### Shri Shivaji Education Society Amravati's

#### Science College, Congress Nagar, Nagpur

Internal Quality Assurance Cell

#### **DEPARTMENT OF BOTANY**

#### **INTERNAL ACADEMIC AUDIT**

#### 2020-2021

#### 1. Vision and Mission of the Department

Vision- To emerge as a centre of excellence in "Plant Science".

**Mission-** We dedicates & commits ourselves to provide education in plant science & its applications to enrich the students with recent advances in the subject "where sky is the limit"

#### 2. A. Faculty Strength:

Faculty	Recruited	Vacant	Remarks
Regular	04	01	
СНВ			
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

# 3. Students strength A. (Winter 2020)

Group	Number of Students Admitted
CBM	31
CBZ	53
CBG	26
Total	110
CBM	29
CBZ	45
CBG	19
Total	93
CBM	33+1 (34)
CBZ	62
CBG	37
Total	133
1*- Biotech., Chem., Bot	
	CBM CBZ CBG Total  CBM CBZ CBG Total  CBM CBZ CBG Total  CBM CBZ CBG Total

# **B.** (Summer 2021)

Year	Group	Number of Students Admitted
B.Sc. Semester II	CBM	31
	CBZ	53
	CBG	26
	Total	110
B.Sc. Semester IV	CBM	29
	CBZ	45
	CBG	19
	Total	93
B.Sc. Semester VI	CBM	33+1* (34)
	CBZ	62
	CBG	37
	Total	133
	1*- Biotech., Chem., Bot	
M.Sc. I		
M.Sc. II		
Ph.D.		
Value Added Program		

### 4. Students Performance

# A. Result Analysis (Winter 2020) 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- I	109	105	96.33%
	B.Sc Semester- III	93	93	100%
	B.Sc Semester- V	132	132	100%

## B. Result Analysis (Summer 2021 ) UG & PG

Programme Code	Programme Name	Number of students appeared in the final year examination	Number of students passed in final year examination	Pass Percentage
	B.Sc Semester-II	108	108	100%
	B.Sc Semester-IV	92	92	100%
	B.Sc Semester- VI	131	131	100%

# C. Achievements

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

Sr.No.	Name of the Students	Class	Title
	Mr Yash Nitin Mahule (3 <sup>rd</sup> position)	B.Sc Semester - I	Intercollegiate e-Poster competition on <b>National Wildlife Week</b> organized by Hislop College Nagpur on 7 <sup>th</sup> October 2020
	Tanushree Bannerji, (1 <sup>ST</sup> Rank)	B.Sc Semester - VI	Quiz competition conducted during National Webinar on Plant Tissue Culture: Application & Techniques organized by the department in association with St. Alloysius College Jabalpur, M. P. on 15th May 2021.
	Rashmi Chopkar, ( 2 <sup>nd</sup> Rank)	B.Sc Semester - VI	Quiz competition conducted during National Webinar on Plant Tissue Culture: Application & Techniques organized by the department in association with St. Alloysius College Jabalpur, M. P. on 15th May 2021.

Neha		B.Sc Semester - VI	Quiz competition conducted
Thakra	ıl (		during National Webinar on
3 <sup>rd</sup>			Plant Tissue Culture:
Rank)			Application & Techniques
			organized by the department in
			association with St. Alloysius
			College Jabalpur, M. P. on 15th
			May 2021.

# B- Merit Position of PG Students in RTMNU (for PG Dept. only): NA 5. Students Progression:

Year	No. of students enrolling into higher Education	Program graduated from
	UG to PG	05
		(04- Inst. of Science, 01- PGTD, RTMNU Nagpur)
	PG to Research	
	Placement	
	On campus	
	Off campus	

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

Title of the Paper/Book	Name of Author	Title of journal/Book	Year of publication
Vision of life	Ishant M. Nikure	Vision of life	2020
Poem on Transgender	Ishant M. Nikure	India needs a change	2020
Community			
(LGBTQ)			
Pankh	Ishant M. Nikure	Pankh (Udane ki	2020
(Udane ki Khawaish)		Khwaish)	

#### (ii) Students' Extension Activity

Sr. No.	Name of Activity (Online)	Participation
1.	World Environment Day	52
2.	World Nature Conservation Day	48
3.	National Webinar on Plant Tissue Culture: Application &	232
	Techniques	

(iii) No. of Students pursuing higher course: 05

(04- Inst. of Science, 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

#### 6. Faculty

I. Research Paper Publications

A. Total Number of publications:

i) International: RND-01; RHM - 01 ii)

National : RHM- 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	Citatio n Index	Institutiona l affiliation as mentioned in the publication	Number of citations excluding selfcitation
Notes on <i>Aristida</i> spp. from Bhandara District of Maharashtra State, India	Rajendra. N. Deshmukh	Annals of Plant Sciences (ICI)	2020			
Effect of glyphosate on seedling growth of <i>Malachra capitata</i> L	R.H. Mahakhode	Bioinfolet UGC-CARE Approved Journal of Life Sciences www.indianjo u rnals.com	2020			
Effect of paraquat on rhizosphere mycoflora of <i>Psoraleacorylifolia</i> .	R.H. Mahakhode	Bioinfolet UGC-CARE Approved Journal of Life Sciences www.indianjo u rnals.com	2020			
Climate Change and Effect of Pollution on Plants.	Dr.Mrs.Sharay u S.Deshmukh	UGC Care Group I Journal Vol- 10 Issue-07 No. 3	July 2020			
Sports, Yoga, Music Are Effective in Covid-19	Dr.Mrs.Sharay u S.Deshmukh	SCHE- DC19LPIW 2020	Aug .2020			
Evaluation of Phytochemical Constituents in Aromatic Plant	Dr.Mrs.Sharay u S.Deshmukh	Research Interventions & Technological Advancement s In Plant Sciences	27th-28th march 2020			

