Shri Shivaji Education Society Amravati's Science College, Congress Nagar, Nagpur Internal Quality Assurance Cell

### **DEPARTMENT OF BOTANY**

### **INTERNAL ACADEMIC AUDIT**

## 2021-2022

#### 1. A. Faculty Strength:

Faculty	Recruited	Vacant	Remarks
Regular	04	01	
СНВ	01		
Ad-hoc			
Non-teaching	02	01	

#### **B.** Faculty profile

Name	Highest Qualification	Designation	Specialization	Teaching Experience
Prof. R.N.Deshmukh	M.Phil., Ph.D.	Professor & Head	Algae & Cytogenetics	34
Prof. P.S.Tiwari	M.Phil., Ph.D.	Professor	Aerobiology & Plant Tissue Culture	23
Dr. R.H.Mahakhode	B.Ed., Ph.D.	Assistant Professor	Cytomorphology & Cytogenetics	10
Dr. R.P.Sonwalkar	Ph.D.	Assistant Professor	Plant Biodiversity	03
Dr.Mrs.Sharayu S.Deshmukh	M.Sc., M.Phil, Ph.D	Assistant Professor	Taxonomy of Angiosperms	03

#### 2. Students strength A. (Winter 2021)

Year	Group	Number of Students Admitted
B.Sc. Semester I	CBM	31
	CBZ	53
	CBG	22

	Total	106	
B.Sc. Semester III	CBM	31	
	CBZ	52	
	CBG	25	
	Total	108	
B.Sc. Semester V	СВМ	30	
	CBZ	46	
	CBG	19	
	Total	95	
M.Sc. I			
M.Sc. II			
Ph.D.			
Value Added Program			

## B. (Summer 2022)

Year	Group	Number of Students Admitted
B.Sc. Semester II	CBM	31
	CBZ	52
	CBG	22
	Total	105
B.Sc. Semester IV	CBM	30
	CBZ	51
	CBG	25
	Total	106
B.Sc. Semester VI	CBM	31
	CBZ	46
	CBG	19
	Total	96
M.Sc. I		
M.Sc. II		
Ph.D.		
Value Added Program		

## 3. Students Performance

## A. Result Analysis (Winter 2021) UG & PG

Programme Code	Programme Name	Number of students	Number of students	Pass Percentage
		appeared in the	passed in final year	
		final year	examination	
		examination		

B.Sc Semester- I	108	108	100%
B.Sc Semester- III	105	103	98.09%
B.Sc Semester-V	95	95	100%

# B. Result Analysis (Summer 2022 ) UG & PG

Programme	Programme Name	Number of	Number of	Pass Percentage
Code		students	students passed	
		appeared in the	in final year	
		final year	examination	
		examination		
	B.Sc Semester- II	100	100	100%
	B.Sc Semester- IV	103	103	100%
	B.Sc Semester-VI	96	96	100%

## C. Achievements

## A- (Medals/Awards/Prizes at University level)

Sr.No.	Name of the Students	Class	Title
1	Ms. Neha Thakral (1 <sup>st</sup> position)	B.Sc Sem. VI	Intercollegiate PowerPoint Presentation Competition on the occasion of World Environment Day jointly organized by Pratibha Shakti- Vidarbha Chapter & Institute of Science, Nagpur on 25 <sup>th</sup> June 2021.
2	Ms. Tanushree Banerjee (2 <sup>nd</sup> position)	B.Sc Sem. VI	Intercollegiate PowerPoint Presentation Competition on the occasion of World Environment Day jointly organized by Pratibha Shakti- Vidarbha Chapter & Institute of Science, Nagpur on 25 <sup>th</sup> June 2021.
3	Mr. Ameya Dhore (3 <sup>rd</sup> position)	B.Sc Sem. VI	Intercollegiate PowerPoint Presentation Competition on the occasion of World Environment Day jointly organized by Pratibha Shakti- Vidarbha Chapter & Institute of Science, Nagpur on 25 <sup>th</sup> June 2021.
4	Mr Atharva Wankhede (1 <sup>st</sup> position)	B.Sc Sem. I	Intercollegiate Composition Competition on the occasion of World Nature Conservation Day organized by the department on 28 <sup>th</sup> July 2021.
5	Ms. Khushi Sign	B.Sc Sem. III	Intercollegiate Composition Competition on

