



**R.P. GOGATE COLLEGE OF ARTS AND SCIENCE AND R. V. JOGALEKAR  
COLLEGE OF COMMERCE, RATNAGIRI**

**ANNUAL PROGRESS REPORT SUPPORTED UNDER STAR COLLEGE SCHEME**

1. Name of the College: R. P. Gogate College of Arts and Science and R. V. Jogalekar College of Commerce, Ratnagiri

2. Name of Coordinator: **Dr Vivek Vasant Bhide**  
Designation, Address: Assistant Professor,  
Phone Nos. Gogate Jogalekar College, Ratnagiri-41561  
9421139296

3. Assessment duration: **01/04/2022 to 31/03/2023** Duration in years: **One year**

4. Details of Departments Supported

Sr. No.	Name of Department	Courses (B.Sc./M.Sc./PG Diploma, certificate etc.) offered	Regular Faculty members	
			With Ph.D.	Without Ph.D.
			<b>Total = 24</b>	
1.	Zoology	B.Sc. Ph. D.	02	04
2.	Chemistry	B.Sc. M.Sc. Ph. D.	06	02
3.	Physics	B.Sc. M.Sc. Ph. D.	03	02
4.	Botany	B. Sc. Ph. D.	01	04

5. Number & Date of Advisory committee meeting: **21/04/2023**

6. Qualitative improvements due to DBT support. Please highlight 5 salient points  
(Within 500 words)

- The Star College Scheme has empowered all four departments to acquire new types of equipment and enhance infrastructure facilities significantly. This has resulted in improved performance simultaneously, allowing students to independently handle instruments. Consequently, there has been an increase in students' interest in pure sciences and a boost in their confidence levels.
- Students got to try out new and advanced experiments to encourage a love for research. Thanks to better labs and equipment, students now do experiments on their own, making learning more personal. Special guest speakers, like researchers and industry experts, were invited to share their knowledge with both students and teachers. To create scientific awareness, all departments have organized various exhibitions on the occasion of National Science Day 28<sup>th</sup> February.
- Useful Workshops and Programs:** Money from the grant helped to organize various workshops and programs for students. Some interesting programs included learning about biological sciences, using technology in biology (Bioinformatics), understanding how to do research (Research Methodology), identifying plants, working with DNA (Electrophoresis and Molecular Biology),



preserving fruits, making herbal cosmetics, growing plants, and doing tiny experiments in chemistry (Microscale Techniques).

These programs aimed to give students practical skills and spark their interest in different subjects.

4. **Hands-on Learning and Job Opportunities:** Students had a cool chance to learn practical things and experience different subjects. The college got financial help to take students on trips to actual industries, showing them how what they learn in class is used in real jobs. More of these trips happened, and they were especially helpful for students who might not have many resources. These trips helped them learn and allowed them to connect with people in the industry, making it easier for them to find jobs later on.
  5. The increased number of industrial and field visits under this scheme broadened students' perspectives and facilitated networking opportunities. Particularly, these visits proved instrumental in assisting economically disadvantaged students, providing them with a platform for academic development and enhancing their employability skills.
7. Any Novel aspect introduced or planning to be introduced during the Scheme duration.

During the DBT STAR College Scheme, we've been working to improve our education. We've added new things to make learning more interesting and in line with the latest in science education. These changes are meant to make studying more enjoyable and encourage us to keep getting better. We've already started some cool projects, and we have more exciting plans for the future.

- **Collaborative Research Projects:** Plans are underway for collaborative research projects, bringing students from different departments together for interdisciplinary research. This fosters teamwork and a holistic understanding of scientific principles.
  - **Enhanced Digital Learning Resources:** Responding to the role of technology in education, we're improving digital resources. This includes developing online modules, and multimedia content to supplement traditional teaching methods.
  - **Student-Led Initiatives:** Empowering students, we're exploring initiatives like student research clubs and science outreach programs. This allows students to showcase independent projects, fostering a sense of responsibility and initiative.
8. Lessons learnt / difficulties faced/suggestions if any, in implementing the programme and utilising the DBT grant. (Max 3 points within 300 words).

