Using Machine Learning in 6th International Conference on ICT for Sustainable Development.
21. Tanvi Kulkarni, Paulomee De, Swara Lawande published the article, Trust Evaluation and Cloud Service Recommendation System Based On Machine Learning Techniques in International Conference on Computing, Communication and Green Engineering (CCGE21), IEEE.
22. Aishwarya Dorge, Pooja Bomble, Anushka Dhamankar, published the article on 'Gateway Based Trust Management System for Internet Of Things' in Innovation, Technologies and Management Journal: Revista Geintec-Gestao Inovacao E Tecnologias Vol. 11, Issue No. 4, ISSN: 2237-0722, pp. 4750-4763.

23. Pooja Shinde, Gauri Kudalkar, Shruti Pawar, Harshita Tiwari, presented a paper on ‘Accident Hotspot Detection by DB-Scan Clustering’ in the Springer Conference on ICT Analysis and Applications Book series (LNNS, volume 314) Lecture Notes in Networks and Systems, Electronic ISSN 2367-3389 Print ISSN 2367-3370 Series Editor Janusz Kacprzyk.
24. Chhanam Thorat, Aishwarya Bhat, Padmaja Sawant, Isha Bartakke, presented a review paper on ‘A Detailed Review on Text Extraction Using Optical Character Recognition’ in the Springer Conference on ICT Analysis and Applications Book series (LNNS, volume 314) Lecture Notes in Networks and Systems. Electronic ISSN 2367-3389 Print ISSN 2367-3370 Series Editor.
25. Gayatri Bedase, Divya Ghorpade, Tejashri Gangarde, ‘A recommendation system to support the student to Choose a Role in the College Election in Springer Conference on ICT Analysis and Applications Book series (LNNS, volume 314) Lecture Notes in Networks and Systems Electronic ISSN 2367-3389 Print ISSN 2367-3370 Series Editor Janusz Kacprzyk.

**Regional / Intercollege level: In various inter college competitions, students received prizes in different categories.**

1. Yogita Bacchewar and Rutuja Chandegave, Pooja Dendage and Seema Dhamgunde won first prize in in project competition ‘Avishkar 22’ organized by Savitribai Phule Pune university at Jspm's Rajarshi Shahu college of engineering and also secured first prize in project competition in ‘Mutation 22’ organized by Sinhgad institute of technology, Lonavala(IEEE & IETE sponsored) and won best project title in National level project competition ‘Techcult 2k22’ organized by Pcet's Nutan Maharashtra institute of engineering and technology, Pune.
2. Divya Bangad, Shreya Chafe, Sanika Watve, Prajakta Saraf won the second prize in Aspire 2k22 a National level Project competition organized by Computer and Information Technology Department of PES Modern college of Engineering Pune.
3. Priyanshu Agarwal, Esha Chaugule, Shruti Agarwal, Samruddhi Sangale won the second prize in National level project competition ‘Versatalia’ organized by Pune Vidyarthi Griha’s College of engineering, Pune, third prize in Avishkaar 2022 organized by Savitribai Phule Pune university at Jspm’s Rajarshi Shahu College of engineering, Pune and won the consolation prize in regional level project competition AISSMS’s College of Engineering, Pune.
4. Shreya Hardas, Bhakti Chindhe, R Archana, Shravani Chavan won second prize in Avishkaar 2022 organized by Savitribai Phule Pune university in Jspm’s Rajarshi Shahu college of engineering, Pune.

➤ **Students Clubs**

**Entrepreneurship cell:**

To promote entrepreneurship and self-reliance among our students, the college provides a conducive environment with various initiatives related to entrepreneurship. The college has signed an MOU with the Wadhvani foundation to promote entrepreneurship.

Faculties trained by the Wadhvani foundation as entrepreneurship educators teach basic courses in Entrepreneurship.

Some remarkable achievements in 2021-22 are as follows:

- "Green Machines" by Priyanka, Gayatri and Ankita which received excellence awards in 2022 during global jury evaluation.
- Prerna Burande was selected for the February '22 Cohort of Xartup Fellowship, which is a highly selective, execution-centric platform for outstanding founders, leaders, and innovators.
- Musical Revolution Startup idea by Prerana "TimbreBells" was selected in the "Top 20 Ideas (for startups)" in the competition "THE ORIGINAL PITCH" arranged by Navayuvak Entrepreneurs Pvt. Ltd and PICT EDC Cell.

Talks and competition for students:

- Design Thinking by Ms. Sharwari Kulkarni, the Co-founder and the Marketing Director of Makeshift
- Journey of Accidental Entrepreneur by Mr. Durgesh Mangeshkar
- Insights on Entrepreneurship by Wadhvani foundation
- From Cummins to Shark Tank India by Rakhi Pal (Alumni)
- Empulse '22 - An Entrepreneurial Fiesta (2 days event with talks, workshops and competitions)
- Business idea competition, the Business Plan Poster Competition was organized to trigger the innovative minds of our students

### **Code Club:**

Aim of the Code Club is to improve coding skills and enhance the culture of competitive coding. Code club activities in 21-22 are

- 25<sup>th</sup> September 2021 - A session by Arsh Goyal on "How to approach Opportunities by Tech Giants and Interview Preparation" Some key takeaways from this session were focus on any one OOP language (JAVA, C++), Data Structure Algorithms are fundamental, keep an eye out for social media announcements for off campus opportunities and most importantly, practice regularly.

- 12 Feb, 2022.- A session on "All about Open-Source and GSSOC" by Harsh Bardhan Mishra. He covered all misconceptions and myths about open source and explained how one can start contributing as a beginner. He also spoke about contributing through Girl Script Summer of Code and answered questions on GSOC.

### **Aeromodeling club:**

Members of the club are dedicated aeronautical/aerospace enthusiasts who conceive, design/model, fabricate and pilot -fixed wing RC aircrafts in competitions across India such as the SAE Aero Design Challenge.

This year the club members i.e. team 'Bhardwaj' received all India rank in two categories in the SAE Aero Design Challenge competition as mentioned below:

- SAE ADC Regular class 2021 • All India Rank 1: Best technical presentation
- BIT Techfest Smart drone 2021 • All India Rank 1: Overall

### **Astronomy club: Aasamant**

Aasamant club aims to spread knowledge about this beautiful universe, its darkest secrets and humankind's relationship with it all. Club conduct activities like guest lectures, group discussions and quizzes.

This year the club organized various activities on the theme 'Gravitational Waves' which included:

- Webinar on "Gravitational Waves: The Introduction" - 11 July 2021 An enlightening introduction to the world of Gravitational Waves that is accessible to all.
- Nova by Aasamant (Podcast) Podcast 1: Stars & their life cycle - 28 August 2021  
o Podcast 2: Possibility of more planets in our solar system - 23 September 2021.
- Lecture on gravitational waves: Conducted by Purva Kane and Samradni Jadhav - 7 November 2021 on Black Holes as a means to study Gravitational waves

### **TEDxCCOEW:**

College started TEDxCCOEW- the official TED club of Cummins college of engineering for Women in collaboration with a TEDxKothrud countdown on 31st October 2021. TEDx Kothrud Countdown is a global movement that turns ideas into action by advocating and accelerating solutions to the climate catastrophe.

Following talks were organized by the club:

- Talk by Hemang Vellore- A 14-year-old unschooled techie with 6 years of experience and learning from his own travels, ranging from NASA to MIT, drone racing, robotics, Hackathons, Digital Fabrication, Workshops, Seminars, Conferences and so much more; his credentials are definitely impressive.

- Talk by Avani Awasthee Parchure -The youngest Indian to have visited Antarctica twice as an environmental ambassador at the age of 18 and who has been awarded the Karmaveer Chakra by the Govt. Of India in 2019. She has been working with UN Asia Pacific, UN Women and the UN Humanitarian units spread awareness about climate change.
- Talk by Ripu Daman Bevli - Popularly known as the Plogman of India, he is the founder of the country's RST eco-tiniest movement. The Government of India adopted his mission and chose close to 1 crore people from over 100+ cities to participate in the event. He's also won the Social Activist of the Year award by Cosmopolitan in 2021. The concepts he pioneered - Plogging, Trash Workouts and Plastic Upvaas have become the new must-do activities

➤ **Professional society Chapter activities**

**ACM-W Student chapter, CCEW**

ACM-W student chapter organized the following listed events this year:

1. Coding Contest “Code It”, conducted online due to COVID 19 was organized on 9th Oct 2021 for all engineering students from different colleges in Pune region.
2. Workshop on “Deep learning using python” from 14<sup>th</sup> to 19<sup>th</sup> March 2022 was organized by ACM-W chapter in which sessions were conducted by our faculty Dr. Madhuri Tasgaonkar, Bhusan Garware, Dr. Walembec, Dr. Manasi Patwardhan and Jyoti Raghatwan. 105 faculty and students attended this workshop.
3. The ACMW Distinguished Speaker Program was organized on 7 May 2022 in which talk by Dr. Rizwan Ahmed, CTO, DelaPlex Independent Cybersecurity, Digital & Mobile Forensic Consultant was arranged. 246 students registered and attended the program from India.

**IEEE Student Chapter, CCEW**

IEEE student chapter, CCEW organized the following listed events this year:

1. Various webinars were organized this year on topics such as Natural Language Processing, Data visualization using Tableau, Purdue Alumni Connect, Research Paper Writing, Guide to Overseas Education, IoT 101 Web-series and Deep Learning.
2. A Panel Discussion was organized on Getting Internship through college Students of Final Year 2021-22
3. Workshops were organized on subjects such as MongoDB and Design Thinking.

4. The competition Scavenger Challenge Hunt was organized by IEEE student branch and Givetastic, Germany.

#### **ASME (American Society of Mechanical Engineers) Cummins Student Section**

ASME student chapter, CCEW organized the following listed events this year:

1. Webinars were organized on topics such as How to actively participate in ASME E Fest event - The Ballad of Victors, Trends & Opportunities in Renewable Energy.
2. Project Presentation Competition - 'Crack Domain' was conducted

#### **CSI (Computer Society of India) student's chapter**

CSI student chapter, CCEW organized the following listed events this year:

1. Hands-on workshops were conducted on Machine Learning using Matlab and Cyber security.
2. State level Project Competition " TECH-SRUJAN" was organized to promote innovation and provide industry inputs to the students.
3. The webinar was organized on "Extending Presence"

#### **SWE (Society of Women Engineers) CCEW Affiliate**

SWE student chapter, CCEW organized the following listed events this year:

1. Various sessions were organized for students, including Self-Love Session, Pride 101: A session on inclusion – LGBTQ+ Perspective, Womaning at the Workplace, Self-Learning and Big Bold Moves
2. Workshops on topics such as Self Defense, Own your finances and Resume Building were organized for the overall development of students.
3. INCUBE Conference is a flagship event organized every year.

