



Rayat Shikshan Sanstha's

Yashwantrao Chavan Institute of Science, Satara

(AUTONOMOUS)

Lead College, Karmaveer Bhaurao Patil University, Satara

National Seminar

on

“Sustainable Agriculture and Smart Technology”

(SAST-2023)

(Thursday, 16th March, 2023)

Organised by

Department of Electronics and Computer Science
Rayat Institute of Research and Development (RIRD)

Yashwantrao Chavan Centre for

Invention, Innovation and Incubation (YC-CIII)

Centre of Excellence in Artificial Intelligence Applications Development (COE-AIAD)

Designed by Department of Animation Science

In collaboration with

Dream Foundation, Satara and Agrosan Aadhar LLP

Technically Sponsored by

Society for Promotion of Excellence in Electronics Discipline (SPEED), Pune



Chief Guest

Padma Shri Dr. Anil K. Rajvanshi

Director and Hon. Secretary
Nimbkar Agricultural
Research Institute (NARI), Phaltan



President

Hon. Dr. B. T. Jadhav

Principal,
Yashwantrao Chavan Institute of
Science, Satara
(Autonomous)



Dr. Arvind D. Shaligram

Director ISRO-SPPU Space Technology Centre
and CEO of SPPU Research Park Foundation

Key Note Address
Data Analytics and Artificial Intelligence
for Agricultural Sustainability

Panel Discussion : Sustainable Agriculture and Smart Technology



Mr. Nilesh Nalawade

Director of Education,
Agricultural Development Trust,
Baramati



Dr. H.V. Deshmukh

President Dream Foundation,
Satara



Mr. Sharad Kadam

Founder and CEO,
Agrosan Aadhar LLP



Dr. S. M. Nimbale

Coordinator Data Centre,
YCIS, Satara



Karmveer Auditorium, YCIS, Satara (Autonomous)



10.00 AM Onwards

Mr. S. R. Pol
Convener- SAST-2023

Mr. S. K. Shinde
Chairman, SAST-2023

Prin. (Dr.) B. T. Jadhav
President- SAST-2023

Schedule of the Seminar

Thursday, 16 th March 2023	
Inaugural and Inspirational Talk	
1	10.30AM - 11.45AM Chief Guest: Hon. Dr. Anil K. Rajwansi (Padma Shri awardee) Director and Hon. Secretary Nimbkar Agricultural Research Institute (NARI), Phalun Topic: "How to be Good Citizens" President: Hon. Dr. B. T. Jadhav Principal, Yashwantrao Chavan Institute of Science, Satara
Key Note Address Topic: Data Analytics and Artificial Intelligence for Agricultural Sustainability Speaker: Prof. (Dr.) Arvind D. Shaligram Director, ISRD-SPPU Space Technology Centre CEO, SPPU Research Park Foundation, SPPU Pune Session Chair: Prin. Dr. B. T. Jadhav Yashwantrao Chavan Institute of Science, Satara (Autonomous)	
12.00 - 01.00PM LUNCH BREAK	
01.00PM - 02.00PM Panel Discussion: Sustainable Agriculture and Smart Technology 1. Mr. Nilesh Nalawade, Director, Education, Agricultural Development Trust, Baranati 2. Dr. H.V. Deshmukh, President, Dream Foundation, Satara 3. Mr. Sharad Kadam, Founder and CEO, Agronon Aadhar LLP 4. Dr. S. M. Nimhale, Coordinator, Data Centre, YCIS, Satara	
2	
2.15PM - 3.30PM Poster Exhibition and Quiz Valdictory Function	
3	
4	
5	

Our Patrons

Hon. Shri. Sharadchandraji Pawar
President, Rayat Shikshan Sanstha, Satara

Hon. Dr. Anil Patil
Chairman, Rayat Shikshan Sanstha, Satara

Hon. Prin. Dr. V. S. Shivankar
Secretary, Rayat Shikshan Sanstha, Satara

Hon. Prin. Dr. S. G. Menkundale
Jt. Secretary (H. Edu.), Rayat Shikshan Sanstha, Satara

Advisory Committee

Hon. Prof. (Dr.) D. T. Shirke
Vice Chancellor, Shivaji University, Kolhapur & Karmaveer Bhaurao Patil University, Satara MS, India

Hon. Prof. (Dr.) R. K. Kamat
Vice Chancellor, Dr. Homi Bhabha State University, Mumbai, MS, India

