



Research & Development Cell

Details of IPR (Utility/ Design / Copyrights etc. per teacher during A.Y. 2024-25)

Details from: 01/07/2024 to 31/12/2025

ODD Semester Data

Date: 01-Aug.-2025

Ov. Sr. No.	Dp. Sr. No.	Details	Published Date	Examination Date	Grant status with Date and Patent No.	Type (Utility/ Design Registration / Copyrights)	Country (India / UK / Australia / Canada / etc)
	D1	Name of Department	Artificial Intelligence & Data Science				
1	1	Applicant Names: Gavali Ashwini Subhash, Ghavate Navnath, Solanke Rahul, Salunke Vinod Title: A FERTILIZER DISPENSER MACHINE Patent Application No: 202421049982 Date of application/Filing: 29/06/2024	26 July 2024	01/01/2025	Pending	Utility	India
2	2	Applicant Names: Dr. Shrinivas R. Zanwar, Dr. R. P. Chopade, Dr. Yogesh H. Bhosale, Dr. Gurucharansingh Sahani, Arvind S. Sardar, Pankaj Umate, Dr. U. B. Shinde Title: Artificial Intelligence Based Brain Monitoring Headset Patent Application No: 427598001 Date of application/Filing: 29/06/2024	27/09/2024	15/07/2024	Granted	Design	India
3	3	Applicant Names: Gavali Ashwini Subhash, Dr. Ulhas B. Shinde, Dr. Sangeet N. Kakarwal, Dr. Shrinivas R. Zanwar, Pawan B. Chaudhari Title: A Portable Fruit Sorting Device using Artificial Intelligence and a method for the same Patent Application No: 202321042855 Date of application/Filing: 26/06/2023	08/09/2023	21/08/2024	Granted on 30/10/2024. Patent No: 553551	Utility	India
	D2	Name of Department	Civil Engineering				
4	1	Applicant Names: Mr. P. G. Sonar Title: Construction Safety Helmet Patent Application No. 153024 Date of application/Filing. : 20-11-2023	11/01/2024	24/12/2023	Granted Date: 11/01/2024 Patent No:	Design	India



				400214-001			
D3		Name of Department		Computer Science and Engineering			
5	1	Applicants Name: Prof. Natasha Patel (1st Author) Title: Block Chain-Based Cyber Insurance Framework For Critical Data Security. Patent Application No.: 202421068740 A Date of Application / Filing: 11/09/2024	18/10/2024	-	Published Date: 18/10/2024 Patent No.- 202421068740 A	Design	INDIA
6	2	Applicants Name: Mr. R. N. Jadhav (2nd Author) Title: AI Based Stock Market Prediction Device Patent Application No.: 176439 Date of Application / Filing : 16/06/2024	27/07/2024	-	Granted Date: 27/07/2024 Patent No.- 176439	Design	INDIA
7	3	Applicants Name: Mr. A.S. Sardar (2nd Author) Title: AI-ENHANCED SPEECH RECOGNITION FOR VIRTUAL ASSISTANTS Patent Application No.: 202421053544 Date of Application / Filing: 12/07/2024	2/8/2024		Granted Date: 02/08/2024 Patent No.- 202421053544	Design	INDIA
8	4	Applicants Name: Mr. A.S. Sardar (1st Author) Title: ARTIFICIAL INTELLIGENCE BASED CERVICAL CANCER DETECTION DEVICE Patent Application No.: 427263-001 Date of Application / Filing: 16/08/2024	07/11/2024		Granted Date: 07/11/2024 Patent No.- 427263- 001	Design	INDIA
9	5	Applicants Name: Dr. G. J. Sahani (1st Author) Title: DEVICE TO HARVEST ENERGY FROM PLANT ROOTS Patent Application No.: 427355-001 Date of Application / Filing: 18/08/2024	13/11/2024		Granted Date: 13/11/2024 Patent No.- 427355- 001	Design	INDIA