Properties of Dried Leaves of LeonotisnepitifoliaPla nt Role & Contribution of	International	Peer Review			
Women In Today's Research in Environment Oral PPT (online zoom platform) 23 march 2021 233QCVVV2323332 3332233eer xcccc 2021 23rd March	Journal Of Science Technology And Management	& referred Journal Impact factor 6.3 UCG notified Journal	23 march 2021 233QCV VV23233 32333223 3eer	Yes	

# ${\bf C}.$ Faculty participation in conferences/seminar/workshop and symposia:

Name of the	Title of	Period	Level	Whether	
Faculty	Conference/		International	Presente	/paper published in
	Seminar/ workshop		/	d papers	Souvenir/Abstract
	Attended		National/		Book
			State		
			/University		
			/College		
	Medicinal Plants as	2020	International		
D 11 1 1 1	Immuno-stimulants		Econference	Yes	Abstract Published
R.H.Mahakhode	to fight Covid-19				
	Algae: Use as	2021	International	Yes	Abstract Published

R.H.Mahakhode	sustainable water in purification technology.		Econference		
R.N. Deshmukh	Crosstalk between Ethanobotany & Immunology: A fight against COVID 19	2020	National Webinar		
R.N. Deshmukh	Plant Tissue Culture Techniques and Applications.	2021	National Webinar		
P.S.Tiwari	Plant Tissue Culture Techniques and Applications.	2021	National Webinar		
Dr.Mrs.sharayu S.Deshmukh	Wild Plant Ocimum americanum and Its Uses in Herbal Medicine & Cosmetics( Oral Presentation)	Recent Trends In Plant Science 3 rd - 5 th Dec.2020	Online One Day International Conference Akola	Yes	Pepar Published
Dr.Mrs.sharayu S.Deshmukh	Evaluation of Phytochemical Constituents in Aromatic Plant Properties of Dried Leaves of Leonotis nepitifolia Plant (Poster presentation)	Research interventions and technological advancement s in plant sciences 26 th& 27 march 2021	, Sawantwadi	Yes	Pepar Published

# D. Awards to:

Sr.	Faculty	Fellowship/	Award	Event	Whetherinternational /
No.	members	Award	conferri	Organizedby	national / state /regional /
			ng Organiz		collegeoryuniversity level
			ation		
1		Award for	Indian	RajarsheeShahu Science	
		the Best	Science	College	
	Dr.sharayu	paper-	Congre	Chandur Railway, Dist.	
	S.Deshmukh	Presentatio	SS	Amravati	National
		n	Associa		

	tion	

# 7. 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

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

٠.	018011120011011011				
	Nature of the Project	Duration	Name of funding Agency	Amount Sanctioned	Amount Received

#### 9. Books Published: Nil

Dr.Sharayu			Book
S.Deshmukl	n		Edited
	Title	ISBN and Date	Chapter

Aadhar Publication (March- 2021)	Flora of Warud College Campus Area Page No 39-46	International ISBN: 97881- 95551-49 (March- 2021)	
Bhumi Publication (March- 2021)	A comparative Study Of Flora Of Campus Area of Mahatma Fule Arts Science,Commerce&Sitaramjichoudharico llege.WarudDist.Amaravati.Page No162- 169	International  Ecology Research (Volume-I) ISBN: 978- 93-88901- 19-2, (March- 2021)	

### 10. Research Guidance by Faculty during the year: Nil

Name of the guide	Ph.D		
	Awarded	Submitted	Registered

## 11. Alumni engagement

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

#### 12. Action Plan of the Department

- 1. To celebrate World Nature Conservation Day.
- 2. To organize various Eco-friendly activities.
- 3. To plan excursion tour
- 4. To organize student seminars
- 5. To organize guest lectures
- 6. To conduct workshop on Plant Tissue Culture
- 7. To encourage the students in various curricular & Extra-curricular activities

- 8. To organize workshop on Mushroom Cultivation under skill base course
- 9. To encourage staff to participate in various National & International events

#### 13. Best Practices of the department

Eco-Friendly Activities (World Environment Day, World Nature Conservation Day, Rakhi & Dry holi celebration, Study tours etc.)

#### 14. SWOT Analysis

#### Strength

- 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.
- Teacher Mentor Scheme for students.
- Parent-teacher interaction is encouraged.
- Seminars, counseling, personality development, guest lectures and Awareness programs are regularly arranged.

#### Weakness

- 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

- Declining interest of the students in basic science subject.
- Poor response of students during online classes in pandemic period (Covid- 19)

Mushrooming of professional courses.

Yours sincerely

Prof. R. N. Deshmukh

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