Hon. Prof. (Dr.) A. D. Shaligram
Director ISRD SPPU Space Technology Centre, CEO, Research Park, SPPU, Pune, MS, India

Hon. Dr. Ajit Jaokar
Visiting fellow: Department of Engineering Science and Cosma Director, Artificial Intelligence, Cloud and Edge Implementations - University of Oxford

Hon. Nilesh Nalawade
Director of Education, Agricultural Development Trust, Baranati

Hon. Dr. H. V. Deshmukh
President, Dream Foundation, Satara MS, India

Organizing Committee Members

Mr. P. S. Kadam	Ms. V. N. Pawar
Ms. K. D. Gadekar	Ms. P. H. Gharge
Ms. P. V. Jadhav	Ms. R. R. Shinde
Ms. A. R. Sawant	Ms. D. B. Jangam
Ms. R. S. Sonawane	Mrs. M. V. Pawar
Ms. P. P. Badekar	Ms. Y. S. Salunkhe
Ms. T. N. Chavan	Mr. N. A. Junghare
Ms. D. S. Sabale	Ms. S. P. Salunkhe
Ms. K. D. Salunkhe	Mr. R. P. Waghmare

All teaching faculty and Non-teaching staff of Yashwantrao Chavan Institute of Science, Satara (Autonomous)

Yashwantrao Chavan Institute of Science, Satara
(Autonomous)
Lead College of Karmaveer Bhaurao Patil University, Satara
NAAC Reaccredited of A+ Grade with CGPA 3.57, UGC-CPE B, DBT-Star, DST-FIST, RUSA
Excellence, UGC-PARAMARSH, ISO-9001:2015

National Seminar on "Sustainable Agriculture and Smart Technology" (SAST-2023)

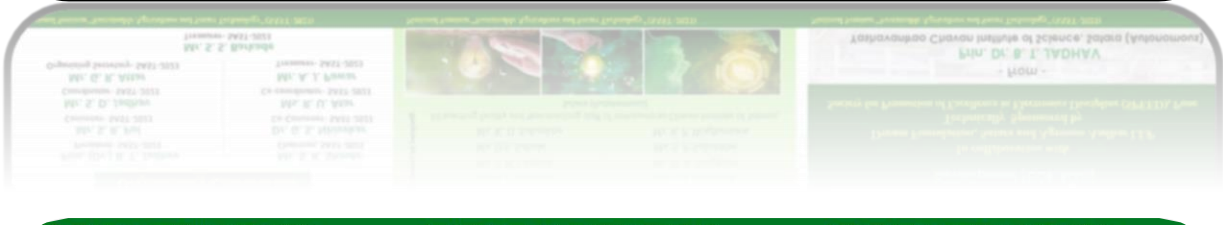
(Thursday, 16th March, 2023)

Organized by
**Department of Electronics and Computer Science
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- From -
Prin. Dr. B. T. JADHAV
Yashwantrao Chavan Institute of Science, Satara (Autonomous)



Invitation

Dear Sir/Madam, It is our great pleasure to invite and welcome you to participate in National Seminar on "Sustainable Agriculture and Smart Technology" (SAST-2023) organized by Department of Electronics and Computer Science, Yashwantrao Chavan Institute of Science, Satara (Autonomous) on Thursday, March 16, 2023. We look forward to welcome you at our Institute.

About Rayat Shikshan Sanstha, Satara

Rayat Shikshan Sanstha is one of the largest educational institutions in the Asia. Karmaveer Bhaurao Patil founded Rayat Shikshan Sanstha in 1919 with a noble objective of bringing the socially and economically backward class in the mainstream by means of education. Government of India conferred on him "Padmabhushan Award" for his enormous contribution in the field of education. Presently the Rayat Shikshan Sanstha has been conducting a total of 751 branches including 42 colleges, 441 secondary schools, 7 training colleges, 52 primary schools (English medium-24), 42 pre-primary schools (English medium-28), 91 hostels, 7 administrative offices, 8 Ashramshalas, 3 L.I.L., 52 ancillary branches and 1 research institute.

