

EVALUATIVE REPORT OF THE BOTANY DEPARTMENT

1. **Name of the Department & Its year of establishment** : BOTANY
: Department of Natural Science -1972
(Pre-University)
Department of Botany -1985 (Allied Botany)

2. **Names of Programme /Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)**

Botany is taught as Allied Subject for I st B.Sc. Zoology (E/M & T/M) ; II B.Sc. Zoology (E/M & T/M) and II nd B.Sc., Chemistry (T/M) students.

Allied Botany has 3 papers, two theory papers & one Practical paper.

The students have to complete these 3 Papers during their first and second year UG degree course.

3. **Interdisciplinary courses and departments involved**

Interdisciplinary courses		Departments involved
UG Level	Allied subjects	Zoology and Chemistry

4. **Annual/Semester/Choice Based Credit System:**

✓ Semester pattern with Choice Based Credit System

5. **Participation of the department in the courses offered by other departments:**

✚ Our department extending the research oriented Skills to Chemistry and Zoology Students and Research Scholars

6. **Number of teaching posts sanctioned and filled (Professors/AssociateProfessors/Asst.Professors)**

Post	Sanctioned	Filled	Vacant
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Associate Professors	-	-	-
Asst. Professors	01	01	-
PTA Faculty	01	01	01

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

Sl. No.	Name & Qualification	Designation	Specialization	No. of Years Experience	No. of Ph.D. students guided in the last 5years
01	Dr.S.Dharmarajan, M.Sc., M.Phil., B.Ed., Ph.D.	Assistant Professor	Microbiology- Mycology: VA- Mycorrhae	15	-
02	Miss.S.Abirami, M.Sc., M.Phil., B.Ed.,	Lecturer (PTA Faculty)	Algology	01	-

8. Percentage of classes taken by temporary faculty-Programme-wise information

Sl.No.	Programmes	Session
1.	UG	5

9. Programme-wise Student Teacher Ratio

Sl.No.	Name of the Programme	Student teacher ratio
1.	UG	24:1

10. Number of academic support staff (technical) and administrative staff sanctioned and filled:

Sl.No.	Staff	Sanctioned	Filled
1.	Technical-Lab Assistant	1	1
2.	Museum Keeper	-	-

**11. Number of faculty with ongoing projects from
a) national b) international funding agencies and
c) Total grants received.**

Mention names of funding agencies and grants received project-wise.

Applied for Minor-Project proposal to UGC, & Project Proposal to Dept of Higher Education



12. Departmental projects funded by DST-FIST; DBT, ICSSR, etc.; total grants received: Nil

13. Research facility / Centre with

✚ State recognition

✚ National and International recognition : Nil

14. Publications:

✓ Number of papers published in peer reviewed journals (national/international)

S. No.	Name of the staff	No. of papers published in reputed journals	No. of books Published	No. of papers presented in Seminars	Citation Index	h-index	i10-index	Invited Lectures
1	Dr.S.Dharmarajan	04	-	08	-	-	-	03

* Author for correspondence for all the Research papers and Papers presented in Seminars

✓ Impact factor-range / average:

* All the papers with impact factor ranging from 0.5 to 2.5

15. Details of patents and income generated: Nil

16. Areas of consultancy and income generated:

Expertise of the faculty members are in designing the teaching methodology and Practical for Botany to nearby Government Higher Secondary Schools, High Schools and Government Aided and Private Higher Secondary Schools in the form of consultancy is a regular practice of the department in a non-profitable basis.

17. Faculty recharging strategies

Orientation/Refresher and Training Programmes

Sl.No.	Name of the faculty	Number of Attended Orientation/Refresher Courses
1.	Dr.S.Dharmarajan	03

Papers presented in Seminars

Sl.No.	Year	No. of Papers Presented		
		State	National	International
1.	Dr.S.Dharmarajan	-	04	03



18. Students projects

- ✓ **Percentage of students who have done in-house projects including inter-departmental**

Providing counseling and to assist guidance to PG-Zoology & Chemistry PG - Students to do their projects.