#### **International Society of Automation Cummins Student Chapter**

ISA student chapter, CCEW organized the following listed events this year:

1. Webinars were organized on different topics such as Supply Chain 4.0- New Normal for Digital Supply Chain Management, From Process Design to Control Engineering Base, Profibus Network Failure Diagnosis and Troubleshooting, Future of Automation Career- Roadmap for Emerging Engineers, OPC for IA Systems, Robotics and DIY Product Development, Reliable Cybersecurity between IT and OT networks, Top 20 PLC Secure Coding Practices, Recent trends in Calibration Solutions, Safety Lifecycle for Safety Instrumented System, Instrumentation in Hazardous Area etc.
2. Workshops were organized on Automatus 2020- Make Automation Yours, PLC, Machine learning using MATLAB and Android App Development

3. National Level Technometer Drone Quiz Competition was held on the occasion of Engineer's Day, which was sponsored by Forbes Marshall.
4. A session was organized on Intrapreneurship on ISA ACARD Platform
5. National Level Hackathon Competition 'Automathon 2022' was organized

➤ **Details of sports and cultural events / competitions organized by the institution:**

**Sports Activities:**

Sr. No.	Name of the sport event organized	Date
1	Pentacle (Throwball Competition)	4 <sup>th</sup> April – 6 <sup>th</sup> April 2022

Our college students participated in different inter college events and also represented university zonal inter-university sport events.

**Remarkable achievements** in Khelo India Youth Games 2022 and in West Zone Inter University Tournament 2022.

- 1) Ruchita Herlekar.: Team championship 'Silver' medal and individual 'Bronze' in Khelo India Youth Games 2022.
- 2) Ruchita Herlekar.: Silver medal in Rope Mallakhamb tournament in the Khelo India Youth Games 2022.
- 3) Sawari Shunde secured sixth place in All India Inter University Athletics (Short-put) Tournament.
- 4) Rahee Raghuwanshi and Khushi Gosavi Secured first place (Gold medal) in West Zone Inter University Chess Tournament 2022.

**Participation and achievements in inter college sport competitions organized by SPPU**

Sr. No.	EVENT	Organized by	Date	Remark
2	Rope Mallkhamb	Lokseva e-school, Pashan	27th November 2021	1st Place - Ruchita Herlekar
3	Football	AISSMSIOIT	22nd to 23rd November 2021	3rd Place
4	Yogasanna	Abasaheb Garware College	6th December 2021	3rd Place
5	Volleyball	CACPE, Swargate	6th December 2021	4th Place
6	Athletics	Sant Dnyaneshwar Stadium, Bhosari	8th December 2021	2nd Place - Sawari Shinde
7	Power	Poona College	15th December	1st Place - Sawari

	Lifting		2021	Shinde
8	Cricket	Abeda Inamdar College	24th–25th December 2021	3rd Place
9	Kho kho	Shri Siddhivinayak Mahavidyalaya	29th December 2021	4th Place
10	Chess	MMCOE, Karvenagar	27th–31st December 2021	1st Place

Based on the performance of our students in inter college sport events, they were selected to represent Pune university in different sport events as follows

**Players Selected for SPPU Interzonal Competitions 2021-22:**

Sr. No.	Name of the student	Sport
1	Manasi Kasande	Cricket
2	Sakshi Mahajan	Football
3	Vedanti Donkar	Football
4	Shubhra Jain	Football
5	Eshwari Gudhate	Volleyball
6	Avani Chawardol	Volleyball
7	Pooja Thorat	Kho kho
8	Sanjana Date	Basketball
9	Khushi Gosavi	Chess
10	Rahee R.	Chess
11	Nimita Joshi	Chess
12	Ruchita Herlekar	Mullkhamb
13	Sawari Shinde	Athletics

**Participation and winners in inter college events are summarized as below:**

Sr No.	Name of the Student	Competition Title	Name of the Sport	Level	Date	Organizer	Winner
1	Eshwari Gudhate	MIT Sumit 2021	Volleyball	National	18-22 Dec 2021	MIT, Pune	Winner (First)
2	Eshwari Gudhate	MIT Sumit 2022	Volleyball	National	18-22 Dec 2021	MIT, Pune	Best Lifter
3	Ritavi Gaikwad	MIT Sumit 2023	Volleyball	National	18-22 Dec 2021	MIT, Pune	Winner (First)
4	Arpita Sathey	Drill and Volley Ball Competetion	Volleyball	State	23-29 Sept 2021	3 Maha Air Squadron NCC Pune	Winner (First)
5	Samruddhi Joshi	Pune City Zonal Sports	Cricket	Intercolle ge	2021-22	SPPU - Pune City Zonal Sports Committee	Winner (Third)
7	Ruchita Herlekar	Pune City Zonal	Rope Mallakhamb(W)	Zonal	2021-22	Pune City Zonal Sports Committee	Winner (Second)

8	Nidhi Suryavanshi	Zest 22	Chess Rapid Team	National	10-13 March 2022	COEP	Winner (First)
9	Shruti Laddha	Pune City Zonal Sports Committee	Cricket	Intercollege	2021-22	Pune City Zonal Sports Committee and SPPU	Winner (Third)
10	Shruti Bhilave	MIT Summit	Basketball	National	18-22 December 2021	MIT	Winner (1st)
11	Sanjana Date	MIT Summit	Basketball	National	18-22 December 2021	MIT	Winner (1st)
12	Mruga Gokhale	MIT Summit	Badminton	National	18-22 December 2021	MIT	Winner (1st)
13	Sawari Shinde	MIT Summit21	Volleyball	National	18-22 December 2021	MIT	Winner (1st)
14	Riya savant	MIT Summit21	Basketball	National	18-22 December 2021	MIT	Winner(Highest Scorer)
15	Riya savant	MIT Summit21	Basketball	National	18-22 December 2021	MIT	Winner (1st)
16	Vaishnavi mundada	MIT Summit21	Basketball	National	18-22 December 2021	MIT	Winner (1st)
17	yashvi bhutada	MIT Summit21	Basketball	National	18-22 December 2021	MIT	Winner (1st)
18	Alefiya Dawasaz	MIT Summit21	Football	National	18-22 December 2021	MIT	Winner (1st)
19	Uma Sawant Bhosale	MIT Summit21	Football	National	18-22 December 2021	MIT	Winner (1st)
20	Gaurika Gupta	MIT Summit21	Football	National	18-22 December 2021	MIT	Winner (1st)
21	Sayalee Damle	MIT Summit21	Football	National	18-23 December 2021	MIT	Winner (1st)
22	Tanvi Kasande	MIT Summit21	Badminton	National	18-22 December 2021	MIT	Winner (1st)
23	Manasi Kasand	SPPU Pune City Zonal	Cricket	Intercollege	2021-22	SPPU Pune	Winner (3rd)
24	Nisarga Khatkale	SPPU Pune City Zonal	Cricket	Intercollege	2021-22	SPPU Pune	Winner (3rd)
25	Sakshi Parandwal	SPPU Pune City Zonal	Cricket	Intercollege	2021-22	SPPU Pune	Winner (3rd)

26	Yuga Dhargunde	MIT Summit21	Football	National	18-22 December 2021	MIT	Winner (1st)
27	Gouri loankar	MIT Summit21	Football	National	18-22 December 2021	MIT	Winner (1st)
28	Anushka pawar	MIT Summit21	Volleyball	National	18-22 December 2021	MIT	Winner (1st)
29	Sawari Shinde	SPPU Pune City Zonal	Shot-put (W)	Intercollege	2021-22	SPPU Pune	Winner (2nd) (9.88m)
30	Khushi Gosavi	SPPU Pune City Zonal	Chess (W)	Intercollege	2021-22	SPPU Pune	Winner (3rd)
31	Pooja Bansode	MIT-WPU SUMMIT 2021	Volleyball	National	18 -22 Dec 2021	MIT-WPU Pune	Winner
32	Anushka Patil	PUNE CITY ZONAL SPORTS COMMITTEE	Cricket	State	2021-22	SPPU PCZSC	Third place
33	Jain Shubhra	MIT-WPU SUMMIT 2021	Football (Women)	National	18 -22 Dec 2021	MIT Summit 2021	Golden Boot Award

#### Cultural activities:

Sr. No.	Name of the Cultural events organized	Date
1	The music club organized "Diwali Performance by Music Club,"	10 <sup>th</sup> Nov 2021
2	Gandhaar 2022	4 <sup>th</sup> April – 7 <sup>th</sup> April 2022

Students participated in various prestigious cultural competitions organized by state and inter college level.

- Participated in Purshottam Karandak 2021 organized by Maharashtra Kalopasak, Pune. Shambhavi Joshi won Consolation prize for direction and Tanvi Kamble won Consolation prize for Acting.
- Rutuja Keskar won the first prize in Singing Art Circle “Ganetostav” organized by the Walchand college of engineering, Sangli.
- Nidhi Kulkarni won the consolation prize in Symbiosis Karnadak 2021 organized by Symbiosis College of Arts and Commerce, Pune.

## 9] NSS Activities:

The NSS unit conducts various activities for students, staff and society. Staff and students participated in these activities enthusiastically. The activities conducted in this year are summarized below:

Sr. No.	Name of the activity	Short report	Date
2	Supporting Indian Team in Tokyo Olympics	All members of the NSS team showed support for the Indian team participating in Olympics in various ways by cheering them on social platforms.	26 <sup>th</sup> July 2021
3	Plantation Drive	The event was coordinated virtually to motivate people to plant trees and be aware of their surroundings.	27-31 <sup>st</sup> July 2021
4	Yoga for Wellness	The event was organized with the help of our student Garima Baleja to motivate students and faculty for their wellness.	31 <sup>st</sup> July 2021
5	Azadi Ka Amrut Mahotsav	All students and faculty participated in singing the National anthem to celebrate Azadi Ka Amrut Mahotsav	9 <sup>th</sup> August 2021
6	Traffic Awareness and Road Safety	Speaker Mr. Anil Pantoji, Retd. RTO inspector and faculty at CIRT guided our students on the rights and duties of responsible citizens, explained different road signs and spoke on what one should do in case of emergency or accidents.	9 <sup>th</sup> August 2021
7	Sadbhavana Day Pledge	The pledge was taken by students and faculty to promote National integration & Communal harmony among people of all religions, languages & regions.	20 <sup>th</sup> August 2021
8	Village surveys, awareness of Cleanliness	The faculty members along with members of Khadkwadi Grampanchayat created awareness regarding cleanliness and how they can make their village greener and more sustainable.	20 <sup>th</sup> August 2021
9	Water Conservation	Speaker Niranjana Upasani- Founder, Director of sustainable living solutions Pvt. Ltd. In his talk highlighted the importance of water conservation not only by conventional methods, but by using engineering skills as well.	23 <sup>rd</sup> August 2021
10	Webinar on National Integration ('Samajik Aikya Pandharwada')	Colonel Rakesh Budhani who had worked as an instructor in NDA, Pune and Infantry school, Mhow motivated students on the occasion of 'Samajik Aikya Pandharwada.	2 <sup>nd</sup> Sept.2021
11	Week1-Plantation Drive as POSHAN VATIKA	Students did plantations in their surrounding areas.	1 <sup>st</sup> to 7 <sup>th</sup> Sept. 2021
12	Week2-Yoga and Nutrition Activity (By AYUSH)	The activity involved sharing one challenge every day, i.e., doing a specific asana or pose.	8 <sup>th</sup> to 15 <sup>th</sup> Sept., 2021
13	Week3 - Poshan Abhiyan-Nutritious Food Activity	The event was organized by NSS to create awareness about healthy food habits.	16 <sup>th</sup> to 23 <sup>rd</sup> Sept. 2021