**Lessons Learned:**

- Basic equipment facilities were expanded.
- Research aptitude was fostered and developed.
- Introduction of research projects for first- and second-year students across all participating departments.
- Encouragement for students to participate and present papers in conferences/seminars.
- Fostering relationships with eminent subject experts in all departments.
- Improvement of infrastructure facilities in all participating departments.

**Difficulties Faced:**

- Lack of clear-cut and well-defined demarcation of the amount to be utilized under each head (recurring, contingency, etc.).



- Organizing additional sessions for students beyond their regular schedule was a significant challenge, addressed through efficient planning and time management.

## 9. Key performance indicators:

S. No	Indicator	Pre-support	During /After Support	Remarks													
1.	No. of students admitted	<b>Department of Zoology</b>															
		Total = 300						Total = 200									
		M = 106			F = 194			M=44			F=156						
		S	S	OB	G	S	S	OB	G	S	S	OB	G	S	S	OB	G
		C	T	C		C	T	C		C	T	C		C	T	C	
		10	1	30	65	14	-	89	91	4	2	14	24	12	3	54	87
		<b>Department of Chemistry</b>															
		Total =400						Total = 280									
		M = 138			F =252			M = 110			F =170						
		S	S	OB	G	S	S	OB	G	S	S	OB	G	S	S	OB	G
		C	T	C		C	T	C		C	T	C		C	T	C	
		21	-	57	60	11	1	97	143	12	3	30	65	6	1	100	63
		<b>Department of Physics</b>															
		Total =200						Total = 85									
		M = 62			F =113			M = 40			F =45						
		S	S	OB	G	S	S	OB	G	S	S	OB	G	S	S	OB	G
C	T	C		C	T	C		C	T	C		C	T	C			
5	-	27	30	9	1	42	61	3	-	12	25	2	-	15	28		
<b>Department of Botany</b>																	
Total = 300						Total = 150											
M = 78			F = 142			M = 22			F =128								
S	S	OB	G	S	S	OB	G	S	S	OB	G	S	S	OB	G		
C	T	C		C	T	C		C	T	C		C	T	C			
5	1	27	45	13	-	60	69	4	2	09	07	5	1	54	68		
2.	No. of students passing out (%) students Admitted /passing out (pass %)	<b>Zoology</b>	90%					60%									
		<b>Chemistry</b>	85%					52%									
		<b>Physics</b>	90%					62 %									
		<b>Botany</b>	100%					100%									
3.	Drop-out rates	<b>Zoology</b>	2%					1%									
		<b>Chemistry</b>	3%					2%									
		<b>Physics</b>	4%					2%									
		<b>Botany</b>	2%					1%									
4.	No. of students opting for M. Sc.	<b>Zoology</b>	04					04									
		<b>Chemistry</b>	10					10									
		<b>Physics</b>	03					02									
		<b>Botany</b>	03					04									
5.	Average marks	<b>Zoology</b>	63 %					66%									
		<b>Chemistry</b>	60%					63%									



		<b>Physics</b>	58%	62%	
		<b>Botany</b>	66%	68%	
6.	No. of hands-on experiments being conducted	<b>Zoology</b>	60	64	
		<b>Chemistry</b>	60	64	
		<b>Physics</b>	60	64	
		<b>Botany</b>	60	70	
7.	No. of new experiments introduced	<b>Zoology</b>	Nil	05	<a href="#">Anne xure-I</a>
		<b>Chemistry</b>	Nil	01	
		<b>Physics</b>	Nil	Nil	
		<b>Botany</b>	Nil	Nil	
8.	Publication (Scopus indexed)/patents if any	<b>Zoology</b>	Nil	Nil	NIL
		<b>Chemistry</b>	Nil	Nil	
		<b>Physics</b>	Nil	Nil	
		<b>Botany</b>	Nil	Nil	
9.	Training received by faculty	<b>Zoology</b>	03	03	<a href="#">Anne xure-II</a>
		<b>Chemistry</b>	04	-	
		<b>Physics</b>	03	-	
		<b>Botany</b>	03	04	
10.	Exhibitions /seminars/ training courses conducted	<b>Zoology</b>	03	07	<a href="#">Anne xure-III</a>
		<b>Chemistry</b>	01	03	
		<b>Physics</b>	01	04	
		<b>Botany</b>	04	08	
11.	Books/journals subscribed from grants	<b>Zoology</b>	Nil	06	<a href="#">Anne xure-IV</a>
		<b>Chemistry</b>	Nil	Nil	
		<b>Physics</b>	Nil	Nil	
		<b>Botany</b>	Nil	Nil	
12.	Outreach activities (Popular lectures)	<b>Zoology</b>	02	Nil	<a href="#">Anne xure-V</a>
		<b>Chemistry</b>	02	Nil	
		<b>Physics</b>	02	01	
		<b>Botany</b>	02	01	
13.	College mentored to apply for DBT Star college grants	Nil		Nil	
14.	Invited lectures	<b>Zoology</b>	02	03	<a href="#">Anne xure-VI</a>
		<b>Chemistry</b>	02	02	
		<b>Physics</b>	01	Nil	
		<b>Botany</b>	02	02	