	Consolation prize		the occasion of World Nature Conservation Day organized by the department on 28 <sup>th</sup> July 2021.
6	Samiksha Admane & Padmavati Dehury	B.Sc Sem. VI	Wild Plant Station part of Phyto Ethno Expo exhibition organized by the department on 27 <sup>th</sup> May 2022
7	Abhilasha Dudhpachare & Akshay Bhatkulkar	B.Sc Sem. VI	Hydro Station part of Phyto Ethno Expo exhibition organized by the department on 27 <sup>th</sup> May 2022
8	Yash Mahule & Aditi Giri	B.Sc Sem. IV	Spice Station part of Phyto Ethno Expo exhibition organized by the department on 27 <sup>th</sup> May 2022
9	Palak Mehta & Itisha Mothghare	B.Sc Sem. IV	Herb Station part of Phyto Ethno Expo exhibition organized by the department on 27 <sup>th</sup> May 2022
10	Aryan Bhothmange & Madhavi Mohod	B.Sc Sem. IV	Medicinal Station part of Phyto Ethno Expo exhibition organized by the department on 27 <sup>th</sup> May 2022
11	Tushar Mhashakhetri & Nidhi Manwatkar	B.Sc Sem. VI	Aromatic Station part of Phyto Ethno Expo exhibition organized by the department on 27 <sup>th</sup> May 2022

# B- Merit Position of PG Students in RTMNU (for PG Dept. only): NA

## 4. Students Progression:

Year	No. of students enrolling into higher Education	Program graduated from
2021-22	02	• Hislop College, Nagpur • PGTD, RTMNU, Nagpur
	PG to Research	
	Placement	
	On campus	
	Off campus	

## (i) Students' publication in Extra-curricular activity - Nil

Title of the Paper/Book	Name of Author	Title of journal/Book	Year of publication

(II) Students Extension Activity					
Sr. No.	Name of Activity (Online)	Participation			
1.	World Nature Conservation Day	64			
2.	Plant Tissue Culture Technique	26			
3.	"Phyto Ethno Expo" Medicinal plant Exhibition	48			
4.	National Webinar On Health& Nutrition in Post Covid -19	158			

#### (ii) Students' Extension Activity

#### (iii) No. of Students pursuing higher course : 02

#### (01- Hislop College, Nagpur ; 01-PGTD, RTMNU, Nagpur)

#### (iv) Students' participation in seminar : Nil

#### Student of M.Sc. Sem IV Physics participated in conference: NA

Sr. No.	Name of Students	Conference type	Participation as
1.			
2.			
3.			

#### (v) Students' Learning course through-on-line : Nil

#### **5.Faculty**

I. Research Paper Publications

A. Total Number of publications:

- i) International : RHM 01
- ii) National : RPS- 01
- iii) International : SSD- 04
- iv) National :SSD-02
- B. Bibliometrics of the publications during the last Academic year based on average citation index in Scopus/ Web of Science or PubMed/ Indian Citation Index

Title of the Paper	Name of Author	Title of journal	Year of publication	Citation Index	Institutional affiliation as mentioned in the publication	Number of citations excluding selfcitation
Influence of Goal of Nucleic Acid content in seedlings of <i>Medicago sativa</i> .	R.H. Mahakhode	International Journal of Current Science	2021			
Ethno-medico – botanical studies on sacred grooves in shree kshetra korthan taq. Parner, Dist. Ahmednagar (Maharashtra) India	R.P. Sonwalkar	Bioinfolet UGC-CARE Approved Journal of Life Sciences <u>www.indianj</u> <u>ournals.com</u>	2021			
Phytochemical& GC- MS analysis Of Aromatic Plant <i>Leonotis</i> <i>nepitifolia</i>	S.S.Deshmukh	International Journal Of Scientific Research In science and Technology	2021			
Phytochemical and Ethnomedicinal Studies of Aromatic Plant <i>Ocimum americanum</i> Linn	S.S.Deshmukh	International Journal of Scientific Research In Science and Technology.	2021			
Conservation and Use of Wild Medicinal Plants Problems, Progress, and Prospects	S.S.Deshmukh	Aayushi International Interdisciplinary Research Journal	2021			
Conservation Of Ethonomedicinal Plant is One Of the Way Of Conservation Of Environment	S.S.Deshmukh	Interdisciplinary Multilingual Refereed Journal	2021			