For additional information one can refer www.rayat.org and www.rayatshikshan.edu

About Institute

Yashwantrao Chavan Institute of Science, Satara is an autonomous institute belongs to Rayat Shikshan Sanstha is re-accredited with A+ grade (CGPA 3.57) by NAAC, Bangalore. Recently, it became a constituent part of Karmaveer Bhaurao Patil University, Satara, India. It has received the several recognitions from Govt. of India including UGCPE, DBT-Star College Scheme, DST-FIST, UGC-Paramarsh Scheme etc & Lead College Status of Shivaji University, Kolhapur, Best College Award for NSS Unit by Govt. of Maharashtra and Shivaji University, Kolhapur, Academic Excellence Award by Shivaji University, Kolhapur and Best Autonomous College Award by Parent Body. Institute has got RUSA excellence tag along with financial assistance under RUSA Component B. The working process of the institute is ISO 9001:2015 certified consistently since 2015. The institute offers UG (18), PG (14), M. Phil, and Ph.D (7) programs in Basic Sciences and Professional Courses

Theme of the Seminar

Sustainable development is today's need to save environment and agriculture on the earth. Sustainable development is of growing importance to the agriculture sector because the current locking utilization of resources and energy usage, together with the pollution generated from toxic chemicals, cannot continue at present rates. Sustainability in agriculture can be achieved through using less (or no) poisonous chemicals, saving natural resources, and reducing greenhouse gas emissions. Technology applications could help farmers to use proper data in decision-making, which leads to low-input agriculture. The aim of seminar is to provide the platform to discuss the issues in sustainable development. Furthermore, the seminar will provide an opportunity to young researchers and aspirants to interact with renowned scientists and technologists working in the field of Agriculture, Science, technology, biodiversity conservation, Bio-technology, solid state materials, nano-materials, engineering, etc. on the role of smart technology implementation in sustainable agriculture.

Registration Fee

- ▶ UG Student: Rs. 100.
- ▶ PG students/Research Students/Faculty: Rs. 200
- ▶ Industry personnel: Rs. 500
- ▶ Registration fee will include participation in all sessions, certificate, etc.

Venue

Yashwantrao Chavan Institute of Science, Satara (Autonomous)
533A, Sadar Bazar, Satara - 415001, Dist: Satara, MS, India

Contact

Mr. S. R. Pol Convener- SAST-2023 Mob. +91 9730951806	Dr. G. S. Nhivekar Co-Convener- SAST-2023 Mob. +91 9970222316	Mr. S. D. Jadhav Coordinator- SAST-2023 Mob. +91 9372560119
Ms. R. U. Atar Co-Coordinator- SAST-2023 Mob. +91 8600201864		Mr. G. R. Attar Organizing Secretary- SAST-2023 Mob. +91 766530896

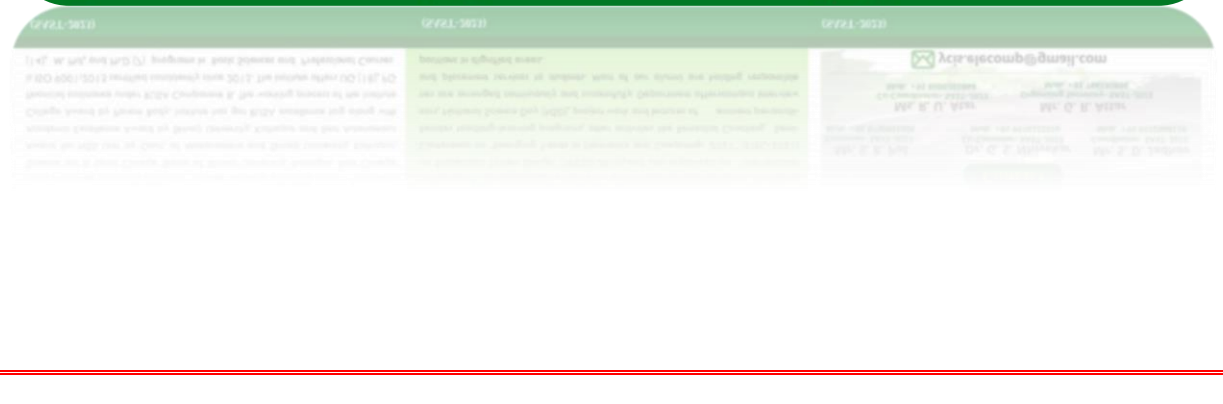
ycis.elecomp@gmail.com

About Satara City

Satara is the historical city of Maratha dynasty located in the state of Maharashtra, India. It is situated on Pune-Bengaluru national highway (NH-4), 110 km away from Pune, Kaas Plateau - a world natural heritage site is just 22 km away from Satara. Other nearby places Mahabaleshwar, Thosgar, Panchgani, Soljnegroh etc.

