# S.S.E.S.AMT'S SCIENCE COLLEGE, NAGPUR

# Information to be submitted by Head of the Department for Internal Academic Audit

Name of the Department: BOTANY

Period of assessment: Session: 2018-19

### 1. Details about Academic Programmes:

Level of the Programme	Number of existing Programmes	Number of programmes added during the year	Number of self- financing programmes	Number of value added / Career Oriented programmes
UG	01	01	01	01
PG				
Ph. D.				
PG Diploma				
Advanced Diploma				
Diploma				
Certificate				
Others				
Total				

2. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D. / M. Phil. etc.,)

Name	Whether Permanent /Adhoc/ Contribut	Qualification	Designatio n	Specialization	No. of Years of Experience	Whether supervisor	No. of Ph.D. awarded / Submitted / Ongoing
Dr.R.N.Deshmukh		M.Sc., M.Phil, B.Ed., Ph.D.	Asso.Prof	Algae & Cytogenetics	31		
Dr.P.S.Tiwari	Permanent	M.Sc., M.Phil. Ph.D.	Asst. Prof	Aerobiology & Plant Tissue Culture	20	Yes	
Dr.S.D.Puranik		M.Sc., B.Ed., Ph.D.	Asst. Prof	Paleobotany	15	Yes	
Dr.R.H.Mahakhode		M.Sc., B.Ed., Ph.D.	Asst. Prof.	Cytomorphology & Cytogenetics	07	Yes	
Dr.Mrs.Sharayu S.Deshmukh		M.Sc., M.Phil, Ph.D	Asst. Prof	Taxonomy of Angiosperms	00	No	

			111.10					
3.	No. of Guest and	d Visiting fa	aculty	01	01			

4. Faculty participation in conferences/seminar/workshop and symposia:

Name of the Faculty	Title of	Period	Level	Whethe	Whether	Whether	Whether
	Conferenc		International/	r	abstract	papers	served as
	e/		National/State	Presente	published	published in	experts,
	Seminar/		/University /College	d papers	in Sovinor/A	proceeding	chairpersons
	workshop				bstract	with ISBN	or resource
	Attended				Book	No if any	persons
Dr.R.N.Deshmukh	02	2018-19	Int.01; Workssop:01	Yes	Yes		JuryExpert
Dr.P.S.Tiwari	01	2018-19	Int.01	Yes	Yes		
Dr.S.D.Puranik	02	2018-19	Nat.01;Int.01	Yes	Yes		Chairperson
Dr.R.H.Mahakhode	02	2018-19	Int.01; Workssop:01	Yes	Yes		Rapporteur

- 5. Innovative processes adopted by the Department in Teaching and Learning: ICT
- 6. No. of faculty members involved in curriculum restructuring /revision /syllabus development as member of Board of Study/ as member of Faculty/as a participation in Curriculum Development workshop
- 7. Initiatives undertaken towards faculty development

			Fa	culty / St	aff Developn	nent Progra	ammes		
Name of the Faculty	Orienta tion	Refre sher	UGC – FIP	HRD progr am	Faculty exchange program	Staff training by universi ty	Staff training by other institutio ns	Summer / Winter schools, Worksh ops, etc	Others
Dr.R.H.Ma hakhode		Yes		Yes					

### 8. Details of Administrative and Technical staff

Name of the staff	Designation	Permanent /Temporary
Shr. A.M. Gandhre	Lab. Attendent	Permanent
Shri. S.W.Dailkar	Lab. Attendent	Permanent

Shri. P.B.Ankalwar	Lab. Attendent	Permanent

9. Research funds sanctioned and received from various funding agencies, industry and other organizations:

Name of the Faculty	Major/ Minor/ Interdisciplinary/ Industry sponsored/ Any other (Specify)		Name of the funding Agency	Sanction Letter No /Date	Total grant sanctioned	Receive d	Complet ed/ Ongoing	Wheth er New Propos al Submit ted
Dr.R.H. Mahakhode	Minor	2 Years	UGC	47- 698\13(WRO)2 1May2014	275000	202500	On submission	No