11. ZBSA Status: (Mark Check Box):



10. Self-evaluation			
Department	*Objective (as stated in a proposal)	% achieved	Reasons for Under-achievement / If achieved, state in quantitative metrics
<b>Zoology</b>	To inculcate need-based skilled courses to the learners.	75	1.5 (In the university-affiliated system, designing was not possible, but we are planning to do so in autonomous status.)
	To cater hands-on training of instruments to learners.	100	2.0
	To undertake interdisciplinary research projects.	75	1.5 (Interdisciplinary projects for students are ongoing but not yet completed.)
	To organize workshops, seminars, and conferences for teachers and research scholars.	100	2.0
	Introduce practical modules aligning with industry demands, that help students to learn skills needed for jobs in Zoology.	75	1.5 (Practical modules are prepared but need editing)
<b>Chemistry</b>	To impart basic experimental skills relating to chemistry to the learners.	100	2.0
	To cater hands-on training of instruments to learners.	100	2.0
	To inculcate interdisciplinary research culture among learners.	75%	1.5 (The interdisciplinary projects for students are currently ongoing.)
	To organize workshops, seminars, and conferences for learners and teachers.	75%	1.5 (A few workshops were conducted and more are planned in the coming year)
	Teach students about using environmentally friendly practices in chemistry experiments. (green chemistry)	100	2.0
<b>Physics</b>	To inculcate need-based skilled courses to the learners.	75	1.5 (In the university-affiliated system, designing was not possible, but we are



			planning to do so in autonomous status.)
	To cater hands-on training of instruments to learners.	100	10
	To undertake interdisciplinary research projects.	75	1.5 (The projects for students are going on)
	To organize workshops, seminars, and conferences for teachers and research scholars.	100	1.5 (Workshops were conducted, and there are plans to conduct more in the future.)
	Introduce courses that enhance students' proficiency in using computational tools and software relevant to physics.	75	1.5 (Modules are designed and will be included in the syllabus)
<b>Botany</b>	To inculcate need-based skilled courses to the learners.	75%	1.5 (In the university-affiliated system, designing was not possible, but we are planning to do so in autonomous status.)
	To cater hands-on training of instruments to learners.	100	2.0
	To undertake interdisciplinary research projects.	75	1.5 (Students have been assigned interdisciplinary projects, but as of now, they are not yet completed.)
	To organize workshops, seminars, and conferences for teachers and research scholars	100	2.0
	Integrate courses that focus on sustainable and eco-friendly practices in botany.	100	2.0

Not opened Under process Opened but not mapped on PFMS

Account is functional  y

Remarks if, any:


12. Sanctioned Budget details:

(Rs. in Lakhs)

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Total Sanctioned Budget	Total Released Budget	Expenditure	Balance as on 31.12.2023	Remarks if any
Grants for creation of capital assets (Non-recurring)	36.53322	34.81697	1.71625	Balance grant (NR) refunded through Bharat Kosh
Grants-in-aid General (Recurring)	12.00	12.16219	Nil.	Over and Above Expenditure (16219/-) against head-wise sanctioned grant is born by the college.
Total	48.53322	46.97916	1.71625	

  
Course Coordinator  
(With Seal) (With Seal)  
RATNAGIRI - 415 012



  
PRINCIPAL  
Head of the Institution  
R. P. Gogate College of Arts & Science and  
R. V. Joglekar College of Commerce, Ratnagiri