10	6	Applicants Name: Mr. A.S. Sardar (2nd Author) Title: AI-ENHANCED SPEECH RECOGNITION FOR VIRTUAL ASSISTANTS Patent Application No.: 202421053544 Date of Application / Filing: 12/07/2024	2/8/2024		Granted Date: 02/08/2024 Patent No.- 202421053544	Design	INDIA
11	7	Applicants Name : Mr. P. S. Umate (1st Author) Title: Machine Learning and IOT-Based device to measure sugar levels in diabetes through saliva Patent Application No.: 427596-001 Date of Application / Filing : 20/8/2024	27/09/2024		Granted Date: 27/09/2024 Patent No.- 427596- 001	Design	INDIA
12	8	Applicants Name : Dr. Y. H. Bhosale (1st Author) Date of Application / Filing : 20/8/2024 Title : AI-based Plant Extract Analyzing Device to Identify Disease Patent Application No.: 427354-001 Date of Application / Filing : 18/8/2024	20-09-2024	Under Examination Date : 21-10-2024)	Date: Patent No.-	Design	INDIA
	D4	Name of Department	Electronics Engineering (Advance Communication Technology)				
13	1	Applicant Names: Dr.Syed Sumera Ershad Ali Title: System & Methods for inspecting Food Products Patent Application No. 202121045939 Date of application/Filing. : 08-10-2021	20-10-2023	30-12-2023	Granted Date: 30-09-2024 Patent No: 987654387-877	Design	India
14	2	Applicant Names: 1) Mr. Bharat R. Pawar, 2) Dr.Kirti Satish Agashe 3) Dr.Preeti Thombare, 4) Prof.Ajay Khake 5) Prof.Vinod Damdhar, 6) Prof.Dhammadeep Laxman Gadhe, 7) Dr.Devendra Laxman Bhuyar 8) Dr.Ulhas B Shinde, 9) Prof. Dinesh Durgadasrao Darp, 10) Prof.Somnath A.Karmude 11) Prof.Satish	23-08-2024	--	--	UTILITY	India



		Hiraman Jadhav Title: AI POWERED INTELLIGENT SHIRODHARA PROCESS TO PROMOTE RELAXATION AND MENTAL CLARITY FOR STRESS MANAGEMENT Patent Application No. 202421057892A Date of application/Filing. : 30-07-2024					
15	3	Applicant Names: 1) Mr. Bharat R. Pawar 2) Sajeeda Shikalgar 3) Dr.Preeti G. Thombre 4) Prof.Natasha Patel 5) Prof Satish Hiranman Jadhav 6) Mr.Santosh Uttam Thorwe Title: DECENTRALIZED SELF-SOVERIGN IDENTITY(SSI) AND IDENTITY ACCESS MANAGEMENT(IAM) SYSTEM WITH BLOCK CHAIN BASED GOVERNANCE FOR SECURE DIGITAL AUTHENTICATION Patent Application No. 202421077916A Date of application/Filing. : 14-10-2024	22-11-2024	--	--	UTILITY	India
	D5	Name of Department	Electronics and Computer Engineering				
16	1	Applicant Names: Dr.P.G.Thombare Inventor Name : Mr.Hemant Mahajan,Dr Monika Dangore,Dr Nalini Jagtap Title: Ai based multimedia forgery Patent Application No. 405570-001 Date of application/Filing. : 25/12/2023	24/01/2024	-	-	Utility	India
17	2	Applicant Names: Mr.B.R.Pawar Inventor Names: Mr.Jagannath Nivrutti Mohite ,Prof. Mr.Ganesh Namdeo Dhengale ,Dr BHAVANA BANSILAL NERKAR ,Mr Ganesh Patil ,Mr.Dinesh Durgadasrao Darp ,Dr.Devendra Laxman Bhuyar ,Dr.Ulhas B Shinde ,Akshay Tukaram Jadhav ,Mr.Pankaj Ramdas Bhusari ,Dr.Preeti Gajanan Thombre,	05/07/2024	-	-	Utility	India