19. Awards / recognitions received at the national and international level by University Rank Details from 2006-2007 to Onwards

Name of the Student with placement and prize won: Not applicable

20. Seminars / Conferences / Workshops organized and the source of funding (national / international) with details of outstanding participants, if any.

Nil

21. Outstanding participants who graced the occasions

22. Student profile course-wise

Not applicable

22. (a) Admission Details: Not applicable

22 (b) UG Programmes

22. (c) PG Programmes

22. (d) Ph.D. Programmes

Diversity of students: Not applicable

23. How many students have cleared Civil Services, Defense Services, NET, SLET, GATE and any other competitive examinations?

Not applicable

Student progression: Not applicable

24. Diversity of staff

Percentage of faculty who are graduates	
Of the same parent university	01
From other universities within the State	01



From other universities from other States	--
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25. Number of faculty who were awarded Ph.D., during the assessment period.

Nil

Year	Ph.D.,

26. Present details about infrastructural facilities

a) Library:

Department: 1084 books

b) Internet facilities for staff and

c) students:

- 24 Hours unlimited Broadband internet facility is available in the Botany Department for the use of Staff members, Students and research scholars of other departments.

d) Total number of class rooms : 01

e) Class rooms with ICT facility : 01

- Smart class room cum laboratory is equipped with smart Board, audio-video projection and latest ICT gadgets.

f) Students laboratories : 01

a. Physical facilities:

Department of Botany has the built - up area of 108 Sq.ms. The department has its own laboratory (9.5 m X 10 m).

The laboratory has 6 mega sized Students work tables (8x4) to accommodate 24 students. For the better performance of students in practical modern lighting facilities (with 13 Florescent lamped, an air circulator and plug-point facilities in each work table) are provided from June 2005 onwards. The lab has two wooden cup boards, steel racks and Cement slab cup boards, having 12 compartments with gliding doors to store the laboratory articles.

b. Equipment facilities:

i) Basic Equipments

S. No	Name of Equipments	Number
1	Compound microscope	51



2	Compound microscope with Electric light source	02
3	Dissection microscope	46
4	Bio visual charts	96
5	Physiology apparatus	12
6	Slide cabinet	1
7	Chart cabinets	2
8	Staining racks	22
9	Permanent slides	502
10	Mounted museum specimens	35
11	Revolving stools	6
12	Over head projector	1
13	Smart Board	1
14	LCD Projector	1
15	Data processing Unit with internet facility	1

ii) Advanced Equipments

S. No	Name of Equipments	Number
1	Plant Preservation unit	1
2	Photo micrographic unit	1
3	Camera lucida (mirror type)	2
4	Ocular and Stage micrometers	2
5	Research mono, binocular microscopes	6
6	Stereoscopic binocular microscope	2
7	Projection microscope	1
8	Centrifuge	1
9	Autoclave	1
10	Double demonstration eye piece	1
11	Multipurpose slide projector	1
12	Hot air oven	1
13	Tissue Homogenizer	1
14	Sprinkler system	2
15	Micro concavity slides	48
16	Aquarium	1
17	Microtome	1

g) Research laboratories : Nil

27. Number of students of the department getting financial assistance from College and Government. : Not applicable

28. Was any need assessment exercise undertaken for the development of new program(s)? If so, give the methodology.

✓ The basis for the importance for introducing a new Programme



will be discussed in the departmental meeting along with the copies of UGC/CSIR/DST brochures/syllabi.

29. Does the department obtain feedback from

a) Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize it?

- ✓ Yes, the suggestions given by the Staff members directly involved in the new Programme or syllabi are always considered as an effective feedback. The merits and demerits posed by the teacher concerned will be discussed in the BOS meeting and subsequent changes are updated periodically.
- ✓ Faculty members from other institutions are also involved in feeding feed-back in regular basis during the Evaluation of practical examinations.

b) Students on staff, curriculum as well as teaching-learning-evaluation and what is the response of the department to the same?