### ANNEXURE - I

#### NEW EXPERIMENTS INTRODUCED IN THE FY: 2022-23

<b>ZOOLOGY: New Experiments Conducted (5)</b>			
1	Collection of water samples and identification of zooplankton.	B.Sc. I /Sem. I	<a href="https://rb.gy/29cb9s">https://rb.gy/29cb9s</a>
2	Culture of Artemia as a live feed.	B.Sc. I /Sem. III	<a href="https://rb.gy/vebzum">https://rb.gy/vebzum</a>
3	Writing of an abstract from the given research paper.	B.Sc. I /Sem. IV	<a href="https://shorturl.at/JNpv9">https://shorturl.at/JNpv9</a>
4	Preparation of permanent histological slides.	B.Sc. I /Sem. V	<a href="https://shorturl.at/yEZ08">https://shorturl.at/yEZ08</a>
5	Preparation of Artificial fish feed.	B.Sc. I /Sem. VI	<a href="https://rb.gy/3zn25l">https://rb.gy/3zn25l</a>

<b>ZOOLOGY: PROJECTS (2)</b>			
Sr. No	Project Title	Class	Name of student /Supervisor
1.	Ichthyofaunal diversity from Ganeshgule, Ratnagiri, west coast of Maharashtra. <a href="https://shorturl.at/lxEKX">https://shorturl.at/lxEKX</a>	F.Y. B. Sc.	Ms. Sharvari Umesh Todankar Ms. Rakhi Sndip Rangankar Ms. Tanvi Subodh Rangankar <b>/Ms. Bhakti Salkar</b>
2.	Species diversity of birds in and around Kasheli, Ratnagiri. <a href="https://shorturl.at/qstT8">https://shorturl.at/qstT8</a>	F. Y. B. Sc.	Mr. Prasad Promod Sutar and Mr. Pranav Bhalchandra Sutar <b>/Ms. Mohini Bamane</b>

<b>CHEMISTRY: New Experiments Conducted (01)</b>		
1.	Monitoring of chemical reactions using thin-layer chromatography (TLC) No of Beneficiaries- 48	B.Sc. I /Sem. IV <a href="https://shorturl.at/sEQWZ">https://shorturl.at/sEQWZ</a>

### ANNEXURE - II

#### LIST OF TRAINING COURSES/WORKSHOPS/CONFERENCES ATTENDED BY THE FACULTY DURING FY: 2022-23

##### DEPARTMENT: ZOOLOGY

	Title	Date	Proofs (Hyperlinked)
Name: Dr. Madhura Mukadam			
1.	One-Day Gender Sensitization Workshop	21 <sup>st</sup> Feb. 2023	<a href="http://tinyurl.com/3fruzxsp">http://tinyurl.com/3fruzxsp</a>
2.	International Conference on Beyond Access and Parity” Complicating the Narrative of Gender equality in Higher education in India.	23 to 25 <sup>th</sup> Feb.	<a href="http://tinyurl.com/2tvnd8da">http://tinyurl.com/2tvnd8da</a>
Name: Ms. Mohini Bamane			
1	Accidents do not happen accidentally	11 <sup>th</sup> Oct. 2022.	<a href="http://tinyurl.com/5bwjunn5">http://tinyurl.com/5bwjunn5</a>
2	Popularising the science of DNA barcoding	7 <sup>th</sup> -9 <sup>th</sup> Dec. 2022	
3	Bioinformatics tools & their applications	4 to 5 <sup>th</sup> Feb.2023	



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4.	One-Day Gender Sensitization Workshop	21st Feb. 2023	<a href="http://tinyurl.com/3v9njv6b">http://tinyurl.com/3v9njv6b</a>
5.	International Conference on Beyond Access and Parity” Complicating the Narrative of Gender equality in Higher education in India.	23 to 25th Feb.	
Name: Dr. Amruta Bhave			
1	Accidents do not happen accidentally	11 <sup>th</sup> Oct. 2022.	<a href="http://tinyurl.com/yckswu2p">http://tinyurl.com/yckswu2p</a>

