

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: 2017-18

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 | Nil | 03 | Nil |
| 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 | Designation | Specialization | No. of Years of Experience | Whether supervisor | No. of Ph.D. awarded / Submitted / Ongoing |
|-------------------|-------------------------------------|------------------------------|-------------|------------------------------------|----------------------------|--------------------|--|
| Dr.R.N.Deshmukh | Permanent | M.Sc., M.Phil., B.Ed., Ph.D. | Asso.Prof | Algae & Cytogenetics | 30 | -- | -- |
| Dr.P.S.Tiwari | Permanent | M.Sc., M.Phil. Ph.D. | Asst. Prof | Aerobiology & Plant Tissue Culture | 19 | Yes | -- |
| Dr.S.D.Puranik | Permanent | M.Sc., B.Ed., Ph.D. | Asst. Prof | Paleobotany | 14 | Yes | -- |
| Dr.R.H.Mahakhode | Permanent | M.Sc., B.Ed., Ph.D. | Asst. Prof. | Cytomorphology & Cytogenetics | 06 | Yes | -- |
| Dr.Sharada K.Ulhe | CHB | M.Sc., M.Phil., Ph.D | CHB | Taxonomy of Angiosperms | 06 | No | ---- |

3. No. of Guest and Visiting faculty

01

01

4. 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 published in Sovonor/Abs tract Book | Whether papers published in proceeding with ISBN No if any | Whether served as experts, chairpersons or resource persons |
|---------------------|--|---------|--|--------------------------------|--|--|--|
| Dr.R.N.Deshmukh | 04 | 2017-18 | Nat.03; Int.01 | Yes | Yes | No | Jury |
| Dr.P.S.Tiwari | 04 | 2017-18 | Nat.02;Int.02 | Yes | Yes | No | No |
| Dr.S.D.Puranik | 06 | 2017-18 | Nat.04;Int.02 | Yes | Yes | No | Chairperson |
| Dr.R.H.Mahakhode | 06 | 2017-18 | Nat.04;Int.01 | Yes | Yes | No | 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

Nil

7. Initiatives undertaken towards faculty development

| Name of the Faculty | Faculty / Staff Development Programmes | | | | | | | | |
|----------------------|--|---------------|--------------|--------------------|--------------------------------|---|---|--|--------|
| | 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. Mahakhode | | 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) | Duration Year | Name of the funding Agency | Sanction Letter No /Date | Total grant sanctioned | Received | Completed / Ongoing | Whether New Proposal Submitted |
|---------------------|---|---------------|----------------------------|-----------------------------|------------------------|----------|---------------------|--------------------------------|
| Dr.R.H.Mahakhode | Minor | 2 years | UGC | 47-698/13 (WRO) 21 May 2014 | 275000/- | 202500/- | On submission | No |

10. Details on research publications:

| Name of the Faculty | Peer Review Journals | | | Non-Peer Review Journals | | | Conference proceedings | | | e-Journals | | |
|---------------------|----------------------|----------|-------|--------------------------|----------|-------|------------------------|----------|-------|---------------|----------|-------|
| | International | National | Other | International | National | Other | International | National | Other | International | National | Other |
| Dr.R.H.Mahakhode | Yes | | | | | | | | | | | |
| Dr.S.D.Puranik | Yes | | | | | | | | | | | |
| Dr.S.K.Ulhe | Yes | | | | | | | | | | | |

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

| Name of the Faculty | No of research publications in SCOPUS | No of research publications in Google Scholar | 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 |
|---------------------|------------|-------------|---------|---------------------|-------------|------|-----|-----|---------|
| | | | | | | | | | |
| | | | | | | | | | |

13. Details on Impact factor of publications:

Range Average h-index Nos. in SCOPUS

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

| Name of the Faculty | Chapter in Book | Book Edited | Book Published | | | Year of Publication |
|---------------------|-----------------|-------------|-----------------------------|-----------|-----------|---------------------|
| | | | Title of the Book Published | ISBN/ISSN | Publisher | |
| | | | | | | |

| | | |
|----------------------|--|--|
| Areas of consultancy | Revenue generated through consultancy before the assessment period | Revenue generated through consultancy during the assessment period |
| | | |

15. Areas of consultancy and Revenue generated through consultancy :

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

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

17. No. of collaboration /linkages

18. Total budget for research for current year in lakhs:

From Funding agency From Management of College

19. No. of research awards/ recognitions of faculty and research fellows of the institute:

| Name of the Faculty | Details of the awards/ recognitions | International / National / State / University/ Dist/ College Level | Year |
|---------------------|-------------------------------------|--|------|
| Dr. R.N.Deshmukh | Distinguished Researcher Award | International | 2017 |
| Dr.S.K.Ulhe | T.R.Sahu Award | International | 2017 |