14	NSS Day Celebration by taking NSS Pledge	On NSS day students and faculty of the NSS unit took the pledge and sang the prayer.	24 <sup>th</sup> Sept. 2021
15	NSS orientation program	This session was conducted to make the students aware about how the unit functions and its activities.	29 <sup>th</sup> Sept. 2021
16	“Celebration of Gandhi Jayanti Communal Harmony Day”, Swachh Bharat Campaign	The NSS team inspired our college students to follow Gandhiji’s principle in day to day life.	2 <sup>nd</sup> Oct. 2021
17	Blood Donation Camp for staff	Organized Blood donation camp as a part of social responsibility.	5 <sup>th</sup> Oct. 2021
18	Awareness Program to avoid the use of single use plastic	Survey on how to reduce plastic and how to turn down the plastic waste was undertaken by the team and spread awareness to avoid the use of single -use-plastic.	26 <sup>th</sup> Oct. to 30 <sup>th</sup> Oct.2021
19	World Aids Day Awareness	Created awareness by putting posters on campus and by mail.	1 <sup>st</sup> Dec.2021
20	"Majhi Vasundhara" Abhiyan	Plantation activity was conducted	11 <sup>th</sup> Dec.2021
21	Victory Day	NSS members celebrated this day to honor the fighters/ jawans at borders	16 <sup>th</sup> Dec. 2021
22	Constitution Day Celebration (read the preamble of the Indian constitution)	All college students and faculty members joined the NSS team in making a commitment to the Indian constitution by reading the preamble of the Indian constitution.	24 <sup>th</sup> Dec. 2021
23	Celebration of Youth Day	The NSS team celebrated this day by sharing their views on youth responsibilities in today’s time	12 <sup>th</sup> Jan.2022
24	Surya Namaskar for vitality	On the occasion of Makar Sankranti this event was conducted to keep good health & vitality.	14 <sup>th</sup> Jan.2022
25	National Girl Child Day Celebration	The event celebrated to create awareness of	24 <sup>th</sup> Jan.2022
26	Voters Day Celebration	All students and faculty participated in Voter’s pledge activity.	25 <sup>th</sup> Jan.2022
27	National Voter Awareness Contest	Under the theme, ‘My vote is my future: Power of one vote.’ The event included a quiz contest, song contest, video making contest, slogan contest.	25 <sup>th</sup> Jan. – 31 <sup>st</sup> Mar.2022
28	International Women's Day Celebration	On this occasion, 1] guest lecture was delivered by dr. Manali Deo on ‘Yogasana for PCOD and Thyroid’2] free dental check-up, 3] Pathology tests on concessional rate.	10 <sup>th</sup> Mar. 2022
29	Health Awareness	To create health awareness among students, a guest lecture by Dr. Madhavi Shinde was organized.	24 <sup>th</sup> Mar. 2022

## 10] Training and Placement:

- The training and placement cell of the college plays an integral role in creating the illustrious placement record for the college.
- The cell not only ensures smooth functioning of the placement activities in the campus and virtually but also conducts training activities of the students in pursuing their career interests and also grooms and shapes the students to make them industry ready with necessary skills and training so that they get placements and internships in the best of the companies.
- Companies visiting college for campus recruitments are Microsoft, Amazon, Cisco, Veritas, Persistent, Walmart, Western Digital, Fincorp companies such as Goldman Sachs, Deutsche bank, Well Fargo, Bank of America, RBL, service based companies such as Accenture, Infosys, TCS, Cognizant, Capgemini, Wipro, L & T info Tech, DXC Technology, Automobile companies such as Tata motors, Hero MotoCorp, Caterpillar, JCB, Michelin, Mahindra & Mahindra, Faurecia, manufacturing industries like Alstom, Honeywell, Emerson, Forbes Marshall, Thermax, Eaton, Tetra pack, Boeing, Exxon Mobil, Shell.
- This year around 65 companies visited campus for Comp and IT program and offered average package of 11 -13 lakhs, 59 companies for E&TC program and offered an average package of 9 lakes, 17 companies for Mech program and offered an average package of 8 locks and 28 companies for Instru program and offered an average package of 6lakhs.
- **The highest package offered by the company ‘Cohesity’ was 37.28 lakh.**
- This year, 91.41% students from E&T/C, 95.79% students from Comp., 88.33% students from Instru, 100% students from IT, and 94.12% students from Mech were placed. The overall placement percentage is 94.12% students.

<b>Branch</b>	<b>Enrolled</b>	<b>Placed</b>	<b>Percentage</b>
E & T/C	198	181	91.41
COMP	214	205	95.79
Instrumentation	60	53	88.33
Information Tech.	71	71	100
Mechanical	69	66	95.65
Total	612	576	94.12

### 11] Industry Interaction (MOU):

The college signed MoUs with the following industries and universities in AY 2021-22.

<b>Sr. No.</b>	<b>MoU signed with University/Industry</b>	<b>Date of MoU</b>	<b>Purpose</b>
1	Vodafone	01/05/2021 (for 1 year)	Industry inputs to students
2	Intence Engineering	31/08/2021	Industry inputs to students
3	Neuflex Talent Solution Pvt. Ltd.	17/02/2022	Soft skill training
4	Scorpius Pvt. Ltd.	15/03/2022	Consultancy /project/ internship
5	UNI-TECH Automation Pvt. Ltd.	26/02/2022	Consultancy /project/ internship
6	Man Truck & Bus (I) Pvt. Ltd.	09/06/2022 to 08/06/2025	Industry inputs to students
7	Mercedes-Benz Research and Development India Pvt. Ltd.	08/04/2022 to 08/04/2023	Industry inputs to students
8	Khushboo Charitable Trust	02/04/2021 to 01/04/2024	Sponsorship to students
9	Veritas Software Technologies India Pvt. Ltd.	May 2022 to 30 April 2023	Consultancy /project/ internship

## 12] Alumnae Association:

### Alumni Meet:

- Alumni meet is organized every year. This year, after the post pandemic, the alumni association members along with the department alumni coordinators were very happy and full of enthusiasm for organizing the Alumni meet in person.
- The alumni meet after a gap of 2 years was held on 23<sup>rd</sup> April 2022, Saturday evening. We received an overwhelming response for the registrations from our alumni that spread over from the first batch, 1995 recent batch 2021.
- The event was very well hosted by Prof. Pratima Kulkarni and Prof. Prajakta Deshpande. Following our culture, the evening started with Ganesh Vandana performed by the current students. The Sanstha chairman, Mr. Ravindra Deo, Sanstha, LMC chairman, Mr. Inamdar, Principal madam, Dr. Madhuri Khambete and Dean Alumni, Dr. Mrudul Dixit were present for the event.
- **Donations from Alumni:** Academic Year 2021-22: 10 Alumni financially supported by donating Rs.6, 17,045.80. The interviews of needy students were conducted and 21 students were selected so as to receive the financial support for their college fees.

### **13] Library:**

The college library is well furnished with large no. of titles related to engineering courses, basic sciences and also titles for preparation of GRE, Tofil, MBA and many other competitive examinations. Every year new titles are added as per the demand by faculty and students.

- This year 608 books were purchased. Few subjects to mention are Blockchain Technology, Internet of Things, Data mining, Machine Learning, Design and Analysis of Algorithms, Computer-integrated Manufacturing, Turbo machine, Control System Engineering, Biomedical Equipment Technology, Human Values, Professional Ethics, books of GATE exams.
- Remote access to e-sources are provided for journals which include IEEE, POP-206, 1553 e-journals, Elsevier-294 e-journals, McGraw-Hill ebook-897. Apart from this new 74 e-books are subscribed and off campus access is made available for students and faculty.

**The library has organized various activities for staff and students this year which are as follows:**

1. The library celebrated the late Dr. A.P.J. Abdul Kalam's Birth Anniversary (Vachan Prerana Diwas) on 15<sup>th</sup> October 2021, Library organized Online Glimpses of Dr. A.P.J. Abdul Kalam's Books (Online Talk on A.P.J. Abdul Kalam's books), 17 students participated in this program.
2. The library celebrated Marathi Bhashasanvardhan Pandharwada during 14th January to 28th January 2022. For this activity Library organized an online talk on Marathi Books on 14<sup>th</sup> January 2022, 16 students participated in this talk. On 20th January 2022, 150 staff and students solved the Online Marathi Word Puzzle. On the occasion of Matrubhasha Diwas.
3. On 21st February 2022, Library organized Online Marathi Word Puzzle and Essay Writing. In these events 88 staff and students participated.
4. On 11<sup>th</sup> March 2022 on the occasion of International Women's Day, 137 staff and students participated in Online Quiz.
5. The library organized Webinar on Techniques for effective research with IEEE Xplore on 20th November 2022 for faculty by Gaurav V. Date (Training Manager, IEEE Certified Trainer) and an online session on "UGC Care List".
6. On 5<sup>th</sup> February 2022 session was conducted by Dr. Shubhada Nagarkar – (Coordinating Centre for Publication Ethics, Savitribai Phule Pune University, Pune.) for faculty on 'UGC -CARE list'.

#### 14] Professional Development Activities for staff

The faculty members of the college constantly upgrade their knowledge and skills by attending various professional development activities in the form of faculty development programs (FDP). Following is the list of FDPs attended in the current year.