**DEPARTMENT: BOTANY**

	Name	Title	Date	Proofs (Hyperlinked)
1.	Mr. Sharad Anandrao Apate	Accidents do not happen accidentally	11 <sup>th</sup> Oct. 2022.	<a href="http://tinyurl.com/r5fke3b">http://tinyurl.com/r5fke3b</a>
2.	Dr. Sonali Santosh Kadam Rujuta Parag Godbole Priyanka Amol Shinde-Avere Mr. Paresh Ganpat Gurav	Accidents do not happen accidentally	11 <sup>th</sup> Oct. 2022.	
3.	Dr. Sonali Santosh Kadam Rujuta Parag Godbole Priyanka Amol Shinde-Avere Mr. Paresh Ganpat Gurav	Maharashtra State Development of Educators and Enhancement in Delivery (MS-DEED) Programme	3 <sup>rd</sup> to 5 <sup>th</sup> April 2023	
4.	Dr. Sonali Santosh Kadam Rujuta Parag Godbole Priyanka Amol Shinde-Avere Mr. Paresh Ganpat Gurav	Bioinformatics tools & their applications	4 to 5 <sup>th</sup> Feb.2023	

**ANNEXURE -III**

**EXHIBITIONS /SEMINARS/TRAINING COURSES CONDUCTED/ VISITS DURING FY: 2022-23**

	Title	Date	Resource Persons	No. of Beneficiaries
<b>Department of Zoology</b>				
<b>Trainings</b>				
1.	Research techniques in biological sciences	9 <sup>th</sup> May to 13 <sup>th</sup> May 2022	Dr. Madhura Mukadam Mr. Ambadas Rodge Ms. Mohini Bamane	10 <a href="http://tinyurl.com/m2du7pffc">http://tinyurl.com/m2du7pffc</a>
<b>Workshops</b>				
1.	Bioinformatics Tools and Applications	4th and 5th Feb. 2023	Experts from Codon Biosciences, Goa	28 <a href="http://tinyurl.com/m2wrc6847">http://tinyurl.com/m2wrc6847</a>
2.	Preparation of Permanent Histological slides	13th Feb. 2023 to 14th Feb. 2023	Dr. Madhura Mukadam Mr. Ambadas Rodge Ms. Mohini Bamane	30 <a href="http://tinyurl.com/m/ev9akrd6">http://tinyurl.com/m/ev9akrd6</a>
3.	Electrophoresis and Molecular Biology techniques	23rd Feb. 2023 to 25th Feb. 2023	Dr. Amruta Bhave Ms. Bhakti Salkar	30 <a href="http://tinyurl.com/m/4nx8jucc">http://tinyurl.com/m/4nx8jucc</a>
<b>Seminar</b>				
1.	Coastal Wetlands of India: Threats and Solutions	2nd Feb. 2023	Dr. Mahua Saha, Scientist, NIO	97 <a href="http://tinyurl.com/m/2w54j2nf">http://tinyurl.com/m/2w54j2nf</a>

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			Dr. Deepak Apte, EX-Director, BNHS, Mumbai	
<b>Field Visits</b>				
1	Visit to Histopathology Museum of B.K. Walawalkar Hospital, Dervan	19 <sup>th</sup> Aug. 2022	Mr. Ambadas Rodge Ms. Mohini Bamane	<b>31</b> <a href="http://tinyurl.com/sxyb6uvd">http://tinyurl.com/sxyb6uvd</a>
2	Field visit at cage culture, Gurav-wadi, Gaonkhadi and Mangrove safari at Pavas.	16 <sup>th</sup> Jan. 2023	Mr. Ambadas Rodge Ms. Mohini Bamane	<b>20</b> <a href="https://shorturl.at/iNQ TZ">https://shorturl.at/iNQ TZ</a>

	Title	Date	Resource Persons	No. of Beneficiaries
<b>Department of Chemistry</b>				
<b>Workshops</b>				
1.	Research grants from RGSTC	21/09/2022	Dr. V.V. Mahajani	<b>20</b> <a href="https://shorturl.a t/hknJ3">https://shorturl.a t/hknJ3</a>
2.	Microscale Techniques in Chemistry	11/12/2022	Dr. A. M. Kulkarni	<b>24</b> <a href="https://shorturl.a t/egCT6">https://shorturl.a t/egCT6</a>
<b>Field Visits</b>				
1.	Midspray Pvt. Ltd. (Cipla) Goa	21/01/2023	-	<b>28</b> <a href="https://shorturl.a t/cgmU3">https://shorturl.a t/cgmU3</a>