20. No. of Ph.D. awarded by faculty from the Institution

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:

| Facilities | Existing | | Newly purchased | | Source of Fund | Total |
|------------|----------|---------------------------------------|-----------------|---|----------------|-------|
| | 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 ≥ 1 lakh) | | | | | | |
| Others | | | | | | |

List attached (Existing)

DEPARTMENT OF BOTANY

List of Major Equipments

| Sr.no | Name of the Equipment | Date & year of Purchase | Qty. | Cost | Stock Register No. & 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 Grant | | | | | |
| 1. | Tromoscope (ProjectionMicroscope) | 24.11.99 | 1 | 17500/- | 6C/169 |
| 2. | Centrifuge | 22.3,2001 | 1 | 8274/- | 6C/ 109 |
| 3. | P ^H 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 | | | | | |
| 1 | Laminar Air Flow | 3.12.2009 | 1 | 89944/- | 1A/31 |

| | | | | | |
|------------------|---------------------------------------|--|-------------|-------------------------------|-------------------------------|
| 2 | Incubator | 15.10.2009 | 1 | 19631/- | 1A/23 |
| 3 | Autoclave | 30.10..2009 | 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 2 | 750/- 3318/- | 12c/119 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 19.04.2012 17.10.2014 | 1 1 1 | 38750/- 33860/- 34990/- | 12C/107 12C/127 12C/139 |
| 6 | Double Distillation Unit | 14.01.15 | 1 | 48,000/- | 12C143 |
| 7 | pH Meter | 30.03.15 | 1 | 5225/- | 12C/147 |

23. Total Number of students

| UG | PG | Ph. D. | Others |
|-----|----|--------|--------|
| 330 | | | |

24. No. of students qualified in these examinations

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 Faculty | Whether members in National committees if yes, give details with period | Whether members in International Committees if yes, give details with period | Whether members in Editorial Boards if yes, give details with period | Whether served as experts, chairpersons or resource persons if yes, give details with period |
|---------------------|---|--|--|--|
| Dr. R.N.Deshmukh | Life member Botanique | Life member IJBAT | | Jury, Co-Convener ICRTS-17 |
| Dr P.S.Tiwari | Life member Botanique | Life member Japanese Journal of Breeding | Executive editor Souvenir-2017 | Co-Convener ICRTS-2017 |
| Dr.S.D.Puranik | Life member Botanique | Life member Gondwana Magazine | Member Editorial board-Botanique | Chairperson ICRTS-2017 |
| Dr.R.H.Manakhode | Life member Botanique | Life member IJBAT | | Rapporteur ICRTS-2017 |

26. Student projects: yes

27. Awards / Recognitions received by faculty and students:

| Name of the Faculty/ students | Details of the awards/ recognitions | International / National / State / University/ Dist/ College Level | Year |
|-------------------------------|-------------------------------------|--|------|
| | | | |
| | | | |

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

| Sr No | Name | Field | Address | Date of visit |
|-------|--------------|--------------|---------|---------------|
| 1. | Jing Tian | Member, APQN | China | 24/3/18 |
| 2 | Huang baoyin | Member | China | 24/3/18 |
| 3 | Li Hongyan | Member | Chiana | 24/3/18 |

29. Student progression

| Student progression | Against % enrolled |
|---|--------------------|
| UG to PG | 11% |
| PG to M.Phil. | |
| PG to Ph.D. | |
| Ph.D. to Post-Doctoral | |
| Employed • Campus selection • 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 |
|-----------------------------|--|------------------------------|---------------------------------|-------------------|
| Land scaping | Lectuer | Mr.Amit Pophali | Landscape designer | 2hrs.(20/2/2018) |
| Floriculture | workshop | Mrs. Anuja parchure | Flower management | 6hrs.(20/3/2018) |

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 | Science Exhibition, INSPIRE | Yuva Mahotsava | Helping society through Out reach Program Joy of giving | Session 2017-18 Jan -18 n Oct.-17 |
| Dr P.S.Tiwari | Science Exhibition INSPIRE | Yuva Mahotsava | Helping society through Out reach Program Joy of giving | Session 2017-18 Jan -18 n Oct.-17 |
| Dr.S.D.Puranik | Science Exhibition INSPIRE | Yuva Mahotsava | Helping society through Out reach Program Joy of giving | Session 2017-18 Jan -18 n Oct.-17 |
| Dr.R.H.Manakhode | Science Exhibition INSPIRE | Yuva Mahotsava | Helping society through Out reach Program Joy of giving | Session 2017-18 Jan -18 n Oct.-17 |

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 – 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–Reader,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 Chinchamatpure- 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
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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 Floriculture and Landscaping, Mushroom Cultivation & plant Tissue Culture
- 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.

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 2018-2019

- ❖ 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.
- ❖ To continue the project of Soilless Roof Top farming and Hydroponics.
- ❖ To plan for Button Mushroom Cultivation

Date

Signature
Head
Department of -----