### 10. Details on research publications:

Name of the Faculty	Peer R	eview J	ournals	Non-I	Non-Peer Review		Conference		e-Journals			
				J	ournals		proceedings					
	Inter	Nati	Other	Intern	Intern Nati Other In		Inter	Nati	Other	Inter	Nati	Other
	natio	onal		ational	onal		natio	onal		natio	onal	
	nal						nal			nal		
Dr.S.D.PuraniK	Yes											
Dr.R.H.												
Mahakhode												
	Yes											
Dr.Mrs.Sharayu	Yes											
S.Deshmukh												

11. No of research publications listed in International Database (SCOPUS / Google Scholar)

Name of the Faculty	No of research publications in <b>SCOPUS</b>	No of research publications in <b>Google Scholar</b>	Citations	h-index	i10- index

12. Details on research publications listed in International Database (SCOPUS)

Name of the Faculty	Co-Authors	Short Title	Journal	Year of Publication	Imp. Factor	SNIP	IPP	SJR	h- index
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	Name of the Faculty	Co-Authors	Short Title	Journal	Year of Publication	Imp. Factor	SNIP	IPP	SJR	h- index
13.	Details on Imp	pact factor of p	ublications:							

h-index

# 14. Details of publication of Chapter in Book/ Book Edited/ Book Published by the faculty:

Name of the Faculty	Chapter in Book	Book Edited		Year of Publication		
Tucuity	Book	Editod	Title of the Book Published	ISBN/ISSN	Publisher	1 donedion
Dr.Mrs.Sharayu S.Deshmukh			A Text Book of Ecology and Environment  B. Sc. Semester- I, Home science  Page No1-112	ISBN 978-81- 941893-0.5	Central Techno Publication, Nagpur National	2019
Dr.Mrs.Sharayu S.Deshmukh			A Text Book of Ecology and Environment  B. Sc. Semester- I, Home science  Page No1-112	ISBN 978-81- 941893-4-3	Swami Publication, Nagpur  National	2019

15. Areas of consultancy and Revenue generated through consultancy:

13. The day of constituting and textende generated an oagh constituting.							
Areas of consultancy	Revenue generated through consultancy	Revenue generated through consultancy					
before the assessment period		during the assessment period					

# 16. Conferences/Seminar /workshop/Guest Lect. organized by the Department:

Sr.	Conferences/Seminar/	International/ National	Title /Topic	Period	Sponsoring
No	workshop/Guest Lect.	/ State/ University/			Agencies
		College Level			

	1.	Guest Lecture	College level	Translational Research in	28/07/	Social			
				Herbals: Past to Future to Past	2017	Forestry			
						Dept.			
	2	Guest Lecture	College level	World Nature Conservation	04/08/	College			
				Day	2018				
	3	Guest Lecture	College level	Landscaping	20\2\2	College			
					018				
	4	Workshop	College level	Flower Arrangement	20\3\2	College			
					018				
1.5	7 N	C 11 1 4 7 1							
1.	/. No. (	of collaboration /linkages	01						
18	18. Total budget for research for current year in lakhs:								
	From Funding agency From Management of College								

18. Total budget for research for current year in lakhs:							
From Funding agency From Management of College							
19. No. of research awar	rds/ recognitions of faculty and res	earch fellows of the institute:					
Name of the Faculty	Details of the awards/	International / National / State /	Year				
	recognitions	University/ Dist/ College Level					
Dr.R.N.Deshmukh	Distinguished Researcher	International	2018				
	Award						

20. No. of Ph.D. awarded	by faculty fa	from the In	stitution			
21. No. of Research scholars receiving the Fellowships (Newly enrolled + existing ones)						
JRF	SRF		Project Fellows		Any other	

22. Details of increase in infrastructure facilities:

	Existing		Newly purchased		Source of Fund	Total
Facilities	No	Value of the equipment (Rs. in Lakhs)	No	Value of the equipment purchased (Rs. in Lakhs)		
No. of important equipments (cost <1 lakh)						