		Mr.B.R.Pawar Title: Lean ai-sculpting your body with ai weight loss management Patent Application No. 202421043435 Date of application/Filing: 05/06/2024					
18	3	Applicant Names: Mr.B.R.Pawar Inventor Names: Dr Gurmeet sikh sikh,Dr.A.Thandauthapani, Dr. S. Ramanathan,Mr. M.ASHWIN, Mr.B.R.Pawar Title: Robotic process automation framework for efficient business process management. Patent Application No. 202421044814 Date of application/Filing: 12/06/2024	12/07/2024	-	-	Utility	India
19	4	Applicant Names: Mr.B.R.Pawar Inventor Names: Prof.Sanket Bhivsenrao Shinde,Dr.Priti Thombare,Prof.Ganesh Namdeo Dhengale,Prof.Jagannath Nivrutti Mohite,Dr.Jitesh Ramdas Shinde Prof. Ganesh Patil,Dr.Ulhas B Shinde,Dr.Devendra Laxman Bhuyar,Prof.Dinesh Durgadasrao Darp, Mr.B.R.Pawar Title: Physique AI: AI powered smart physique classifier system. Patent Application No. 202421055471 Date of application/Filing: 09/07/2024	09/08/2024	-	-	Utility	India
20	5	Applicant Names: Mr.B.R.Pawar Inventor Names: Dr.Kirti Satish Agashe,Dr.Preeti Thombare,Prof.Ajay Khake Prof.Vinod Damdhar,Prof.Dhammadeep Laxman Gadhe,Dr.Devendra Laxman Bhuyar,Dr.Ulhas B Shinde,Prof.Dinesh Durgadasrao Darp,Prof.Somnath A.Karmude,Prof.Satish Hiramam Jadhav, Mr.B.R.Pawar	23/08/2024	-	-	Utility	India



		Title: AI Powered intelligent shirodhara process to promote relaxation and mental clarity for stress management. Patent Application No. 202421057892 Date of application/Filing: 23/07/2024					
21	6	Applicant Names: Mr.B.R.Pawar Inventor Names: Dr.Kirti Satish Agashe, Mr.B.R.Pawar Title: Embryoctony prevention for safeguarding Foetal gender equity using trustworthy Block chain technology. Patent Application No. 202421062426 Date of application/Filing: 30/07/2024	30/08/2024	-	-	Utility	India
22	7	Applicant Names: Mr.B.R.Pawar Inventor Names: Dr.Kirti Satish Agashe, Mr.B.R.Pawar Title: Block chain enabled orphan child adoption management system leveraging decentralized ledger technology and smart contracts for secure, transparent and effective adoption process. Patent Application No. 202421064654 Date of application/Filing: 06/08/2024	06/09/2024	-	-	Utility	India
23	8	Applicant Names: Mr.B.R.Pawar Inventor Names: Dr Rachayya Arakerimath, Mr.Pavan Bhaskar Chaudhari Title: Cyber secured iot integrated series and parallel catalytic converters for HCCI Engines. A solution for emission reduction and air pollution control. Patent Application No. 202421065107 Date of application/Filing: 04/09/2024	04/10/2024	-	-	Utility	India
24	9	Applicant Names: Mr.B.R.Pawar Inventor Names: Mr.Ajay Vijaykumar	04/10/2024	-	-	Utility	India



		Khake,Dr.Syed A. Naveed,Mr.B.R.Pawar Title: Innovative decentralized and tamperproof approach of Block chain-Based Cyber security framework for IoT based real time Traffic control Systems in Smart City infrastructure. Patent Application No. 202421065472 Date of application/Filing: 04/09/2024					
25	10	Applicant Names: Mr.B.R.Pawar Inventor Names: Dr Minal Deshmukh,Dr sudhashil Ghosh, Mr.B.R.Pawar Title: Adaptive AI initiative Framework for Enhancing Visitor Experiences and to analyzing rare artifacts across Listed and Non-Listed Heritage sites. Patent Application No. 202421066718 Date of application/Filing: 11/09/2024	11/10/2024	-	-	Utility	India
26	11	Applicant Names: Mr.B.R.Pawar Inventor Names: Dr.Kirti Satish Agashe, Mr.B.R.Pawar Title: Block chain enabled vr platform for realistic interaction with deceased persons and historical figures. Patent Application No. 202421067838 Date of application/Filing: 11/09/2024	11/10/2024	-	-	Utility	India
27	12	Applicant Names: Mr.B.R.Pawar Inventor Names: Prof.Sanket Bhivsenrao Shinde, Prof.Ganesh Dhengale, Dr.Preeti Thombare, Prof.Natasha Patel, Prof.Sanjay B Dhumal, rof. Vitthal K Bhosale,Prof.Ajay Khake, Dr.Devendra Laxman Bhuyar,Prof.DineshDurgadasraoDarp, Mr.B.R.Pawar Title: Block chain based cyber insurance for critical	18/10/2024	-	-	Utility	India