##### FDP attended by the Faculty:

Sr. No.	Name of teacher who attended the program	Title of the program	Duration (from) (DD-MM-YYYY)	Duration (to) (DD-MM-YYYY)
1	Prof. Seema Shah	FDP on "Inculcating Universal Human Values in Technical Education" organized by AICTE	19th July 2021.	23rd July 2021.
2	Prof. Neha Deshpande	FDP on "Inculcating Universal Human Values in Technical Education" organized by AICTE	19th July 2021.	23rd July 2021.
3	Prof. Prachi Mukherji	Inculcating Universal Human Values in Technical Education	27-09-2021	01- 10- 2021
4	Prof. Sharada Ohatkar	Inculcating Universal Human Values in Technical Education	04- 10-2021	08- 10-2021
5	Prof. Sharada Ohatkar	"6G Wireless Communication"	20-12-2021	24-12-2021
6	Prof. Sharada Ohatkar	"New Pedagogies"	29-11-2021	03- 12-2021
7	Prof. Sharada Ohatkar	Designing Learner-Centric MOOCs	1- 1-2022	1- 2-2022
8	Prof. Sandeep Musale	Inculcating Universal Human Values in Technical Education	27-09-2021	01- 10- 2021
9	Prof. Sandeep Musale	Introduction to Speech Processing and its Applications using AI-ML (ISPA)-2021	25- 10-2021	29-10-2021

10	Prof. Sandeep Musale	Mathematical Foundation for Machine Learning	22-11-2021	26-11-2021
11	Prof. Sandeep Musale	Machine Learning Applications on Image Processing	17-01-2022	21-01-2022
12	Dr. Seema Rajput	Innovation Ambassador (IA) Training Program of the Ministry of Education's Innovation Cell and AICTE	30-06-2021	30-07-2021
13	Dr. Seema Rajput	Trends and Innovation in Healthcare	25-10-2021	29-10-2021
14	Dr. Seema Rajput	National Technology Day	11- 05-2022	11- 05-2022
15	Dr. Ashwini M. Deshpande	Machine and Deep Learning for Remote Sensing Applications	05- 07-2021	16- 07-2021
16	Dr. Ashwini M. Deshpande	AI-Powered IoT for Building Smart Sustainable Signal Processing Application	15- 11-2021	19- 11-2021
17	Dr. Ashwini M. Deshpande	New Pedagogies	29-11-2021	03- 12-2021
18	Dr. Ashwini M. Deshpande	Machine Learning & Deep Learning using Python	04- 01-2022	08- 01-2022
19	Dr. Ashwini M. Deshpande	Designing Learner-Centric MOOCs	1- 1-2022	1- 2-2022
20	Dr. Anita Patil	Inculcating Universal Human Values in Technical Education	27-09-2021	01- 10- 2021
21	Dr. Anita Patil	Design thinking	7- 3-2022	13- 3-2022
22	Dr. Anita Patil	New Pedagogies	29-11-2021	03- 12-2021

23	Dr. Anita Patil	Trends and Innovation in Health Care	25- 10-2021	29- 10-2021
24	Dr. Anita Patil	National Technology Day	11- 05- 2022	11- 05- 2022
25	Dr. Megha Borse	Internet of Things (IOT) using Arduino & Raspberri Pi	25- 10-2021	29-10-2021
26	Dr. Megha Borse	Control Systems : Sensor Technology	11- 01-2022	15- 01-2022
27	Dr. Bageshree Pathak	New Padegogies	29-11-2021	03- 12-2021
28	Dr. Bageshree Pathak	Advances in Engineering	08-12-2021	14-12-2021
29	Dr. Bageshree Pathak	Design thinking	7- 3-2022	13- 3-2022
30	Dr. Ashok Khedkar	Advanced Communication Systems- A Research Perspective	09-08-2021	13-08-2021
31	Dr. Ashok Khedkar	6G Wireless Communication"	20-12-2021	24-12-2021
32	Dr. Ashok Khedkar	Signal Processing for mm Wave communication for 5G and Beyond	01-07- 2021	30-10- 2021
33	Dr. Shubhangi Chaudhary	Data Science	01-07-2021	01-09-2021
34	Dr. Shubhangi Chaudhary	NSS orientation	02- 03-2022	08- 03-2022
35	Dr. Shubhangi Chaudhary	New Pedagogies	29-11-2021	03- 12-2021

36	Dr. Shubhangi Chaudhary	Classroom Communication in Digital Era	20-06- 2022	24-06- 2022
37	Dr. Mrudul Dixit	Data Analytics	18- 4- 2022	24- 4-2022
38	Dr. Mrudul Dixit	“New Pedagogies”	29-11-2021	03- 12-2021
39	Dr. Mrudul Dixit	Design Thinking	7- 3-2022	13- 3-2022
40	Dr. Mrudul Dixit	AI as enabler for teachers in implementing National education Policy 20	28-8-2021	28-8-2021
41	Dr. Mrudul Dixit	Tools and Innovative Techniques for Personality Enhancement	4-10-2021	4-10-2021
42	Dr. Mrudul Dixit	Signal Analysis made easy	11-12-2021	11-12-2021
43	Mr. Sharad Dube	Arduino based system design using Tinker CAD Free Simulator	20-06-2022	24-06-2022
44	Mr. Narendra Kulkarni	Inculcating Universal Human Values in Technical Education	13/09/2021	17/09/2021
45	Dr. Sachin Paranjape	Graphics and Animation for Quality Instructional Material Development	20-06-2022	24-06-2022
46	Mrs. Manasi Pathade	Machine Learning	24-01-2022	29-01-2022
47	Mrs. Manasi Pathade	MALTBAB and LabVIEW	20-06-2022	24-06-2022
48	Mr. Ganesh Padalkar	Introduction to Speech Processing and its Applications using AI-ML (ISPA)-2021	25-10-2021	29-10-2021
49	Mr. Ganesh Padalkar	Mathematical Foundation for Machine Learning	22-11-2021	26-11-2021

50	Mr. Ganesh Padalkar	Machine Learning Applications on Image Processing	17-01-2022	21-01-2022
51	Mr. Ganesh Padalkar	Machine Learning	24-01-2022	29-01-2022
52	Mrs. Sandhya Potdar	3D Vision Summer School 2022	22-05-2022	28-05-2022
53	Mr. Milind Patankar	Classroom Communication in Digital Era	20-06- 2022	24-06- 2022
54	Mrs. Padma Hirave	“Statistical Analysis for Audio and Biomedical Signal Processing”	17-11- 2021	19-11- 2021
55	Mrs. Padma Hirave	8th Annual Conference on Breast Imaging Society of India	12-11-2021	14-11/2021
56	Mrs. Padma Hirave	Trends and Innovation in Health Care	25- 10-2021	29- 10-2021
57	Mrs. Padma Hirave	Research Methodology and IPR	23-5-2022	27-5-2022
58	Mr. Sagar Vanarase	Classroom Communication in Digital Era	20-06- 2022	24-06- 2022
59	Mr. Sagar Vanarase	Internet of Things	27 -06- 2022	01 -07- 2022
60	Mrs. Rupali Pawar	Future Trends in Biomedical Engineering	24-01-2022	29-01-2022
61	Mrs. Rupali Pawar	Research Methodology and IPR	23-5-2022	27-5-2022
62	Mrs. Prachi Waghmare	Machine Learning	24-01-2022	29-01-2022
63	Dr. Supriya Mangle	Python for Machine Learning	1- 1-2022	1- 1-2022

64	Dr. Supriya Mangle	Machine Learning with Python	1- 1-2022	1- 1-2022
65	Dr. Supriya Mangle	Deep Learning with Python	1- 5-2022	1- 5-2022
66	Mrs. Pallavi Ghatkamble	Internet of Things (IOT) using Arduino & Raspberri Pi	25- 10-2021	29-10-2021
67	Mrs. Tejashree Pawar	Webinar Series on Research Methodology	15-09-2021	23-09-2021
68	Mrs. Tejashree Pawar	New Pedagogies	29-11-2021	03- 12-2021
69	Mrs. Tejashree Pawar	Deep Learning using Python (Implementation and Research Areas)	14-03-2022	19-03-2022
70	Mr. Ravikant Suryawanshi	Introduction to Speech Processing and its Applications using AI-ML (ISPA)-2021	25-10-2021	29-10-2021
71	Mr. Ravikant Suryawanshi	Mathematical Foundation for Machine Learning	22-11-2021	26-11-2021
72	Mr. Ravikant Suryawanshi	C-based VLSI Design	01-07-2021	30-07-2021
73	Ms. Harshala Khedlekar	New Pedagogies	29-11-2021	03- 12-2021
74	Ms. Harshala Khedlekar	IEEE Xplore	20-11-2021	20-11-2021
75	Mrs. Gayatri More	PYTHON/ MATLAB and NYUSIM for Machine Learning (ML) in 5G mm Wave MIMO Technology	11-10-2021	28-10-2021
76	Mrs. Gayatri More	Research Methodology and IPR	23-5-2022	27-5-2022

77	Mrs. Snehal Nichale	Introduction to Machine Learning	18-4-2022	22-4-2022
78	Mrs. Snehal Nichale	Machine Learning	24-01-2022	29-01-2022
79	Dr. Anagha Kulkarni	Workshop on Fundamentals of Deep Learning	22 Oct 2021	22 Oct 2021
80	Dr. Dipti Patil	Workshop on Fundamentals of Deep Learning	22 Oct 2021	22 Oct 2021
81	Dr. Dipti Patil	Quality improvement program on Quantum computing for real world applications	17 Jan 2022	21 Jan 2022
82	Dr. Sneha Thombre	Good Citation Behavior	22 Oct 2022	22 Oct 2022
83	Dr. Sneha Thombre	FDP on Cyber Security and	10 Dec 2021	18 Dec 2021
84	Dr. Sneha Thombre	FDP on Stress management	14 Dec 2021	18 Dec 2021
85	Dr. Sneha Thombre	FDP on Immersive Virtual Reality	14 Sep 2021	18 Dec 2021
86	Harsha Sonune	STTP on Blockchain Technology	23 Aug 2021	3 Sept 2021
87	Harsha Sonune	A Nptel online course on Deep learning	Jan 2022	Apr 2022
88	Dr. Sneha Thombre	One week FDP on Qualitative and Quantitative approaches for Quality assurance through performance indicators in engineering institutions	2-May-2022	6-May-2022
89	Dr. Anagha Panditrao	5- days online FDP on the theme "Inculcating Universal Human Values in Technical Education	13 Sep 2021	17 Sep 2021 17/09/21

90	Dr. Anagha Panditrao	Webinar on Tools and Innovative Techniques for Personality Enhancement	10-04-21	10-04-21
91	Dr. Anagha Panditrao	Online Faculty Development Program on "New Pedagogies"	29 Nov 2021	3 Dec 2021
92	Dr. Anagha Panditrao	Online Elementary FDP on "Sensors Technology"	7 Dec 2021	11 Dec 2021
93	Dr. Anagha Panditrao	Foundations:Data, Data, Everywhere: Coursera	Completed on 1 Jan 2022	Completed on 1 Jan 2022
94	Dr. Dipali Ramdasi	Introduction to Industry 4.0 & Industrial Internet of Things	July 2021(12 Weeks)	Oct 2021(12 Weeks)
95	Dr. Dipali Ramdasi	NAAC Sponsored One-day Online Seminar on "Qualitative & Quantitative Metrics in RAAF of NAAC"	17-Sep-2021	17-Sep-2021
96	Dr. Dipali Ramdasi	Online Elementary FDP on " Advanced Sensor Technology for Efficient Biomedical and Energy Management in Smart Cities "	3 Jan 2022	7 Jan 2022
97	Dr. Dipali Ramdasi	IP Awareness / Training program under National Intellectual Property Awareness Mission	26 March 2022	26 March 2022
98	Prof. H. T. Patil	FDP on the theme "Inculcating Universal Human Values in Technical Education"	6 Sep 2021	10 Sep 2021
99	Prof. H. T. Patil	Online Faculty Development Program on "New Pedagogies"	29 Nov 2021	3 Dec 2021
100	Prof. Pratima Kulkarni	Innovation Ambassador Training (MoE)	30 June 2021	30July 2021