No. of important equipments (cost $\geq 1$ lakh)			
Others			

# List attached (Existing)

### **DEPARTMENT OF BOTANY**

# **List of Major Equipments**

Sr.no	Name of the Equipment	Date &year of		Cost	Stock Register No. &
		Purchase	Qty.		Page No.
		Cosip Grant			
1	Mono-ocular Research Microscope	17.11.84	1	1950=00	Cosip 1/ 47
2	Stereoscopic Binocular Microscope	26.0285	1	2035/-	Cosip 1/ 115
		Under College G	rant		
1.	Tromoscope (ProjectionMicroscope)	24.11.99	1	17500/-	6C/169
2.	Centrifuge	22.3,2001	1	8274/-	6C/ 109
3.	P <sup>H</sup> Meter	27.3.2001	1	5937/-	6C/ 121
4.	Colorimeter	30.12.2003	1	8866/-	6C/ 261
5.	Camera Lucida	1990-91	1	420/-	6C/ 79
6.	Magnetic Stirrer	29.9.98	1	2808/-	UGC 12c/59
7.	Chromatography Chamber	28.1.2002	1	4200/-	6C/ 211
8.	T. L.C. Apparatus	31.3.2003	1	2475/-	6C/ 199
9.	E lectrophoresis Apparatus	31.3.2004	1	9130/-	6C/ 253
10.	C omputer	23.10.2008	1	27950/-	6C/ 187
11.	Scanner	24.3.2003	1	3950/-	6C/ 249
12.	Printer	24.9.2008	1	7800/-	6C/ 241
13.	Slide projector	28.2.2009	1	10080/-	6C/ 223
14.	Overhead projector	28.1.2002.	1	9000/-	6C/ 127
		Under CPE Grant			I

1	Laminar Air Flow	3.12.2009	1	89944/-	1A/31
2	Incubator	15.10.2009	1	19631/-	1A/23
3	Autoclave	30.102009	1	45169/-	1A/27
4	Analytical Balance (Electronic)	23.10.2009	1	50625/-	1A/07
5	Research Microscope	20.10.2009	2	8800 /-	1A/15
6	LCD projector	21.10.2009	1	38813/-	1A/02
7	Laptop	21.10.2009	1	27950/-	1A/45
8	Water quality analyzer	29.12.2009	1	44460/-	1A/35
		Under MRP			
1	Trinocular microscope with CCD camera	20.1.2011	2	83,250/-	12c/91,95
					12c/111,115
2	Soxhlet apparatus eating mantle	12.12.2010	1	750/-	12c/119
			2	3318/-	12c/123
3	Digital camera	10.09.2012	1	14990/-	12C/131
		11.09.2012	1	17600/-	12C/135
4	Refrigerator	17.10.2014	1	11900/-	12C/137
5	Laptop	31.07.2010	1	38750/-	12C/107
		19.04.2012	1	33860/-	12C/127
		17.10.2014	1	34990/-	12C/139
6	Double Distillation Unit	14.01.15	1	48,000/-	12C143
7	pH Meter	30.03.15	1	5225/-	12C/147
		1		1	

UG	PG	Ph. D.	Others
330			

24. No. of stude	nts qualified in these exa	iminations		
NET	SET/SLET	GATE	CAT	

IAS/IPS etc	State PSC	UPSC	Others

25. Faculty as members in a) National committees b) International Committees c) Editorial

Name of the	Whether members	Whether members in	Whether	Whether served as
Faculty	in National	International	members in	experts,
	committees if yes,	Committees if yes,	Editorial	chairpersons or
	give details with	give details with	Boards if yes,	resource persons if
	period	period	give details with	yes, give details
			period	with period
Dr. R.N.Deshmukh	Life member	Life member IJRBAT	Advisory Board,	Jury,Co-Cnvener
	Botanique, ISCA		ICMAM- 2018	ICRTS-17 Judge
			organized by	
			Kamala Nehru	
			College, Nagpur	
Dr P.S.Tiwari	Life member	Life member Japanese	Executive editor	Co-Convener
	Botanique, IWSA,	Journal of Breeding,	Souvenir-2017	ICRTS-2017
	ISCA	IJRBAT		
Dr.S.D.Puranik	Life member	Life member	Member	Chair person
	Botanique, IWSA,	Gondwana Magzine	Editorial board-	ICRTS-2017
	Friends Internatioal		Botanique	08-09-18
Dr.R.H.Mahakhode	Life member	Life member IJRBAT	Member	Repporters ICRTS
	Botanique, IWSA,		Editorial board	2017
	ISCA		IJRBAT	