About the Department

Department of Electronics and Computer Science, established in 1986, imparting knowledge of Electronics and Computer Science at U.G and P.G level. The department is enriched with 25 faculties for teaching, research and extension activities and sufficient supportive staff. Department also runs a UGC sponsored certificate course in MATLAB Programming under COC Scheme. The department is recognized for Ph.D. and M.Phil. programs in Electronics and Computer Science. Department has organized a National Seminar on "Modern Approach for Green Electronics and Computing" (MAGEC-2014), National Seminar on "Innovative Trends Electronics and Allied Technology" (ITEAT-2017), Two Days National hands-on "Workshop on Embedded System Design" (IWESD-2016), and also organized an International Conference on "Emerging Trends in Electronics and Computing: 2021" (ETEC-2021) Besides teaching-learning programs, other activities like Remedial Coaching, Seminars, National Science Day (NSD), project work and lectures of eminent personalities are arranged continuously and successfully. Department offers campus interview and placement services to students. Most of our alumni are holding responsible positions in dignified areas.





Rayat Shikshan Sanstha's



**YashwantraoChavan Institute of Science, Satara
(Autonomous)**

(Lead College of Karmaveer Bhaurao Patil University, Satara)

NAAC Reaccredited at A+ Grade with CGPA: 3.57, UGC-CPE-II, DBT-STAR, DST-FIST,
RUSA Excellence, UGC-PARAMARSH, ISO: 9001-2015

**Department of Electronics and Computer Science (Optional)
Rayat Institute of Research and Development (RIRD)**



**YashwantraoChavan Centre for Invention,
Innovation and Incubation (YC-CIII)**

**Centre of Excellence in Artificial Intelligence Applications
Development (COE-AIAD)**

In collaboration with Dream Foundation, Satara

Technically Sponsored by

SPEED, Pune

Organised

National Seminar on

**“Sustainable Agriculture and Smart Technology”
(SAST-2023)**

(Thursday, 16thMarch, 2023)

Report

One Day National Seminar on
“Sustainable Agriculture and Smart Technology”
(SAST-2023)

(Thursday, 16th March, 2023)

❖ Title of Activity:- **“Sustainable Agriculture and Smart Technology”**
(SAST-2023)

❖ Day and Date: Thursday, 16th March, 2023

❖ Objective of SAST-2023:

- 1) To provide an opportunity to young researchers and aspirants to interact with renowned scientist and technologists working in the field of Agriculture, Science, technology.
- 2) To provide a platform for researchers, practitioners, and educators to present, discuss and debate the most recent research results, innovations, trends and concerns in the field of Agriculture and Electronics and Computing.

❖ Theme of SAST-2023:

Sustainable development is today's need to save environment and agriculture on the earth. Sustainable development is of growing importance to the agriculture sector because the current lacking utilization of resources and energy usage together with the pollution generated from toxic chemicals, cannot continue at present rates. Sustainability in agriculture can be achieved through using less (or no) poisonous chemicals, saving natural resources and reducing greenhouse gas emissions. Technology applications could help farmers to use proper data in decision-making, which leads to low-input agriculture.

The aim of seminar is to provide the platform to discuss the issues in sustainable development.

❖Detail Report❖

The One Day National Seminar on “Sustainable Agriculture and Smart Technology” (SAST-2023) organized by Rayat ShikshanSanstha’s Yashavantrao Chavan Institute of Science, Satara (Autonomous Institute) Department of Electronics and Computer Science was held on Thursday, 16th March, 2023.

The primary objective of this SAST-2023 was to develop innovative concepts in electronics, computer and related disciplines for the advancement of social, personal and other technologies. The main aim of this seminar was to discuss the issues in sustainable development.

This seminar was guided and supported by National research personalities in the field of Agriculture, science and technology. Dr. Anil K. Rajvanshi, Prof. Dr. A. D. Shaligram etc... have made great contribution towards the success of the seminar.

The seminar began at 09:00 a.m. with the tea and breakfast. Inauguration ceremony, plenary talk, Panel Discussion, Poster presentation were held from 10:30 a.m. to 05:30 p.m.

Hon. Prin. was President of SAST-2023 Dr. B. T. Jadhav, Hon. Dr. Anil K. Rajvanshi, (Padma Shree Awardee) were the chief guests for Inaugural function. The conference started with the lighting of lamps by Hon. Dignitaries. On this occasion, Mr. S.K. Shinde, Chairman of SAST-2023 welcomed and felicitated all dignitaries and participants and he gave speech about remarkable journey from the establishment of departments and elaborated on the theme of seminar.