101	Prof. Pratima Kulkarni	Webinar on Design Thinking	19 Oct 2021	19 Oct 2021
102	Prof. Pratima Kulkarni	Online Elementary FDP on " Advanced Sensor Technology for Efficient Biomedical and Energy Management in Smart Cities "	3 Jan 2022	7 Jan 2022
103	Prof. Pratima Kulkarni	IP Awareness / Training program under National Intellectual Property Awareness Mission	26 March 2022	26 March 2022
104	Prof. Pratima Kulkarni	Impact Lecture Series session on 'IPR'	20th June 2022	20th June 2022
105	Prof. Pratima Kulkarni	Impact Lecture Series session on 'Innovation and Technology'	20th June 2022	20th June 2022
106	Dr. Vaishali Upadhye	Online session on Basics of Computer Networks	13 July 2021	13 July 2021
107	Dr. Vaishali Upadhye	Online Elementary FDP on "Advances in Control Systems & Sensor Technologies"	27 Nov 2021	1 Dec 2021
108	Dr. Vaishali Upadhye	Online Faculty Development Program on "New Pedagogies"	29 Nov 2021	3 Dec 2021
109	Dr. Vaishali Upadhye	5 Days Workshop on Advanced Industrial Automation Training for Engineering Education and Research (Online Mode)	31 Jan 2022	04 Feb 2022
110	Dr. Vaishali Upadhye	Online FDP on Industrial Automation Using PLC Programming	7 Feb 2022	11 Feb 2022
111	Dr. Vaishali Upadhye	Machine Learning for All	Completed on 11 Feb 2022	Completed on 11 Feb 2022

112	Dr. Revati Shriram	ATAL FDP on Instrumentation, Signals and Images for the Evaluation of Physiological Systems	16 Aug 2021	20 Aug 2021
113	Dr. Revati Shriram	ATAL FDP on Sustainable Change Management in Technical Institute for NEP – 2020 Implementation	23 Aug 2021	27 Aug 2021
114	Dr. Nivedita Daimiwal	5- days online FDP on the theme "Inculcating Universal Human Values in Technical Education	13 Sep 2021	17 Sep 2021
115	Dr. Nivedita Daimiwal	One Week National Level FDP On Administrative Capacity Building	25 Oct 2021	31 Oct 2021
116	Dr. Swati Madhe	Online Faculty Development Program on "New Pedagogies"	29 Nov 2021	3 Dec 2021
117	Dr. Swati Madhe	Online Elementary FDP on "Advanced Industrial Automation"	6 Dec 2021	12 Dec 2021
118	Dr. Swati Madhe	Intellectual Property Awareness Mission	26 March 2022	26 March 2022
119	Prof. Sheetal Katwe	Online Faculty Development Program on "New Pedagogies"	29 Nov 2021	3 Dec 2021
120	Yshwant Adhav	Online Faculty Development Program on "New Pedagogies"	29 Nov 2021	3 Dec 2021
121	Dr. V.D. Hajare	Faculty Development Program and Syllabus Workshop at TE (Instrumentation Control) Syllabus 2019 Course	26 Feb 2022	26 Feb 2022
122	Prof. Pratima Kulkarni	1 week STTP on 'Recent Trends in AIML'	20 June 2022	25 June 2022

123	Dr. Vaishali Upadhye	5- Days online FDP on Inculcating Universal Human Values in Technical Education	6 June 2022	10 June 2022
124	Dr. Swati Madhe	5- Days online FDP on Inculcating Universal Human Values in Technical Education	6 June 2022	10 June 2022
125	Dr. Revati Shriram	FDP on Administrative Capacity Building	25th Oct 2021	31st Oct 2021
126	Dr. Revati Shriram	ATAL FDP on Transformational Leadership	2nd Sep 2021	6th Sep 2021
127	Prof. N. R. Kolhalkar	Data Science	5th July 2021	16 July 2021
128	Poonam Bhore	Stress Management	26 July 2021	30 July 2021
129	Rujuta Agavekar	Life Skills Management	12 July 2021	16 July 2021
130	Rujuta Agavekar	Recent trends in HVAC & R	26 July 2021	30 July 2021
131	Poonam Bhore	Electric Vehicles: Design to Product Development	01 Sep 2021	05 Sep 2021
132	Prof. N. R. Kolhalkar	Introduction to Electric Vehicles:Challenges and Opportunities in Future	20th Sept. 2021	24 th Sept. 2021
133	Prof. N. R. Kolhalkar	Mechatronics and Manufacturing Automation(MMA-2021)	4th October2021	8th October 2021
134	Nitin Patil	Dimensional Management As Per ASME Y. 14.5 Standards	16 August 2021	20 August 2021
135	Nitin Patil	Recent Advances in Solar Energy Research and Applications	25 October 2021	29 October 2021

136	Prof. Parag Chaware	Alternative fuels for IC Engine	02 August 2021	06 August 2021
137	Prof. Parag Chaware	Finite Element Method (with applications in solid mechanics, heat transfer and fluid mechanics)	17 August 2021	21 August 2021
138	Prof. Parag Chaware	Advances in renewable energy technologies	25 August 2021	31 August 2021
139	Prof. V. A. Mali	Research and Publication Ethics	01 September 2021	01 September 2021
140	Prof. Mandar Vahadne	Industry 4.0	15 November 2021	15 November 2021
141	Prof. N. R. Kolhalkar	Robotics	22 November,2021	22 November,2021
142	Prof. N. R. Kolhalkar	New Pegagogies	29 Nov.- 2021	3 Dec.,2021
143	Prof. S. A. Kedar	New Pegagogies	29 Nov.- 2021	3 Dec.,2021
144	Prof. S. A. Kedar	Recent advancements in Sustainable energy storage and conversion	25 Oct.2021	29 Oct.2021
145	Prof. S. A. Kedar	Modeling and Simulation in MATLAB for Mechanical Engineering	06 Dec..2021	10 Dec..2021
146	Prof. H. M. Shinde	New Pegagogies	29 Nov.- 2021	3 Dec.,2021
147	Prof. H. M. Shinde	Modeling and Simulation in MATLAB for Mechanical Engineering	12th March 2022	10 Dec..2021
148	Prof. P.B. Pawar	New Pegagogies	29 Nov.- 2021	3 Dec.,2021
149	Prof. N. R. Kolhalkar	Electric Vehicle Design Master Class	13th Dec.2021	17th Dec.2021

150	Prof. N. R. Kolhalkar	30 Days Machine Learning Master Class	15th Nov.- 2021	14th Dec.2021
151	Prof. H. B. Kadam	New Pegagogies	29 Nov.- 2021	3 Dec.,2021
152	Rujuta Agavekar	New Pegagogies	29 Nov.- 2021	3 Dec.,2021
153	Rujuta Agavekar	Modeling and Simulation in MATLAB for Mechanical Engineering	06 Dec..2021	12 Dec..2021
154	Prof. V. A. Mali	New Pegagogies	29 Nov.- 2021	3 Dec.,2021
155	Prof. V. A. Mali	3D Printing	29 Nov.- 2021	3 Dec.,2021
156	Prof. N. R. Kolhalkar	3D Printing & Design	10 Jan 2022	14 Jan,2022
157	Prof. N. R. Kolhalkar	Intellectual Property Rights	7th March 2022	12th March 2022
158	Prof. Yashwant S. Munde	Modeling and Simulation in MATLAB for Mechanical Engineering	06 Dec..2021	10 Dec..2021
159	Prof. Yashwant S. Munde	New Pegagogies	29 Nov.- 2021	3 Dec.,2021
160	Nitin Patil	Zero Based Costing In Mechanical Engineering”	18 Jan 2022	24 Jan 2022
161	Nitin Patil	New Pedagogies	29 Nov. 2021	3 Dec. 2021
162	Nitin Patil	Exploring the Research in Mechanical Engineering	23 Feb 2022	27 Feb. 2022
163	Nitin Patil	Energy: Transfer, Storage and Utilization	18 Apr 2022	22 April 2022

164	Prof. N. R. Kolhalkar	30 Days Master Class ON Artificial Intelligence	6 Dec 2021	4 Jan 2022
165	Prof. N. R. Kolhalkar	30 Days Master Class on Electric Vehicle Design	2 Feb 2022	3 Mar 2022
166	Prof. P.B. Pawar	3D Printing and design	10 Jan 2022	14 Jan 2022
167	Prof. D. S. Watvisave	Embedded System	25 August ,2021	27 August ,2021
168	Prof. N. R. Kolhalkar	Lithium-ion Battery Manufacturing	20 November,2021	20 November,2021
169	Prof. S. A. Kedar	Kirloskar Vasundhara International Film Festival 2021	14 December 2021	14 December 2021
170	Prof. P.B. Pawar	Artificial Intelligence and Machine Learning	15 December 2021	15 December 2021
171	Prof. N. R. Kolhalkar	National Intellectual Property Awareness Mission	10th March,2022	10th March,2022
172	Rujuta Agavekar	National level workshop on NIRF India rankings 2022 for Higher Educational Institutions	5 January, 2022	6 January, 2022
173	Himani Kadam	Automation studio simulation software for Mechatronics and industrial fluid power control	16 December 2021	16 December 2021
174	Himani Kadam	Intellectual property rights & patent filing	23 April 2022	23 April 2022
175	Prof. P.B. Pawar	National Technology Day	11 May 2022	11 May 2022
176	Nitin Patil	New Product Development	24 February 2022	24 February 2022

177	Rujuta Agavekar	Intellectual property rights & patent filing	23 April 2022	23 April 2022
178	Poonam Bhore	Intellectual property rights & patent filing	23 April 2022	23 April 2022
179	Mrs. Varsha Pimprale	Practical Perspective on Decision Making Education	03 Jan 2022	07 Jan 2022
180	Dr Madhuri Tasgaonkar	Practical Perspective on Decision Making Education	03 Jan 2022	07 Jan 2022
181	Dr. Chhaya Gosavi	Practical Perspective on Decision Making Education	03 Jan 2022	07 Jan 2022
182	Dr. Shubhangi Tikhe	Practical Perspective on Decision Making Education	03 Jan 2022	07 Jan 2022
183	Mrs. Nutan Deshmukh	Practical Perspective on Decision Making Education	03 Jan 2022	07 Jan 2022
184	Mr. Hitendra Khairnar	Practical Perspective on Decision Making Education	03 Jan 2022	07 Jan 2022
185	Mr Prakash Date	Practical Perspective on Decision Making Education	03 Jan 2022	07 Jan 2022
186	Dr. Neeta Maitre.	Leadership and Excellence: A need in the era of Disruptive Transformation	03 Jan 2022	07 Jan 2022
187	Mrs. Vaishali Salgar	Practical Perspective on Decision Making Education	03 Jan 2022	07 Jan 2022
188	Mrs. Aparna Hajare	ATAL Online FDP on "FDP on Artificial Intelligence and Blockchain Application for Food, Agriculture Sector"	24 Jan 2022	28 Jan 2022
189	Dr Madhuri Tasgaonkar	Data Analysis Using Econometric Models	07 <sup>th</sup> Feb 2022	11 <sup>th</sup> Feb 2022