# 26. Student projects: yes

27. Awards / Recognitions received by faculty and students:

Name of the Faculty/	Details of the awards/	International / National / State /	Year
students	recognitions	University/ Dist/ College Level	
Ku.Sakshi Dubey &	1 <sup>st</sup> Prize in Intercollegiate	College Level	5 th March 2018
Ku.Sonali Saonerkar	Poster competition		

28. List of eminent academicians and scientists / visitors to the department.

Sr No Name Field Address	Date of visit
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1.	Dr. Prakash R. Itankar	Pharmaceutical Sciences	RTMNU, Nagpur	04/08/18
2	Mr.Abhimanyu Dongarwar	Mushroom Consultancy	SKY Mushrooms	22/09/2018.

### 29. Student progression

Student progression	Against % enrolled
UG to PG	36%
PG to M.Phil.	
PG to Ph.D.	
Ph.D. to Post-Doctoral	
Employed	20/
<ul> <li>Campus selection</li> </ul>	2%
Other than campus recruitment	
Entrepreneurship/Self-employment	

30. Details on student enrichment programs (special lectures/workshops/seminar) with external experts:

Title/ Topic of the Program	Whether lectures/ workshops/seminar /other	Name of the external experts	Details of the external experts	Period of Program
Landscaping	Lecture	Mr.Amit Pophali	Landscape Desiner	2hrs(20\02\2018)
Floriculture	Workshop	Mrs.Anuja Parchure		6hrs(20\02\2018)

31. Participation in Institutional Social Responsibility (ISR) and Extension activities:

Name of the Faculty/	Details of Participation in Co- curricular activities	Details of Participation in Extra curricular activities	Details of Participation in Extension activities including Institutional Social Responsibility (ISR)	Details with dates and period
Dr. R.N.Deshmukh		Unnat Bharat Abhiyan, Govt. of India	Helping society through Out reach Program Joy of giving	Session 2018-19
Dr P.S.Tiwari	Herbal Cosmatic workshop in association with Somalwar Nikalas Mahila Maha., Nagpur	Swachch Bharat Abhiyan, Govt. of India	Helping society through Out reach Program Joy of giving	Session 2018-19
Dr.S.D.Puranik	Carrier Guidance Programme		Helping society through Out reach Program Joy of giving	Session 2018-19
Dr.R.H.Manakhode	Workshop on Organic farming, Aqua Park,		Helping society through Out reach Program Joy of giving	Session 2018-19

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### 32. List of Alumni of the Departments:

Name	Address	Profession	Email	Mobile No	Date of Birth	Qualification	Passout year	Achievements

#### List Attached

# Alumni of the Department

- 1) Mr. Bhave Pharmaceutical distributor
- 2) Mr. Parate-Lecturer in Dharampeth Jr. College, Nagpur.
- 3) Mr. Dixit Former H.O.D. of Botany, Vidya-Bharati, Amravati
- 4) Mr. Saraf Auto bulb manufacturer
- 5) Mr. Narke C. A. Director of Finance ECL
- 6) Mr. Kholkute Veternary Officer
- 7) Nagasarkar Jr. College Teacher, Dinanath Jr. College, Nagpur
- 8) Dr. Sakundarwar–Former HOD, ,Deptt, of Botany, Science College, Nagpur
- 9) Dr. M. C. Kale Lecturer in Anand Niketan College, Warora
- 10) Dr. R. D. Makde Scientist- C SSPD, BARC, Mumbai
- 11) Dr. (Mrs) Rajurkar Lecturer, DMLT, Datta Meghe College, Nagpur
- 12) Dr. (Mrs) Sushma Pankule –Lecturer, DMLT Datta Meghe College, Nagpur
- 13) Mrs. Shubhangi Patey Lecturer in J.M. Patel College, Bhandara
- 14) Abha Chalpe Research Fellow, South Dekota, U.S.A.
- 15) Shri. Dilip Chinchamalatpure- Environmentlist
- 16) Mr. Shyam Ghosal- Former DFO, Chandrapur
- 17) Mr. Nagdeote, Former DFO Nagpur Div.Nagpur
- 18) Mr. Prakash Bokhad, Former Commissioner, NMC, Nagpur.
- 19) Mr. Vilas Doifode-Lecturer, Bhalerao Sci. College, Saoner