- ✓ Students are free to make comments/suggestions upon the methodology of teaching process (class-room teaching as well as laboratory demonstrations) adapted by the individual teachers directly to the Head of the Department.
- ✓ By the directions of the Principal and IQAC the Head of the department meets all the classes to verify the completion of the syllabus, well in advance, before the last working day of each semester.
- ✓ Every semester, IQAC conducts Feedback evaluation of teachers, infrastructure, laboratory conditions, etc., of the department and subsequently the report is considered with due weight age for further constructive and progressive implementation.

c) Alumni and employers on the Programmes and what is the response of the department to the same? Not applicable

30. List the distinguished alumni of the department (maximum-05):

Not applicable

31. Give details of student enrichment Programmes (special lectures / workshops / seminar) with external experts.

- a) Departmental seminars for allied Botany students are a routine academic process in the department to assess their communication capabilities and also for their internal assessment.

32. List the teaching methods adopted by the faculty for different



Programmes.

33.

Sl. No.	Program me	Teaching Methods Adopted
1.	UG	Other than Conventional Chalk and Talk method, questioning and answering approach, displaying of bio-visual charts, exhibiting the proto-type models, Slide projectors, by using internet facility, direct download of latest study materials, Smart interaction Board and LCD facility for exhibiting photos, audio, video and animations pictures for morphology, anatomy, chemical cycles and physiological pathways etc. students to get direct and firsthand experience, OHP presentations, assigning problems to solve independently, library hour, invited talks by external expertise, supply of well -prepared study materials and guidelines for Practical and up-dated theories behind practical's well before the commencement of laboratory experimental Practical's.

34. How does the department ensure that Programme objectives are constantly met and learning out comes monitored?

- a) The system in curriculum facilitates to have a periodic and continuous assessment of the students through CIA and compulsory attendance.
- b) Inter-departmental analysis of both teacher and students in council of heads of the department level and departmental level after every semester ensures the status and directions of on-going trend in achieving the objectives of the Programmes.
- c) An effective and result-oriented monitoring mechanism is practiced by the PRINCIPAL to review the results of students and performance of teachers, every year.
- d) The interest and competition in selecting Allie Botany subject by the student in admission process is an indicator for the department to ascertain the fulfillment of the objectives of our well-designed Programmes.
- e) No. of students appearing and getting succeeded in Competitive examinations is closely watched in regular manner.
- f) Periodical checking mechanism supported by feedback from students (of both current and out-going) and alumni and reports of IQAC, helps to take suitable remedial measures.

35. Highlight the participation of students and faculty in extension activities.

- ✚ Student's participation in Extension activities is made mandatory for all UG Programmes. The students of ZOOLOGY & CHEMISTRY do advised to participation NSS, YRC and Sports



etc.

- ✚ Students have been conducting awareness Programmes on “learning Science” and in particular, in BOTANY for near school children by deliberation sand demonstration.
- ✚ The Staff have conducted one-day Refresher Programme for the Higher Secondary School teachers organized DIOTE who have handling BOTANY.
- ✚ Staff members are actively involved in society-involved Associations and Organizations for the purpose of serving their intellectual expertise.

Participation of faculties in Various Extension Activities

Sl. No.	Name of the Faculty	Name of the Extension Activity Participated
01	Dr. S.Dharmarajan	<ul style="list-style-type: none">- Additional Chief Invigilator for University Examinations- Chief Superintend of University Examinations- Chief Superintend of TNPSC Examinations- Member College Magazine- Member - Discipline Committee- Member college council- Member NAAC committee- Co-ordinator ECO club

36. Give details of “beyond syllabus scholarly activities” of the Department.

- ✓ Coaching to students for the preparation of UGC-CISR JRF cum Lecturer Test, SLET and other competitive examinations.
- ✓ Training the students to participation Botany Quiz Programmes
- ✓ Training the students to inculcate the learning skills, inter-personal and intra-personal skill and career choosing kills (through workshops & seminars)