190	Mrs. Nutan Deshmukh	Five days Virtual Faculty Development Program on "Blockchain Technologies"	18 April, 2022	23 April, 2022
191	Dr. Madhuri Tasgaonkar	Medical Image Analysis using Artificial Intelligence (MIAAI-2022)"	25 <sup>th</sup> April 2022	29 <sup>th</sup> April 2022
192	Mr Hitendra Khainar	Certificate of Completion for the Following SAS® Training FDP-Shaping a Data Science Curriculum	27 May 2022	27 May 2022
193	Mrs. Vaishali Salgar	AICTE Training And Learning (ATAL) Academy Online Elementary FDP on " Best Teaching Learning and Assessment Practices in Computer Science/Information Technology based on National Education Policy (NEP)"	5th Jul 2021	9th Jul 2021
194	Mrs.Aparna Hajare	AICTE Training And Learning (ATAL) Academy Online Elementary FDP on " Best Teaching Learning and Assessment Practices in Computer Science/Information Technology based on National Education Policy (NEP)"	5th Jul 2021	9th Jul 2021
195	Mrs.Aparna Hajare	AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "Practical insight into key concepts of Blockchain"	12th Jul 2021	16th Jul 2021
196	Dr.Neeta Maitre	5 days hands-on program on "Fundamentals of Linux and Data Analytics"	12th Jul 2021	16th Jul 2021

197	Mrs.Jyoti Chinchole	AICTE Sponsored STTP on "Innovative & Inventive Problem Solving"	13th Jul 2021	18th Jul 2021
198	Mrs.Nutan Deshmukh	Online Elementary ATAL FDP on "nature Inspired Optimization Techniques"	19th Jul 2021	23rd Jul 2021
199	Mrs.Nutan Deshmukh	Online Elementary ATAL FDP on "THE INTERNET OF THE THINGS & EVERYTHING - IOT/IOE"	26 <sup>th</sup> Jul 2021	30th Jul 2021
200	Mrs.Varsha Pimprale	Online Elementary ATAL FDP on "THE INTERNET OF THE THINGS & EVERYTHING - IOT/IOE"	26 <sup>th</sup> Jul 2021	30th Jul 2021
201	Mrs.Nilofer Kittad	one week FDP On Data Science And Artificial Intelligence "	26 <sup>th</sup> Jul 2021	30th Jul 2021
202	Mrs. Nilofer Kittad	STTP through ICT Mode on"Advanced Applications in Artificial Intelligence and Machine Learning"	2 <sup>nd</sup> Aug 2021	6 <sup>th</sup> Aug 2021
203	Hitendra Khairnar	ATAL Online Elementary FDP on "Sustainable Change Management in Technical Institutes for NEP – 2020 Implementation"	23 <sup>rd</sup> Aug 2021	27 <sup>th</sup> Aug 2021
204	Dr. Anjali Naik	ATAL Online Elementary FDP on "Sustainable Change Management in Technical Institutes for NEP – 2020 Implementation"	23 <sup>rd</sup> Aug 2021	27 <sup>th</sup> Aug 2021
205	Dr. Madhuri Tasgaonkar	ATAL Online Elementary FDP on "Sustainable Change Management in Technical Institutes for NEP – 2020 Implementation"	23 <sup>rd</sup> Aug 2021	27 <sup>th</sup> Aug 2021

206	Mrs. Sushila shelke	ATAL Online Elementary FDP on "Fundamental of Artificial Intelligence"	13 <sup>th</sup> Sept 2021	17 <sup>th</sup> Sept 2021
207	Sharayu Mirasdar	ATAL Online Elementary FDP on "Fundamental of Artificial Intelligence"	13 <sup>th</sup> Sept 2021	17 <sup>th</sup> Sept 2021
208	Dr. Anjali Naik	ATAL Online Elementary FDP on "Emotional Intelligence"	13 <sup>th</sup> Sept 2021	17 <sup>th</sup> Sept 2021
209	Dr Sandhya Arora	Online Elementary FDP on " Application Areas of Data Analytics"	23/10/2021	27/10/2021
210	Dr Chhaya Gosavi	Artificial Intelligence and Machine Learning	15th Dec 2021	17th Dec, 2021
211	Dr. Chhaya Gosavi	"Artificial Intelligence"	28th Dec 2021	30th Dec 2021
212	Mrs. Sakshi Mandke	FDP on "Design Thinking"	17 Jan 2022	21 Jan 2022
213	Dr Supriya Kelkar	"Online Workshop on Research, Development and Innovation Ethics" Development and Innovation Ethics"	17th May 2021	19th May 2021.
214	Mrs. Gitanjalee Salunkhe	Advanced Applications of Artificial Intelligence and Machine Learning	2nd August 2021	6th August 2021
215	Mrs. Gitanjalee Salunkhe	One week Faculty Development Program on Data Science and Artificial Intelligence	26 July 2021	30 July 2021
216	Mr. Saurabh P. Mengale	Sustainable Change Management in Technical Institutes for NEP – 2020 Implementation	23 Aug 2021	27 Aug 2021
217	Mr. Saurabh P. Mengale	PRACTICAL PERSPECTIVE ON DECISION MAKING EDUCATION	03 Jan 2022	07 Jan 2022

218	Dr. Sandhya Arora	Block chain and its applications	Jan- Apr 2022	Jan- Apr 2022
219	Dr. Shilpa Deshpande.	"Cyber Security oversight for Information Protection"	12 July 2021	16 July 2021
220	Mrs. Simantinee Vinit Kulkarni.	Advances in Artificial Intelligence	21 Jan 2022	25 Jan 2022
221	Mrs. Simantinee Vinit Kulkarni.	Artificial Intelligence and Machine Learning	15th December 2021	17th December 2021
222	Mrs. Meenal Kamlakar.	"New Pedagogies"	29th November 2021	3rd December 2021
223	Mrs. Meenal Kamlakar.	Gamification	18 Jan 2021	22 Jan 2021
224	Mrs. Jyoti Bangare	"New Pedagogies"	29th November 2021	3rd December 2021
225	Mrs. Jyoti Chinchole	Inculcating Universal Human Values in Technical Education"	27 September, 2021	1 October, 2021.
226	Mrs. Priya Deokar	foundations of cryptography	Jan- Apr 2022	Jan- Apr 2022
227	Mrs. Priya Deokar	Cyber Security	5th July 2021	10th July 2021
228	Mrs. Priya Deokar	Cyber Security and threat intelligence	17 Jan 2022	28 Jan 2022
229	Ms. Pooja Amol Deshmukh	"New Pedagogies"	29th November 2021	3rd December 2021
230	Mr. Mahendra P. Deore	"Advances in Web Technology	7th March 2022.	11th March 2022.
231	Sushila Shelke	"New Pedagogies"	29th November 2021	3rd December 2021

232	Mrs.Vaishali salgar.	Practical insight into key concepts of Blockchain	12 July 2021	16 July 2021
233	Mrs.Vaishali salgar.	Artificial Intelligence and Machine Learning	15th December 2021	17th December 2021
234	Mrs.Vaishali salgar.	“New Pedagogies”	29th November 2021	3rd December 2021
235	Mrs Rakhi Dongaonkar	“New Pedagogies”	29th November 2021	3rd December 2021
236	Mr. Mahendra P. Deore	"Sustainable Change Management in Technical Institutes for NEP – 2020 Implementation"	23 Aug 2021	27 Aug 2021
237	Dr Shilpa Deshpande	“New Pedagogies”	29th November 2021	3rd December 2021
238	Dr. Shubhangi Tikhe	"Semantic Intelligence: The Way Forward with Artificial Intelligence (Part I)"	21 July 2021	25 July 2021
239	Dr. Shubhangi Tikhe	on "Sustainable Change Management in Technical Institutes for NEP – 2020 Implementation"	23 Aug 2021	27 Aug 2021
240	Mrs Rita Patil	Impact Lecture Series - Session 1, lecture 1 on IPR	20th June 2022	20th June 2022
241	Mrs Rita Patil	Impact Lecture Series - Session 2, lecture 1 on IPR	20th June 2022	20th June 2022
242	Mrs Sharayu Mirasdar	Nation FDP on " Machine Learning	8th Nov 2021	12th Nov 2021
243	Mrs. Aparna Hajare	PRACTICAL PERSPECTIVE ON DECISION MAKING EDUCATION	03 Jan 2022	07 Jan 2022
244	Mrs Shilpa Pant	“New Pedagogies”	29th November 2021	3rd December 2021

245	Mrs Aparna Hajare	“New Pedagogies”	29th November 2021	3rd December 2021
246	Dr Chhaya Gosavi	Designing Learner-Centric MOOC's	JAN-FEB 2022	JAN-FEB 2022
247	Dr. Anjali Naik	Certificate of Recognition on IPR Day	26th April 2022	26th April 2022
248	Mr. Prakash Date	“New Pedagogies”	29th November 2021	3rd December 2021
249	Mrs. Meenal Kamlakar	Certificate of Participation in program " Sensitization on Innovation & Cutting Edge Technologies followed by Project Work" through Virtual Platform	27th June 2022	1st July 2022
250	Mrs. Rakhi Dongaonkar	Certificate of Participation in program " Sensitization on Innovation & Cutting Edge Technologies followed by Project Work" through Virtual Platform	27th June 2022	1st July 2022
251	Mrs Rita Patil	Certificate of Participation in Professional Development Program on "Managing Stress for Effective Living "	27th June 2022	1st July 2022

**List of FDP organized for the Faculty:**

Sr. No.	No. of participants	Title of the professional development/ administrative training programs organized for teaching staff (Professional development/ administrative training programs)	Duration (from) (DD-MM-YYYY)	Duration (to) (DD-MM-YYYY)
1	31	3 days hands on workshop on "Cybersecurity and Ethical Hacking" to learn about cyber	28th March 2022	31st March 2022

		attacks and prevention technique CSI		
2	59	HANDS-ON WORKSHOP ON MACHINE LEARNING USING MATLAB (Implementation and Research Areas) The topics include basics of MATLAB, IP Toolbox, NNW, GA, Deep learning using MATLAB.	23 November 2021	27 November 2021
3	67	6 days national workshop on "Deep Learning"	14 March 2022	19 March 2022
4	22	Improvement in Leadership Qualities - Rambhau Mhalagi	27 April 2022	8 June 2022
5	12	Webinar - Techniques for effective research with IEEE Xplore	20th November 2021	20th November 2021
6	51	Online Session on "UGC Care List".	5th February 2022	5th February 2022

**List of FDP organized for Non-teaching:**

<b>Sr. No.</b>	<b>Title of the professional development/ administrative training programs</b>	<b>Duration (from) (DD-MM-YYYY)</b>	<b>Duration (to) (DD-MM-YYYY)</b>	<b>No. of participants</b>
1	Improvement in Leadership Qualities - Rambhau Mhalagi	27 April 2022	8 June 2022	22

## 15] Research and Development:

Details of research publications, patents published and granted, research grants and consultancy received in 2021-22 are as follows.