## C. Faculty participation in conferences/seminar/workshop and symposia:

Name of the Faculty	Title of Conference/ Seminar/ workshop Attended	Period	Level International/ National/State /University /College	Whether Presented papers	Whether abstract /paper published in Souvenir/Ab stract Book
	Climate change & public health	24 <sup>th</sup> -25 <sup>th</sup> July 2021	International	Yes	Yes
Prof. R.N. Deshmukh	Integrated Approach in S&T for sustainable future.	27 <sup>th</sup> Feb. 2022	International	Yes	Yes
	Basics & Advances in Biological Sciences	8th -9th April 2022	National	Yes	Yes
	Recent Advances in Biological Sciences & Opportunity in Entrepreneurship. School of studies in Biotechnology and Ayush University, Chhattisgarh	7th -8th Jan. 2022	International	Yes	Yes
Prof. P.S.	Integrated Approach in S&T for sustainable future.	27 <sup>th</sup> Feb. 2022	International	Yes	Yes
Tiwari	Basics & Advances in Biological Sciences	8th -9th April 2022	National	Yes	Yes
	Sustainable & renewable energy : Chalenges and Opportunity Sindhu mahavidyalaya and global biotech forum Nagpur	8th -9th April 2022 Nagpur	National	Yes	Yes
	Climate change and public health. Organized by VMS Research Foundation and sewadalMahilaMahavidyalaya, Nagpur.	24th -25th July 2021	International	Yes	Yes

	Integrated Approach in S&T for	27 <sup>th</sup>			
	sustainable future.	Feb. 2022	International	Yes	Yes
Dr. R.H. Mahakhode	Innovation in science, technology, humanities, management for sustainable rural development.	14 <sup>th</sup> -15 <sup>th</sup> March 2022	International	Yes	Yes
	Emerging Trends in Science and Technology	10 <sup>th</sup> June 2021	National	Yes	Yes
	Climate change & public health	24 <sup>th</sup> -25 <sup>th</sup> July 2021	International	Yes	Yes
Dr. R.P. Sonwalkar	Integrated Approach in S&T for sustainable future.	27 <sup>th</sup> Feb. 2022	International	Yes	Yes
	Recent Innovation in Biological Research	17th -18th March 2022	International	Yes	Yes
Dr.SS. Deshmukh	StudiesonEthnomedicinalProperties and Ecological aspects ofLeucasasperaLinnPlantParticipated in online	11 <sup>th</sup> - 13 th oct.2021	International econference	Yes	Yes
	Conservation of Ethnomedicinal Plant is One of The Way of Conservation of Environment	26 <sup>th</sup> February 2022	National E- Conference	Yes	Yes
	Topic-सुगंधी वनस्पती आणि णनसगोउप्चार	Date-08- 04-2022	As a Resource Person PlaceLakshmi- Shalini Arts,Commerce &Science Women's College,Pezari, T al- Alibag, DistRaigad 402108		

# D. Awards to Faculty members :

Name of Teacher	Title of the Award	Title of	National/ International
		Agency/Conference	
Prof. P.S. Tiwari	Save Planet award	EGEA, Enhancing	International
	10/10/2021	Green Economy	
		European Union	

		Society	
Dr. R.H. Mahakhode	Kalp-Young Women	Dept. of	National
	Scientist Award	Biotechnology &	
	13/07/2021	Microbiology, Kalp	
		Laboratories, Mathura	
Dr.Mrs.S.S.Deshmukh	Oral Presentation	Organized by dept of	National Level
		Botany Lt Pushpa Devi	
	Award Best E-Poster	Patil arts & science	
		College, &R.A College,	
		Risod,Dist.	
		Washim(	