37. State whether the Programme/ department is accredited/ graded by other agencies. Give details: Nil

38. Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department

Strengths:

1. A bridge course in Botany is conducted every year in the beginning of semester. In this course technical terms in Botany are given and described



- in simplified manner. Spelling test and oral tests are conducted for the same.
2. A practice of delivering an information on any subject as Today's message ("Indru oru Thagaval ") is followed by the students before the commencement of class. This practice inculcates the reading habit in the students to improve the general knowledge and remove the stage dearness among them.
 3. The principle of division of labor and collective responsibility are sowed among the students assigning garden duty, .Allied Botany students are divided into different groups. Garden manual works like garden cleaning, pruning of fences, watering, weeding and planting and maintaining medicinal and ornamental plants are assigned to group as garden duty. Their garden duties are watched by maintaining "**Garden duty register**".
 4. The students of whole class are encouraged to participate in seminars during the seminar; the students themselves evaluate the seminar performance of the students.
 5. To create interest among the students, group discussion, interaction method, quiz time, preparing of charts etc., are adopted in the weekend classes and last hour classes.
 6. Students are motivated
 - i) To write assignments and to find out their abilities in referring to new books in the library or simplifying the points.
 - ii) To solve simple problem in Genetics.
 - iii) To use OHP, bio-visual charts and in seminar to find out their abilities in handling new topics.
 7. Special classes are conducted weekly thrice to give university previous year exam question papers and to correct records.
 8. Experimental skills are monitored in all classes and a sort of self study is motivated by giving fresh specimens to describe in technical terms.
 9. Academically bright students are selected for coaching to score high marks or university ranks.
 10. Weekly tests and model examinations for both theory and practical (3hrs duration) are conducted before they attend university exams.
 11. Individual parent- teacher- student counseling is done for educationally disabled students and special coaching is given for them.

Weaknesses:

- i. Abolition of minor projects for college teachers and financial



assistance to individual departments in the form of DST-FIST, has become unforeseen difficulty while progressing towards upwards.

- ii. As an allied department, the annual allotment of budget in different heads is very low, The annual budget allocation for the department is Rs.10000/ only. Out of which, Rs.5000/- allotted for Stores & Equipments, Rs.3000/- /- for Machineries and Equipments, and Rs.2000/- for maintenance of Machineries and Equipments have been allotted. It is not enough to purchase of Microscopes, other instruments and practical specimens and chemicals. we can't fulfill the students requirements in practical classes.
- iii. At present, only one staff member is sanctioned for the department is could not enough to handling five different medium students.

Opportunities:

- i. Students have chance to appear confidently in competitive examinations as extra-coaching on specific skill is set made available.
- ii. Special coaching classes for NET/SLET/UGC-CSIR pave way to the students to go further in their academic excellence.
- iii. Each student could enrich his/her technical skills as the related

Achievements of the Department:

1. Though the department is offering Allied Botany Course, it has its own Botanical garden and well equipped laboratory with all infrastructures for major level studies.
2. The Students are given practice to raise the plants needed for practical, practically demonstrating different grafting techniques, herbal plants and ornamental plants cultivation in the Botanical cum Herbal Garden.
3. The college campus plants were identified and labeled by fixing the name boards containing Plant's Family name, Scientific, Vernacular and English common names.

Future plans of the department.

- i) Jatropha (Bio-diesel plant) cultivation in the college campus for further development of College. More medicinal plants to be introduced in the Botanical Herbal garden.



ii) Taking Steps to introduce Botany / Plant Bio Technology at UG and PG level.

iii) Planning to setup an organic compost farm by using our college campus plant leaves and other waste residues using mushroom and earth worms in large scale. This compost to be used for fertilizing the plants in our campus.

iii) Setup a permanent mushroom cultivation centre for all community students as well as for the nearby rural self help group peoples to give mushroom cultivation training and to induce their self employment opportunities.