		data security. Patent Application No. 202421068740 Date of application/Filing: 18/09/2024					
28	13	Applicant Names: Mr.B.R.Pawar Inventor Names: Dr.Kirti Satish Agashe, Mr.B.R.Pawar Title: Real-Time Adaptive Shape Memory Alloy Systems for Precision Surgical Tools, responsive Prosthetics, and optimized Vascular Implants. Patent Application No. 202421069184 Date of application/Filing: 08/10/2024	08/11/2024	-	-	Utility	India
29	14	Applicant Names: Mr.B.R.Pawar Inventor Names: Mr.Pawale Sunil Suresh, Mr.Sanket Bhivsenrao Shinde, Prof.Ganesh Namdeo Dhengale, Mr.B.R.Pawar Title: Secure software defined vehicles innovation in cyber security and control systems. Patent Application No. 202421075950 Date of application/Filing: 08/10/2024	08/11/2024	-	-	Utility	India
30	15	Applicant Names: Mr.B.R.Pawar Inventor Names: Mr.Shashank Kumar Singh, Dr.Preeti G. Thombre, Mr.B.R.Pawar Title: Block chain based food packaging protocol for securing nutritional value preservation and safety compliance. Patent Application No. 202421076621 Date of application/Filing: 15/10/2024	15/11/2024			Utility	India
31	16	Applicant Names: Mr.B.R.Pawar Inventor Names: Dr.Preeti G. Thombre,Natasha patel, Mr.B.R.Pawar Title: Decentralized self-sovereign identities (SSI) and identity management system with block chain based governance for secure digital authentication.	22/11/2024	-	-	Utility	India



		Patent Application No. 202421077916 Date of application/Filing: 22/10/2024					
32	17	Applicant Names: Mr.B.R.Pawar Inventor Names: Dr.Bhuyar Devendra Laxman,Rucha Rajesh Deshpande, Sneha Vishnu Pandit, Disha Vijay Narkhede, Mr.B.R.Pawar Title: SecureEHRChain-Secure Decentralized Block chain-Based EHR System for Enhanced Patient Data Privacy and Consent. Patent Application No. 202421080330 Date of application/Filing: 22/10/2024	22/11/2024	-	-	Utility	India
33	18	Applicant Names: Mr.B.R.Pawar Inventor Names: Sajeeda Shikalgar, Mr.B.R.Pawar Title: VeriTrustLense: AI-Driven Cyber security System for Detecting Video Forgery and Ensuring Evidence Authenticity Patent Application No. 202421081801 Date of application/Filing: 29/10/2024	29/11/2024	-	-	Utility	India
34	19	Applicant Names: Mr.B.R.Pawar Inventor Names: Sajeeda Shikalgar, Mr.B.R.Pawar Title: Intelligent Botnet Detection and Mitigation System Using Machine Learning for Enhanced Network Security. Patent Application No. 202421085323 Date of application/Filing: 29/10/2024	29/11/2024	-	-	Utility	India
35	20	Applicant Names: Mr.B.R.Pawar Inventor Names: Saloni Gankar, Sagar Vijay Kulkarni, Mr.B.R.Pawar Title: Decentralized and Distributed Block chain System for Autonomous Vehicle Communication and Proactive Accident Avoidance Patent Application No. 202421089374 Date of application/Filing: 18/11/2024	06/12/2024	-	-	Utility	India