	Title	Date	Resource Persons	No. of Beneficiaries
<b>Department of Physics</b>				
<b>Training</b>				
1	Exploring the world of science with experiments	06/01/23 to 08/01/23	Dr Shirish Pathare, Mr. Chetan Mandloi, HBCSE TIFR	<b>34</b> <a href="http://tinyurl.co m/yn4dutupd">http://tinyurl.co m/yn4dutupd</a>
<b>Exhibitions</b>				
1	Project and Book Exhibition	02/02/2023	-	<b>51</b> <a href="http://tinyurl.co m/yc2nvtm">http://tinyurl.co m/yc2nvtm</a>
<b>Field Visits</b>				
1	Study visit to Railway Station -Ratnagiri	02/03/23	Mr. Kove -Station Superintendent	<b>15</b> <a href="http://tinyurl.co m/yjsuvcs7">http://tinyurl.co m/yjsuvcs7</a>
2	Study visit to Pilot Balloon Observatory, Nachane, Ratnagiri	17/02/23	Mr R. B. Sonar – Meteorologist-A, Pilot Balloon Observatory	<b>16</b> <a href="http://tinyurl.co m/44wn8ttf">http://tinyurl.co m/44wn8ttf</a>

Sr. No.	Title	Date	Resource Persons	No. of Beneficiaries
<b>Department of Botany</b>				
<b>Training courses</b>				
1.	Fruit preservation and processing certificate course	23 <sup>rd</sup> to 30 <sup>th</sup> June 2022	Shri. Sharad Apte Priyanka Shinde-Avere	<b>23</b> <a href="http://tinyurl.com/4 6n6rvfc">http://tinyurl.com/4 6n6rvfc</a>

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2.	Herbal cosmetics certificate course	10 <sup>th</sup> to 17 <sup>th</sup> Sept & 19 <sup>th</sup> to 22 <sup>nd</sup> Oct. 2022	Dr. Sonali Kadam Smt. Rujuta Godbole	<b>24</b> <a href="http://tinyurl.com/3fbkt26e">http://tinyurl.com/3fbkt26e</a>
3.	Plant propagation practices certificate course	09 <sup>th</sup> to 17 <sup>th</sup> Jan. 2023	Shri. Sharad Apaté Dr. Sonali Kadam	<b>39</b> <a href="http://tinyurl.com/4d3rmfte">http://tinyurl.com/4d3rmfte</a>
<b>Workshops</b>				
1.	Plant Identification	06 <sup>th</sup> to 07 <sup>th</sup> Feb. 2023	Prof. Milind Sardesai	<b>22</b> <a href="http://tinyurl.com/mv2p98nt">http://tinyurl.com/mv2p98nt</a>
<b>Exhibitions</b>				
1.	Mangroves and Mangrove-Associated Plants	26 <sup>th</sup> July 2022	-	<b>125</b> <a href="https://rb.gy/tz6cek">https://rb.gy/tz6cek</a>
2.	Medicinal plants	24 <sup>th</sup> and 25 <sup>th</sup> August 2022.	-	<b>255</b> <a href="https://shorturl.at/1CPZ4">https://shorturl.at/1CPZ4</a>
<b>Visits:</b>				
1.	Field visit to Amba Ghat	16 December 2022	Mr. Apaté Sharad Mrs. Godbole Rujuta	<b>35</b> <a href="http://tinyurl.com/yck8t7a8">http://tinyurl.com/yck8t7a8</a>
2.	Field visit to Ranpar	23 July 2022	Mr. Apaté Sharad Mrs. Shinde-Avere Priyanka	<b>29</b> <a href="http://tinyurl.com/3sbvrbj4">http://tinyurl.com/3sbvrbj4</a>