- 20) Dr. S. I. Ghugal-Lecturer, Shiwaji Science College, Pauni
- 21) Miss. Suprita Dogra Lieutenant in Indian Army.
- 22) Miss. Ketaki Agasthi selected in Indian Army
- 23) Mr. A.Joshi Manager, Kotak Mahindra, Mumbai
- 24) Mr. Sumeet Benegal Nutrition Officer in Nestle.
- 25) Mr. Bhushan Borkar Nutrition Officer in Nestle.
- 26) Mr. Bhushan Gomashe
- 27) Mr. Rushikesh Pimpapkar Geologist, Deccan Gold Mine, Bangluru.
- 28) Mr. Bhushan Borkar, Area Manager, Nestle, Nagpur division.
- 29) Ms. Rashmi Gohane, Lecturer, Hislop College, Nagpur.
- 30) Ms. Neha Deoras, Special Correspondent, Economic Times, Mumbai
- 31) Ms Tejaswini Panchbhai, Sr. Air Hostess, Maskat Airlines
- 32) Ms. Sayali Tembhurne- Scienctist B, CGWB, Jaipur
- 33) Mr. Abhinil Parihar- MR, Unique J.B. Chemicals
- 34) Mr. Rushabh Bhardbhunje- CCA, Tech- Mahindra, Mumbai
- 36) Ms. Uttakarsha Meshram- Crew Member, Indian Airlines, New Delhi
- 37) Ms.Sakshi Santoshi, Customer Assist.Staff, Indigo airlines Hyderabad
- 33. Major grievances of students (if any) redressed: Nil
- 34. Any other information: Three students selected for M.Sc. Program at Christ Deemed Univ. Bangaluru
- 35. SWOC analysis of the department

#### Strength

- Qualified, Competent and Experienced Staff.
- Recognized Laboratory for higher Learning and research
- Encouraging Principal and Management
- 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.
- Self Financed courses on plant Tissue Culture
- Skill based certificate course on Mushroom Cultivation
- Botanical society for students.
- Good results with distinction.
- Seminars, counseling, personality development, guest lectures and Awareness programs are regularly arranged.
- Parent-teacher interaction is encouraged
- ICT facilities available.
- Visit to scientific laboratory and excursion tours to various localities.
- Regular evaluation of students.
- Interdisciplinary activities.
- Remedial teaching is provided to slow learners
- Financial support to economically weaker students.
- Skill based Certificate Course On Mushroom cultivation.

#### Weakness

- Average students seek admission in the subject.
- Moderate employment opportunity.
- Slow economic and industrial growth of Nagpur region.

### **Opportunity**

- Employment potential in Forest department, MIHAN, NMC Nagpur
- Training and placement cell in college.
- Student faculty exchange programme.
- Seminars, workshop, conferences, inter collegiate competition, science exhibition,
- 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.
- Mushrooming of professional courses.

### 36. Future plans:

### Future Plan for the year 2019-2020

- ❖ To organize one day workshop on Herbal cosmetics and Herbal textile colors.
- ❖ To celebrate world nature conservation day.

* To organize intercollegiate training on Protoplast Culture.
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- ❖ To continue the project of Soilless Roof Top farming and Hydroponics.
- ❖ To plan for Button Mushroom Cultivation

Date	Signature
	Head
	Department of