### A] List of Publications:

Department	International Journal Scopus/SCI index	National/International Journal: non Scopus index	International Conference Scopus index	National / International conference: non Scopus index	Books published
Computer	-	13	10	7	3
E & T/C	6	18	10	-	-
IT	13	-	10	-	-
Instrumentation	3	2	8	-	4
Mech	9	1	7	4	2
BSH	2	1	1	-	-
<b>Total</b>	<b>33</b>	<b>35</b>	<b>46</b>	<b>11</b>	<b>9</b>

Sr. No.	Title of paper	Name of the author/s	Name of journal	Year of publication	ISSN number
1	Solution of Local Fractional Generalized Fokker-Planck equation using Local fractional Mohand Adomian Decomposition Method.”	Mrs Jyoti Prasad	Fractals.	November 2021	1793-6543
2	Socio-Economic Sciences: Beyond Quantum Math-like Formalisms	Vikram Athalye	Quantum Reports	2021-10-01	EISSN 2624-960X
3	Evaluating green silver nanoparticles as prospective biopesticides: An environmental standpoint	Malini Bapat	Chemosphere	2021 August	0045-6535
4	Oxygen nonstoichiometry effects in spin Seebeck insulating Y3-xPrxFe5O12 materials	Dnyaneshwar Bhosale,	AIP Advances	1st June 2022	2158-3226 (online)

5	Interpretation of backscattering coefficient for distinct Indian lakes using Sentinel-1 SAR imagery	Anand Joshi	The Journal of Indian Geophysical Union	2022	0971-9709
6	Machine-to-Machine Communication for Device Identification and Classification in Secure Telerobotics Surgery	Dr. Dipti Patil	Hindawi, Security and Communication Networks	Aug_2021	1939-0122
7	Secured energy efficient machine -to-machine communication for telerobotic system	Dr. Dipti Patil	Elsevier's Informatics in Medicine Unlocked	Volume 26, 2021, 100731	2352-9148
8	A comprehensive survey on investigation techniques of exhaled breath (EB) for diagnosis of diseases in human body	Dr. Dipti Patil	Elsevier's Informatics in Medicine Unlocked	8/31/2021, Vol 26	2352-9148
9	Empirical Analysis of Feature Points Extraction Techniques for Space Applications	Dr. Dipti Patil	IJACSA	2021	2158-107X
10	A Review on Advancements in Automated Plant Disease Identification	Radhika Bhagwat	International Journal of Engineering and Technology Innovations	2021	2223-5329
11	Enhancing the energy efficiency by LEACH protocol in the internet of things	Dr. Dipti Patil	International Journal of Computational Science and Engineering (Inderscience)	Feb-22	1742-7185
12	Panditrao Anagha, Narawane Manisha	Water Management in Agriculture Keeping in View Frequent Power Failure Problem in Rural India	STM journals	Dec-21	Volume 11, Issue 3
13	“Use and Implementation of Gamification in Enterprise Systems”	Mrs. Sakshi Mandke	International Research Journal of Engineering and Technology (IRJET)	July- 2021	ISSN: 2395-0072

14	AI based Solution : A Business Perspective	Dr. Neeta Maitre	GORTERIA JOURNAL (International Journal)	July – 2021	VOLUME 34, ISSUE 7 – 2021, ISSN: 0017-2294
15	Relative Greenhouse Gases Emissions of MSA Algorithms: A comparison of T-Coffee and MAFFT	Dr. Neeta Maitre	Journal of Emerging Technologies and Innovative Research (JETIR)	July – 2021	July 2021, Volume 8, Issue 7, (ISSN-2349-5162)
16	MDFRCNN: Malware Detection using Faster Region proposals Convolution Neural Network	Mr. M.P.Deore	International Journal of Interactive Multimedia and Artificial Intelligence (IJIMAI).	July – 2021	ISSN: 1989-1660
17	Non-Destructive Vector fault Locator to Detect resistive open defects in static Random access memory with improved performance	Sheetal Barekar	International Journal of university of Shanghai for science and Technology	July – 2021	Volume 23, Issue 7, July -2021, ISSN:1007-6735
18	A Review: Federated Learning for Health care application	Mrs. Jyoti Bangare and Nilofer Kittad	Journal of Emerging Technologies and Innovative Research (JETIR)	Aug– 2021	August 2021 31/8/2021 ISSN : 2349-5162
19	Prediction and Prognosis of Lung Cancer using Machine Learning Techniques	Dr. Shubhangi Tikhe	International research journal of engineering and technology (IRJET)	Sept-2021	IF: 7.529 e-ISSN: 2395-0056 p-ISSN:2395-0072 Vol-8,Issue-9
20	on-chip weak resistive defect diagnosis with performance enhancement in 45nm technology static random access memory	Dr. Sheetal Barekar	Elsevier-Microelectronics journal 115 (2021) 105178 (Science Direct)	July-2021	ISSN:0026-2692
21	Gateway Based Trust Management System For Internet Of Things	Dr. Supriya Kelkar and Dr. Shilpa Deshpande	Innovation, Technologies and Management Journal : Revista Geintec-Gestao Inovacao E Tecnologias	August 2021	Vol. 11, Issue No. 4, ISSN: 2237-0722, pp. 4750-4763
22	"Rumor detection in social network based on user, content and lexical features."	Mrs. Sushila Shelke	Multimedia Tools and Applications (2022): pp 1-22.	7th March 2022	ISSN:1380-7501

23	Rumor Source Identification in Social Network with Lowest Search Space	Sushila Shelke	Turkish Journal of Qualitative Enquiry	Dec 2021	e-ISSN 1309-6591
24	Availability Analysis of a Steam Boiler in Textile Process Industries Using Failure and Repair Data: A Case Study	Suyog patil, Anand Bewoor, Rajkumar Patil	ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part B: Mechanical Engineering	Vol. 7, 2021	2332-9017
25	Reliability, Maintainability, and Availability Analysis of a Computer Engineeringized Numerical Control Machine Tool Using Markov Chains	Rajkumar Bhimgonda Patil, Mohamed Arezki Mellal, Anand K Bewoor, Sameer Al-Dahidi	Acta Polytechnica Hungarica	Vol. 18, No. 6, 2021	1785-8860
26	Dynamic Analysis of Sitar: A Comparative Study of Operational and Experimental Modal Analysis	Beena S. Limkar, Gautam S. Chandekar	Journal of Vibration and Control	August 2021, ID JVC-21-0252, 13 Pages	1077-5463
27	Abrasive Machining Characteristics and Prediction Model for Sisal/Polyester Sandwich Composite	Shinde Avinash, Siva Irulappasamy, Chithirai Pon Selvan, MTH Sultan, Lee Seng Hua & Yashwant Munde	Journal of Natural Fibers	14 Sept 2021, 17 pages	1544-0478
28	Testing of Silicon Rubber/Montmorillonite Nanocomposite for Mechanical and Tribological Performance	Avinash Shinde, I. Siva, Yashwant Munde, Vishal Deore, Mohamed Thariq Hameed Sultan, Ain Umaira Md Shah and Faizal Mustapha	Nanomaterials	12 November 2021, 14 pages	2079-4991
29	Biodiesel production from DK oils using Taguchi L9 techniques: characterization and thermogravimetric study of combustion characteristics	Ganesh Vijay More, Y. V. Hanumantha Rao, S. A. Kedar, S. H. Gawande	Journal of Thermal Analysis and Calorimetry	24 July 2021, 20 pages	1588-2926 1388-6150

30	Design and performance evaluation of novel end-effector with integrated gripper cum cutter for harvesting greenhouse produce	Nilesh R. Kolhalkar, V. L. Krishnan, Anupama A. Pandit, R. G. Somkuwar, Jahier A. Shaikh	International Journal of Advanced Technology and Engineering Exploration	Volume-8 Issue-84 November-2021, 10 pages	ISSN (Print): 2394-5443 ISSN (Online): 2394-7454
31	Tribological performance of hemp fibre reinforced phenolic composites: a brake pad material	Mithul Naidu, Ajit Bhosale, Yashwant Munde and Irulappasamy Siva	International Journal of Surface Science and Engineering	Vol. 16, No. 1 March 28, 2022 pp 52-70	eISSN: 1749-7868
32	Design of IoT-based Mechatronic Module for Real-Time Yield Monitoring During Harvesting of Greenhouse Produce and Vineyards	Nilesh R. Kolhalkar, V.L. Krishnan, R.G. Somkuwar, Anupama A. Pandit	International Review of Mechanical Engineering (I.R.E.M.E)	Vol.16, No. 1, January 2022	ISSN 1970 - 8734 e-ISSN: 2532-5655
33	Adaptiveness, Error Resilience and Robustness Validation Of the Multimodal Hand Biometric Recognition System	Prof. Prachi Mukherji, Deshpande, Pallavi; Ghule, Gauri; Ratnaparakhi, Archana	Yes	International Journal of Computing and Digital Systems	2021
34	Removal of line striping and shot noise from remote sensing imagery using a deep neural network with post-processing for improved restoration quality	Dr. Ashwini M. Deshpande, Sujata Patale, Sampa Roy	Yes	International Journal of Remote Sensing	Aug-21
35	An Efficient Image Deblurring Method with a Deep Convolutional Neural Network for Satellite Imagery	Dr. Ashwini M. Deshpande, Sampa Roy	Yes	Journal of the Indian Society of Remote Sensing	Sep-21
36	Covid 19 detection using chest X-ray	Dr. Megha Borse, Amruta Pomane, Swaliha Sanadi & Aishwarya Shinde	Yes	International Journal of Advanced Research in Computer Engineering and Communication Engineering International Journal of Advanced	Jul-21

				Technology in Engineering & Science IJATES	
37	Development Of End Node Using Stm32 And Gateway For Lorawan Using Esp32 Microcontroller	Dr. Bageshree Pathak, Sharayu Dhande	Yes	GIS Science Journal	Aug-21
38	Attendance Management system using Face Recognition	Sandhya Potadar, Riya Fale , Prajakta Kothawade , Arati Padale	Yes	International Journal of Engineering Research & Technology (IJERT)	Aug-21
39	Object tracking by adaptive fusion of thermal infrared and visible spectrum imaging using particle filter and structural similarity index metric. Journal of Applied Remote Sensing, 15(4), p.044517.	Supriya Mangale, Nikhita More, Meghna Raje, Shivangi Sinha, Madhuri Khambete	Yes	Journal of Applied Remote Sensing, 15(4), p.044517.	<b>Oct-21</b>
40	Single Channel Speech Enhancement using Evolutionary algorithm with LOGMMSE	Kalpana Joshi, Dr. Arti Khaparde	Yes	ASEAN Engineering Journal,	<a href="https://doi.org/10.11113/aej.v12.16770">https://doi.org/10.11113/aej.v12.16770</a>
41	Colon Cancer detection from Histopathological Images using InceptionResNetV2	Niharika Dhande #1 , Akanksha Bharambe #2 , Isha Joshi, Dr. Bageshree Pathak	Yes	The International journal of analytical and experimental modal analysis	<b>0886-9367</b>
42	Fusion-Based Semantic Segmentation Using Deep Learning Architecture in Case of Very Small Training Dataset	Ganesh R. Padalkar, Madhuri B. Khambete	Yes	International Journal of Image and Graphics (Scopus)	Nov-21
43	"Fuel Consumption Prediction of Cars Using Machine Learning"	Isha Bhasme, Supriya Malkar, Aayushi Mohod, Dr. Sharada Ohatkar	Yes	GIS SCIENCE JOURNAL	May-22
44	"Human Face Generation Using	Piyusha Babar, Yashanj	Yes	International Journal of	Jun-22