# 6. MoUs signed with institutions of national, international importance, other universities, industries, corporate houses etc. during the year : Nil

Date of MOU	Organization	Purpose/Activity	Student Participate under MOU

# 7. Research funds sanctioned and received from various agencies, industry and other organizations : Nil

Nature of the Project	Duration	Name of funding Agency	Amount Sanctioned	Amount Received

## 8. Books Published :

	Boo	Book Edited	
	Title	ISBN and Date	Chapter
	The Phyto-Medica: Exotic	978-81-947336-4-5/	Chapter-01
	Medicated Plants and	2021	
	Their Utilization.		
Dr. R.H. Mahakhode	A Therapeutic Role of	978-93-91257-88-0/	Chapter-01
	Some Medicinal Plants in	2021	
	Treatment of Covid-19		
	and Post Covid		
	Complications.		

### **9.** Research Guidance by Faculty during the year :

Name of the guide	Ph.D		
	Awarded	Submitted	Registered
Prof. R.N. Deshmukh			01
Prof. P.S. Tiwari			01

Dr. R.H. Mahakhode			01
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#### **10.** Alumni engagement

- a. Contributes significantly to the development of the institution through financial and other supports: Nil
- b. alumni contribution during the year : Nil

#### **11.** Action Plan of the Department

- 1. To celebrate World Nature Conservation Day.
- 2. To organize various Eco-friendly activities.
- 3. To conduct workshop on Nursery Technique.
- 4. Project on Hydroponics by students.
- 5. To plan excursion tour
- 6. To organize student seminars
- 7. To organize guest lectures
- 8. To conduct workshop on Plant Tissue Culture
- 9. To encourage the students in various curricular & Extra-curricular activities
- 10. To organize workshop on Mushroom Cultivation under skill base course
- 11. To encourage staff to participate in various National & International events

#### 12. Best Practices of the department

- Green Activities Ethno-Phyto Expo (Exhibition on Medicinal Plants),
- Students participation in seminar on World Environment day jointly by Pratibha Shakti- Vidharbh chapter & Institute of Science, Nagpur.

#### 13. SWOT Analysis

#### Strength

- 11111
- Qualified, Competent and Experienced Staff.
- Committed non- teaching staff.
- Disciplined and hard working students.
- Well furnished and equipped Department. Safe and secured environment for co-education Democratic functioning.
- Various options available with Botany subject.
- Skill base certificate course on Mushroom Cultivation.
- Self-finance certificate course on Plant Tissue Culture.
- Botanical society for students.

- Good results with distinction.
- Focus on emotional & mental health of the students through Teacher Mentor Scheme.
- Parent-teacher interaction is encouraged.
- Seminars, counseling, personality development, guest lectures and Awareness programs are regularly arranged.

#### Weakness

- High droop out ratio due to poor socio-economic status of the students.
- Lack of risk taking ability.
- Average students seek admission in the subject.
- Moderate employment opportunity.
- Slow economic and industrial growth of Nagpur region.
- Decline of students' academic interest in pandemic (Covid-19).

#### **Opportunity**

- Employment potential in Forest department, various scientific institution e.g, NEERI, Ankur Seeds, Mahyco, CICR, CCRI, MIHAN, NMC Nagpur
- Training and placement cell in college.
- Student faculty exchange programme.
- Seminars, workshop, conferences, inter collegiate competitions, science exhibition for overall development of the students.
- Visit to Scientific laboratories and various localities.
- Research guidance facility available to students.
- Inspire camp is regularly organized to motivate the students for basic sciences.

#### Challenges

- Cut-throat competition in higher education.
- Declining interest of the students in basic science subject.
- Poor response of students during online classes during pandemic period.
- Majority of the students are facing emotional & mental health problems.
- Mushrooming of professional courses.



Yours sincerely

#### Prof. R. N. Deshmukh

HEAD DEPARTMENT OF BOTANY SHRI SHIVAJI EDUCATION SOCIETY AMRAVATI'S SCIENCE COLLEGE CONGRESS NAGAR, MAGPUR