**ANNEXURE -IV**

**BOOKS PURCHASED/ JOURNALS SUBSCRIBED IN FY: 2022-23**

**DEPARTMENT: ZOOLOGY**

S. No.	Title	Qty	Author	Publisher
1.	Maharashtrachi Kandalvan Sampada	1	Swapna Prabhu, Deepak Apte and Nishigandha Pednekar	Srushti Conservation Foundation <a href="https://shorturl.at/ivGNQ">https://shorturl.at/ivGNQ</a>
2.	Maharashtrachi Sagar Sampada	1	Vishal Bhavé, Atul Sathe and Deepak Apte	Srushti Conservation Foundation <a href="https://shorturl.at/ivGNQ">https://shorturl.at/ivGNQ</a>
3.	The Essentials of Forensic Medicine & Toxicology	1	K. S. Narayan Reddy and O.P. Murty	Jaypee Brothers Medical Publ. Ltd. <a href="https://shorturl.at/flwLU">https://shorturl.at/flwLU</a>
4.	Curious Researcher: A Guide to Writing Research Papers	1	Bruce Ballenger	Pearson Education Ltd. <a href="https://shorturl.at/nyTUX">https://shorturl.at/nyTUX</a>
5.	Research and Publication Ethics: A textbook	1	Debabrata Basu, Samarpan Chakraborty and Aditya Sinha	Concept publishing company <a href="https://shorturl.at/rvHS4">https://shorturl.at/rvHS4</a>
6.	Writing Quality Research Papers	1	Pawan Singh and Baseem Khan	Bpb publications <a href="https://shorturl.at/bqERY">https://shorturl.at/bqERY</a>



## ANNEXURE -V

## OUTREACH INTERDISCIPLINARY ACTIVITIES DURING FY: 2022-23

## DEPARTMENT: PHYSICS

Sr. No.	Name of Activity	Date/s	Beneficiaries
1	Come and Learn Physics	25/02/23	85 <a href="http://tinyurl.com/5nfc5ya3">http://tinyurl.com/5nfc5ya3</a>

## DEPARTMENT: BOTANY

Sr. No.	Name of Activity	Date	Beneficiaries
1.	Nature Walk for the members of Paryavaran Janiv - Jagruti Mandal, Abhyankar – Kulkarni Jr. College, Ratnagiri	21/08/ 2022	85 <a href="https://shorturl.at/GIRX6">https://shorturl.at/GIRX6</a>

## ANNEXURE -VI

## INVITED LECTURES DURING FY: 2022-23

## DEPARTMENT: ZOOLOGY

Sr. No.	Topic	Resource Person	Date	Beneficiaries
1	Microplastics in Wetlands possible threat to the ecosystem.	Dr. Mahua Saha, Principal Scientist, COD, NIO, Goa.	2 <sup>nd</sup> Feb. 2023	75 <a href="https://shorturl.at/vyzW2">https://shorturl.at/vyzW2</a>
2	Climate Change and Migratory Birds	Dr Deepak Apte, Director, Shrusti Conservation Foundation, Pune	2 <sup>nd</sup> Feb. 2023	75 <a href="https://shorturl.at/agjxB">https://shorturl.at/agjxB</a>
3	Freshwater Ecosystems of the Western Ghats	Dr Unmesh Katwate, Scientist B, Bombay Natural History Society of India	10 <sup>th</sup> Jan. 2023	50 <a href="https://shorturl.at/dhEL4">https://shorturl.at/dhEL4</a>

## DEPARTMENT: CHEMISTRY

Sr. No.	Topic	Resource Person	Date	Beneficiaries
1	Green Jobs in the Environmental Sector	Dr Saraf	06/12/2022	150 <a href="https://shorturl.at/lpCFQ">https://shorturl.at/lpCFQ</a>
2	Am I on the right path	Dr. Prabodh Choube	12/10/2022	200 <a href="https://shorturl.at/ivNO0">https://shorturl.at/ivNO0</a>

## DEPARTMENT: BOTANY

## ANNUAL PROGRESS REPORT 2022-2023



Sr. No.	Topic	Resource Person	Date	Beneficiaries
1	Carnivorous Plants	Milind Sardesai	6 <sup>th</sup> Feb. 2023	<b>108</b> <a href="https://shorturl.at/bjln8">https://shorturl.at/bjln8</a>
2	Biodiversity conservation: Importance and opportunities	Dr. Anuradha Upadhye	9 <sup>th</sup> Jan. 2022	<b>75</b> <a href="https://rb.gy/jucwt7">https://rb.gy/jucwt7</a>