	DCGAN''	ali Chavan, Shital Indulwar, Dr. Sharada Ohatkar		Multidisciplinary and Current Educational Research (IJMCER)	
45	Systematic Approach to find effect of clock skew in the performance of Physical CMOS Design in deep submicron technologies	Dr. Seema Rajput,Dr. Harjeet Kaur, Swati Shetkar	Yes	Stochastic Modeling and Application s (UGC Care-1)	
46	Digital twin of a robotic arm	Dr. Anita Patil,Siddhi Chikode, Poorva Deshpande, Mahika Sowale	Yes	Journal of Engineering , Computing and architect	Jul-21
47	3 Dimensional Reconstruction and Identification of Brain Tumor	Dr. Megha Borse	Yes	GIS Science Journal	Apr-22
48	IOT Based SPY Camera System for COPS	Dr. Megha Borse, Ms. Sakshi Patil , Ms. Sakshee Moon, Ms. Krishna Randar	Yes	GIS Science Journal	Jul-22
49	Comparison between different Deep learning techniques for brain tumor detection and classification	Dr. Bageshree Pathak,Prachi Bhosale,Sneha l Khaire ,Akanksha Lathkar	Yes	GIS Science Journal	May-22
50	Covid-19 Prediction Model using LSTM	Dr. Bageshree Pathak,Jahanvi Singh,Madhur a Pansare, Pranita Dhakne	Yes	GIS Science Journal	May-22
51	Simulation of Self Driving Car using CNN	Bhumika Bhagia, Akanksha Hatle and Dr. Mrudul Dixit	Yes	GIS Science Journal ISSN 1869 -9391, Vol. 9, issue 6, June 2022	Jun-22
52	Fashion Try-On using Poly-GAN	Shruti Nair , Rajvee Pisey ,	Yes	Gradiva Review	Jun-22

		Meera Narale , Dr. Mrudul Dixit		Journal, ISSN NO : 0363-8057, Volume 8, Issue 6, June 2022	
53	Deepfake Creation Using Generative Adversarial Network	Samruddhi Raut , Pragati Sapke , Dr. Mrudul Dixit	Yes	Gradiva Review Journal, ISSN NO : 0363-8057, Volume 8, Issue 6, June 2023	Jun-23
54	Object detection based on multi-modal adaptive fusion using YOLOv3	Aarfa Shaikh, Apurva Baru, Sanjana shidedesai, Sup riya Mangale	Yes	Journal of Applied Remote Sensing	Apr-22
55	Stocks and Cryptocurrency Price Prediction using Long Short Term Memory	Ravikant Suryawanshi, R ishima Mathur, Trisha Shah, Tanvi Takavane	Yes	Internationa l Journal of Engineering Research & Technology (IJERT)	May-22
56	Recognition of real time Indian sign language, gestures for the Cafeteria	Prachi Waghmare , Supriya Mangale, Trupt i Bhapkar, Siddh i Dhamale, Arti Dhawale	Yes	GIS SCIENCE, JOURNAL	Jun-22
57	Speed Estimation and License Plate Detection of Moving Vehicles	Anushka Katre, Priyanka Sutar, Shreya Jare, Prof. Mahesh Pote, Dr. Ashok Khedkar	Yes	GIS SCIENCE, JOURNAL	2022

**B] Patents:**

**Patents Published:**

Sr. No.	Title of the Patent	Inventor (Faculty)	Inventor (Student)	Department	Application No.
1	Cloud based online crime reporting	Prof. Jyoti Bangare et. al.	-	Computer Engineering	202141013029

	system				
2	Integrating the Blockchain technology into an Mobile Health System	Prof. Jyoti Bangare	-	Computer Engineering	202111020602

### Patents Granted:

Sr. No.	Title of the Patent	Inventor (Faculty)	Inventor (Student)	Department	Application No.	Date
1	System for Piracy Detection and method Thereof	Dr. Chhaya Gosavi	-	Computer Engineering	331/MUM/2015 A Patent No. 395309	25 April 2022
2	Double Focus Spot Pick-up for Acoustic Signal	Dr. Atul Joshi	-	Instrumentation and Control Engineering	2563/MUM/2015 Patent No. 394154	4 April 2022
3	An Internet of Things Enabled Food and Drugs Supply Chain Management using Blockchain (AUSTRALIAN PATENT)	Dr. Dipti Patil	-	Information Technology	AU 2021107272	24 November 2021
4	System & method for providing Musical Notations	Prof. Pranjali Deshpande	-	Computer Engineering	3693/MUM/2013 369811	21 June 2021

### CJ Research Grants:

Sr. No.	Name of the Principal Investigator/ Co Investigator (if applicable)	Name of the Funding agency	Type (Government/ Non-Government)	Department of Principal Investigator/ Co Investigator	Funds provided (INR in lakhs)	Duration of the project
1	Dr. Dipti Patil	ISRO	Government	Information Technology	11 Lakhs	2 years
2	Dr. Sunita Jairabdkar	ISRO	Government	Computer Engineering	10 Lakhs	2 years
3	Dr. Vikram Athalye	Memorial University, Canada	Non-Government	Basic Science and Humanities	-	1 year
4	Dr. Vikram Athalye	Cambridge	Non-	Basic Science and	-	1 year

		University Press, UK with Co Author Prof. Emmanuel Haven, Memorial University, Canada	Government	Humanities		
5	Dr. C. Amarnath	Chairs in the institution	Non-Government	Mechanical engineering	12 Lakhs	2020-2023

**D] Consultancy:**

<b>Sr. No.</b>	<b>Name of the teacher-consultants</b>	<b>Name of consultancy project/ corporate training program</b>	<b>Consulting/Sponsoring agency with contact details</b>	<b>Revenue generated (INR in Lakhs)</b>	<b>Number of trainees</b>
1	Dr. Mrudul Dixit (ENTC)	SAMYAK: Multimodal Consumer Mapping	Neuflex Talent Solutions PVT LTD, Shri Shubhanagari, A-1 30, 31, Society, Dahanukar Colony, Kothrud, Pune	1.69492	NIL
2	Mr. Sunil Divekar (MECH)	Metallurgy Lab for Bamboo Reinforced Concrete	Ready Structures Associates LLP, S.No. 1, CTS No.694, Raje Manor Apts, Hingne Bk, Karvenagar, Pune 411052	0.048	NIL

## 16] Faculty Achievements:

Following is the list of some prominent faculty achievements in this year.

1. Dr. Vikram Athalye has been offered membership of the council for the interdisciplinary, international Centre for Quantum Social and Cognitive Sciences, Canada. He is the only Indian member on the council.
2. Dr. Mrudul Dixit received consultancy from Neuex Talent solutions Pvt. Ltd.
3. Dr. Ashwini Deshpande and Prof. Tejashree Pawar completed a project MicroDSP6748 Development Board Application from Micro Embedded Technologies, Pune.
4. Dr. Megha Borse and Dr. Shubhangi Chaudhary completed the Project “Smart Stick for Police to monitor Health Parameters” from the Centre for Police Research, Pune.
5. Prof. Pranjali Deshpande received the "Best Innovation Award 2021-22" in the 73rd foundation day function of SPPU.
6. Dr Sandhya Arora, Dr Chhaya Gosavi, Prof Swati Shirsath received Second Prize in National Event "Teaching- Learning- Evaluation Hackathon" conducted by Symbiosis University, Pune.
7. Dr. Sandhya Arora, Mrs. Nutan Deshmukh, Mrs. Priya Deokar, Mrs. Varsha Pimpale, Dr. Chhaya Gosavi, Dr. Neeta Maitre had published book chapters in various book under the publisher’s CRC Press Taylor and Francis, IGI Global Book Submission System.
8. Mrs. Pranjali Deshpande had published a book titled “Natural Language Processing” in Technical publication.
9. Mr. Hitendra Khairnar was awarded for exceptional contribution as a Judge in 'Toycathon, 2021 by the Ministry of MSME.
10. Dr. Chhaya Gosavi was appointed as a member of the external audit committee for Academics and Administrative audit planning to conduct an external audit at JSPM's Rajarshi Shahu College of Engineering, Pune.
11. Dr. Chhaya Gosavi was a technical program committee member and a reviewer at First IEEE International Virtual Conference on Computing, Communication and Green Engineering-2021 (CCGE'21) at JSPM's Rajarshi Shahu College of Engineering, Pune.
12. Dr. Neeta Maitre was a reviewer for the 2021 IEEE International Conference on Computational Intelligence and Computing Applications (IEEE-ICCICA-21) at GH Raisoni College of Engg Nagpur INDIA.

13. Dr Sandhya Arora was a speaker at FDP on topic "Research Methodology- Process, objective, characteristics, Types of research, the role of ICT in research" at SIT, Lonavala Pune and ATAL FDP session on Search techniques in AI 'Heuristic Algorithm Techniques' at RIET Jaipur.
14. Prof Pranjali Deshpande received Sugam Bhushan Pursakar by Prachin Lalit Kala Prabodhini, Sanskrutik Karya Sanchanalaya, Maharashtra Government Registered Organization on 28th November 2021 by Govt of Maharashtra.
15. Prof Swati Shirsath received the Commissioned as Flying Ocer (Associate NCC Officer, Cummins College of Engg for women and 3 MAH AIR SQN, NCC, PUNE) at Air Force Station, Tambaram, Chennai.
16. Dr. Mrs. Anagha Panditrao received an appreciation award from the Center for Electrical Engineering Excellence for unwavering support and guidance in various activities while working as an advisory board member.
17. Dr. Nivedita Daimiwal received Best Paper Award for "Oil Quality Detection Using Image Processing" in the International Conference CISCON-2021 held in Nov 2021.
18. Dr. Mrs. Anagha Panditrao received the certificate for Excellent Reviewing as an editor of STM journal for the year 2021
19. Dr. Makarand Velankar and Dr. Vikas Hajare were recognized as gold awardees for their contributions in global jury evaluation and delivering entrepreneurship education for the year 2021 by Wadhvani foundation.
20. Madhuri Khambete is appointed as SPPU nominee for Governing Body (G.B.) of K. K. Wagh Institute of Engineering Education and Research, Nashik (Autonomous).
21. Madhuri Khambete- is appointed as Chairman, Board of studies 'B. Voc.'