36	21	Applicant Names: Mr.B.R.Pawar Inventor Names: Saloni Gankar, Sagar Vijay Kulkarni, Mr.B.R.Pawar Title: Automated AI Weather-Responsive Cloth Drying System for unpredictable environmental conditions Patent Application No. 202421089337 Date of application/Filing: 18/11/2024	06/12/2024	-	-	Utility	India
37	22	Applicant Names: Mr.B.R.Pawar Inventor Names: Saloni Gankar, Sagar Vijay Kulkarni, Mr.B.R.Pawar Title: Integrated AI-Based Hydro seeding System for variable terrain with Remote Sensing for Comprehensive Land Restoration and Monitoring Patent Application No. 202421089339 Date of application/Filing:18/11/2024	06/12/2024	-	-	Utility	India
38	23	Applicant Names: Mr.B.R.Pawar Inventor Names: Saloni Gankar, Sagar Vijay Kulkarni , Mr.B.R.Pawar Title: Intelligent Poultry Management System Utilizing AI for Growth Enhancement, Disease Forecasting, Health Surveillance, and Optimized Feeding Patent Application No. 202421089341 Date of application/Filing:18/11/2024	06/12/2024	-	-	Utility	India
39	24	Applicant Names: Mr.B.R.Pawar Inventor Names: Saloni Gankar, Sagar Vijay Kulkarni, Mr.B.R.Pawar Title: AI-Enhanced Glycemic Index Assessment System and Method for Personalized Dietary management Patent Application No. 202421089343 Date of application/Filing:18/11/2024	06/12/2024	-	-	Utility	India



40	25	Inventor Names: Saloni Gankar, Sagar Vijay Kulkarni, Mr.B.R.Pawar Title: Intelligent Data Integrity Assurance Framework for Securing LoRaWAN Streetlight Networks. Patent Application No. 202421091486 Date of application/Filing: 18/11/2024	13/12/2024			Utility	India
41	26	Applicant Names: Dr.P.R.Wankhede Title: Efficient computing algorithms for detection of retinal features Registration No: L-138380/2023 Date of registration : 14/12/2024	14/12/2024	-	-	Copyright	India
	D6	Name of Department	Electronics Engineering (VLSI Design & Technology)				
42	1	Applicant Names: Dr. Jitesh Ramdas Shinde, Prof. Ganesh Patil Title: PHYSIQUEAI: Ai Powered Smart Physique Classifier System Patent Application No. 202421055471 Date of application/Filing.: 20-07-2024	09-08-2024	NA	NA	Utility	India
43	2	Applicant Names: Mr. Ganesh Patil, Mr. Pankaj Ramdas Bhusari Title: LEAN AI: SCULPTING YOUR BODY WITH AI WEIGHT LOSS MANAGEMENT Patent Application No. 202421043435 Date of application/Filing.: 05-06-2024	05-07-2024	NA	NA	Utility	India
44	3	Applicant Names: Jitesh Ramdas Shinde Title: SMART AGRICULTURE SENSOR SYSTEM FOR MONITORING AND OPTIMIZING CROP GROWTH Patent Application No. 202421043026 Date of application/Filing.: 03-06-2024	27-07-2024	NA	NA	Utility	India
	D7	Name of Department	Electrical Engineering				



45	1	Applicant Names: P.S.More Title: Secure Computer Verification System for Connected Devices Patent Application No. 6390512 Date of application/Filing. : 12-09-2024	01-10-2024	NA	Granted Date: 30-09-2024	Design	UK
	D8	Name of Department	Mechanical Engineering				
46	1	Applicant Names: Dr. R. P. Chopade Title: Rotary Evaporator for Herbal Drug Extraction Patent Application No. : 427356-001 Date of application/Filing. : 18-08-2024	3-10-2024	18-8-2024	Granted Date: 18-08-2024 Patent No: 987654387-877	Design	India
	D9	Name of Department	Science & Humanities				
47	01	NIL					
		ODD Sem. Total: 46	Utility	Design	Copyright		

Details of IPR (Utility/ Design / Copyrights etc. per teacher during A.Y. 2024-25)

Details from: 01/01/2025 to 30/06/2025

EVEN Semester Data

Ov. Sr. No.	Dp. Sr. No.	Details	Published Date	Examination Date	Grant status with Date and Patent No.	Type (Utility/ Design Registration / Copyrights)	Country (India / UK / Australia / Canada / etc)
	D1	Name of Department	Artificial Intelligence & Data Science				
47	1	Applicant Names: Ghavte Navnath Shivaji, Solunke Rahul Shivaji, Dr. A. S. Gavali , Salunke Vinod Bhagwan Title: A fertilizer dispenser Device Application no: 202421049982 Date of application/Filing.: 29-06-2024	June 2024	October 2024	Granted. Patent No:559930, Date: 11-02-2025	Utility	India
	D2	Name of Department	Civil Engineering				
		NIL					