Hon. Dr. Anil K. Rajvanshi, (Padma Shree Awardee) Director and Hon. Secretary, Nimbalkar Agricultural Research Institute (NARI), Phalatas chief guest, put forth in his speech How to be a good citizen. Mr. S.K. Shinde introduce the chief guest and Mr. S. R. Pol thanked them all.

From 12:00 Noon to 1:00 a.m. Prof. Dr. A. D. Shaligram, CEO, Research Park, Savitribai Phule Pune University, Pune, Maharashtra. He gave key note lecture on “Data Analytics and Artificial Intelligence for Agricultural Sustainability. In this talk, he gave guidance on What IoT application can be used in smart farming? How is technology making sustainable and better? Which sensors are used for data collection? etc.. On this occasion, the

keynote speaker Dr. Prof. Dr. A. D. Shaligram, was introduced by Mr. S.R.Pol and Dr. G. S. Nhivekar thanked everyone and Program was moderated by Mrs. K.D.Gadekar.

After key note talk a lunch break is announced from 01:00 p.m to 2:00 p.m

This was followed by a panel discussion session from 02:15 p.m to 04:00 p.m. For the panel discussion panelist were Mr.NileshNalwade Director, Education, Agriculture, Development Trust, Baramati, Dr. H.V. DeshmukhPresident, Dream Foundation, Satara Mr.SharadKadamFounder& CEO, AgrosenAadhar, LLP and Dr. S. M. NimbaleAssi.Prof.YCIS.Satara.

Discussion was made on the “Sustainable Agriculture and Smart Technology” (SAST-2023) and inevitable Next Generation of Agricultural Tools. What is the future of robotics in agriculture? How technology has changed manufacturing, production level in agricultural? How data analytics used in farming? Why do we need smart farming?

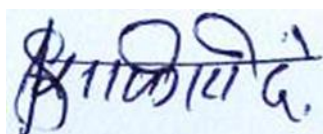
After this, the last session i.e poster presentation was held. During this poster presentation, about 15 participants made poster presentations. For this session, Mr.N.M.Patil, Assistant Prof. Balwant College Vita worked as examiner.

The Valedictory ceremony of the SAST-2023 started at 4:30 p.m. it was presided Hon. Dr. B.T.Jadhav, Prin. Yashavantrao Chavan Institute of Science, Satara. HonDr. H.V. Deshmukh President, Dream Foundation, Satara was the chief guest of function. Mr. S. K. Shinde introduced the Chief guest of the Valedictory ceremony. Mr. S. K. Shinde chairman of SAST-2023 felicitate the president and chief guest, and other college faculties also. After that some participants share their views and gave feedback towards this seminar. Finally Mr. S. R. Pol thanked everyone and expressed his gratitude.

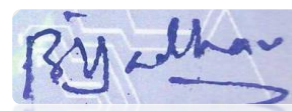
In this conference 270 Participants had registered out of these 15 participants presented their poster.



Mr. S. R. Pol
Convener



Mr. S. K. Shinde
Chairman SAST-2023



Dr. B. T. Jadhav
President SAST-2023



Flowerer tribute to Hon. Yashwantrao Chavan



Respected Dignitaries on the Dies



Mr. S.K. Shinde introduce the chief guest



Hon. Dr. Anil K. Rajvanshi, (Padma Shree Awardee)
Director and Hon. Secretary, NARI



Key Note Talk by Hon.Prof .Dr.A.D.Shaligram CEO, Research Park, SavitribaiPhule Pune University, Pune, Maharashtra



Panel Discussion by Hon. Expert



Feedback from students



Poster Presentation Opening Ceremony



Organizing Committee With Dignitaries after Seminar

Attendance:

1018	NAVATRE VISHAL VILAS	
1019	NAWADKAR ARPITA ASHOK	
1020	NIKAM ANJALI SUDHAKAR	
1021	NIKAM ANUPAMA PANKAJ	
1022	NIKAM PRANALI ANNA	
1023	NIPANE SIDDHI SUDHIR	
1024	NIRMAL SHWETA SANJAY	
1025	PAWAR AKASH RAJENDRA	
1026	PAWAR ITISHA AJAY	
1027	PAWAR RAJASHRI ARJUN	
1028	PAWAR SAKSHI VIKAS	
1029	PAWAR SARANG DATTATRAY	
1030	PAWAR SAYALI SUNIL	
1031	PAWAR SHREYA SANJAY	
1032	PAWAR SOMNATH TUKARAM	
1033	PHADTARE VIVEK HANMANT	
1034	PHADTARE SAKSHI SAMBHAJI	
1035	PISAL VAISHNAVI PRAKASH	
1036	RAJEMAHADIK SIDDHI RAMRAO	
1037	RANJANE AKANKSHA KHANDERAO	
1038	SABALE PAYAL PRAVIN	
1039	SABALE PRIYANSHU PRASHANT	
1040	SABALE SHREYA SANJAY	
1041	SALUNKHE PRACHI RAMESH	
1042	SAPKAL ROSHAN KISAN	
1043	SAVEKAR NANDINI AMIT	
1044	SAWANT SHRITAJ MANOJ	
1045	SAYYAD ARMAN MANSUR	
1046	SHAIKH ARMAN ASHPAQ	
1047	SHAIKH JIYA ZAKIR	
1048	SHAIKH MAHEK AYUSH	
1049		
1050	SHEDAGE SANKET SUNIL	
1051	SHELAR SAKSHI MARUTI	
1052	SHELAR VAISHNAVI VJAY	
1053	SHINDE SHUBHAM PANDIT	
1054	SHINDE SRUSHTI VILAS	

36	2022110238	KARAN VILAS WAGHAMODE	karu
37	2022110239	KIRAN EKNATH GURAV	K.F. Gurav
38	2022110240	KUNAL POPAT KARPE	K.P. Karpe
39	2022110241	MAHEK AYUB SHAIKH	M.A. Shaikh
40	2022110242	MANASI VIKAS WAIKAR	Manasi Waikar
41	2022110243	MANDAR BHAGWAN MORE	M.M.
42	2022110244	MEHAR ILAHI MULANI	M.A. Sarekar
43	2022110245	NANDINI AMIT SAVEKAR	Nandini
44	2022110246	NILAM PRAKASH JADHAV	AB
45	2022110247	NISHANT BHASKAR INJE	Nishant
46	2022110248	OM SANJAY JADHAV	Babale
47	2022110249	PAYAL PRAVIN SABALE	P.S.
48	2022110250	PRACHI BABASO GHORPADE	P.G.
49	2022110251	PRACHI RAMESH SALUNKHE	P.S.
50	2022110252	PRAFULLA VIJAY YEWALE	P.Y.
51	2022110253	PRAGATI SHIVDAS KHAMKAR	P.S.
52	2022110254	PRAJYOT SURESH MANE	P.S.
53	2022110255	PRANALI ANNA NIKAM	P.N.
54	2022110256	PRANAY SHARAD SHIRKE	P.S.
55	2022110257	PRATIK REVANSIDHA JADHAV	AB
56	2022110258	PRIYANKA CHANDRAKANT KANASE	P.K.
57	2022110259	PRIYANSHU PRASHANT SABALE	AB
58	2022110260	PURVA KISAN BAGAL	P.K. Bagal
59	2022110261	PURVA RAVINDRA KASHID	R.K.
60	2022110262	RADHA DASHRATH MAGAR	R.M.
61	2022110263	RAJ CHANDRAKANT JADHAV	R.C.
62	2022110264	RAJASHRI ARJUN PAWAR	R.A.
63	2022110265	RITESH SUNIL LOHAR	R.L.
64	2022110266	ROSHAN KISAN SAPKAL	R.S.
65	2022110267	RUPALI SANJAY WAGH	R.W.
66	2022110268	RUSHIKESH HANMANT MANE	AB
67	2022110269	SAGAR SATISH KUDALE	S.K.
68	2022110270	SAHIL TANAJI GAIKWAD	S.G.
69	2022110271	SAHIL HANMANT SHEDGE	S.H.
70	2022110272	SAHIL POPAT MAHAMULKAR	S.P.
71	2022110273	SAHIL SANJAY DHANE	AB
72	2022110274	SAKSHI CHANDRAKANT NALAWADE	S.N.
73	2022110275	SAKSHI MARUTI SHELAR	S.S.
74	2022110276	SAKSHI SAMBHAJI PHADTARE	S.P.
75	2022110277	SAKSHI VIKAS CHAVAN	S.V.
76	2022110278	SAKSHI VIKAS PAWAR	P.V.
77	2022110279	SANKET DATTATRAY GAVALI	S.D.
78	2022110280	SANKET SUNIL SHEDAGE	AB
79	2022110281	SANSKRUTI DATTATRAY MANE	S.M.