D3		Name of Department	Computer Science and Engineering				
48	01	Applicant Names: Mayur Kakasaheb Jadhav, Dr. Shilp Kabra – Laddha Title: Dataset Analyzer Tool Application no: 16137 / 2024-CO/SW Date of application/Filing.: 20-05-2024	07/01/2025	01/01/2025	Granted, No. SW-20040/2025 Date:	Copyright	India
D4		Name of Department	Electronics Engineering (Advance Communication Technology)				
		NIL					
D5		Name of Department	Electronics and Computer Engineering				
49	1	Applicant Name's: Bharat Ramdas Pawar,Dr. G.B.Dongre,Dr. D.L.Bhuyar, Shreya Gautam Ghewande, Anjali Kakasaheb Ghorpade, Nikita Bapusaheb Chandratike Title: Smart contract powered Immutable and transparent Block chain Registry for Secure and Ethical Organ Donation management. Patent Application No. 202421096035 Date of application/Filing.: 10/01/2025	10/02/2025	NA	NA	Utility	India
50	2	Applicant Name's: Bharat Pawar, Utgikar A Title: Decentralized and immutable block chain governance framework for modern and unpredictable cyber attack Patent Application No. 202521004582 Date of application/Filing.: 14/02/2025	10/03/2025	NA	NA	Utility	India
51	3	Applicant Name's: Dr.Preeti G. Thombre,Bharat Ramdas Pawar, Dr.Devendra Laxman Bhuyar, Dr Ganesh Dongre, Malode Pushkar Ulhas,Pathak Gaurav Santosh,Rajguru Saurabh Satish Title: Enhanced Face Recognition System Using	30/03/2025	NA	NA	Utility	India



		Pre trained VGG16 and Google Net for Adaptive Feature Optimization Patent Application No. 202521016191 Date of application/Filing.: 07/03/2025					
52	4	Applicant Name's: Mr. Bharat Ramdas Pawar, Dr.Preeti G. Thombre, Dr. Devendra Bhuyar, Dr. Ganesh B. Dongre, Sakshi Kailas Sabne, Pawan Raju Wahule, Roshni Vitthal Lode Title: Smart and Comprehensive AI-Powered Multi-Modal Deep Learning System for Real-Time Age and Gender Prediction. Patent Application No. 202521021267 Date of application/Filing.: 21/03/2025	10/04/2025	NA	NA	Utility	India
53	5	Applicant Name's: Mr. Bharat Ramdas Pawar, Dr. Sarita Devanand Sanap Title: Secure Multi-Tenant FPGA-Based Cryptographic Processor System with AES-RC6 Encryption, Cyber-attack Isolation, and Data Leakage Mitigation. Patent Application No. 202521023441 Date of application/Filing.: 28/03/2025	15/04/2025	NA	NA	Utility	India
54	6	Applicant Name's: Bharat Pawar, Mrs. Dipali Ashok Ghule, Mr. Piyush Dilip Khemnar, Vaidehi Sarag Title: Enhanced Safety Polyethylene-Coated Conductor for Eliminating Hooking-Based Electricity Theft and Fatal Accidents. Patent Application No. 202521025099 Date of application/Filing.: 28/03/2025	15/04/2025	NA	NA	Utility	India



	D6	Name of Department	Electronics Engineering (VLSI Design & Technology)				
		NIL					
	D7	Name of Department	Electrical Engineering				
		NIL					
	D8	Name of Department	Mechanical Engineering				
		NIL					
	D9	Name of Department	Science & Humanities				
55	01	Applicant Name's: Abhijeet Kadam, Kranti Zakde, Vibha Chopra, Sanjay Dhoble Title: PHYSIQUEAI: Laboratory Apparatus for multicolor tunable photoluminescence for white light. Patent Application No. 6447770 Date of application/Filing.: 29/05/2025	09-08-2024	NA	Granted 09/06/2025 6447770	Design	UK
		Even Sem. Total: 09	Utility: 07	Design: 01	Copyright: 01		
		A.Y. 2024-25 (ODD, EVEN Sem) Total:	46 (ODD) + 09 (EVEN) = 55				

Dr. Y. H. Bhosale
Dean - R & D

Dr. R. P. Chopade
IQAC

Dr. D. L. Bhuyar
Vice-Principal

Dr. G. B. Dongre
Principal