



GOVERNMENT DEGREE COLLEGE, BELLAMPALLY
DISTRICT MANCHERIAL, TELANGANA STATE
PROFILE OF DEPARTMENT OF BOTANY

Presented

By

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ABOUT THE DEPARTMENT

The Government Degree College, Bellampally was established on 11-12-1987 through G.O.Ms no. 309 based on the representations made to the government by the local representatives. The Government has sanctioned one Principal, eight lecturers and seven non teaching posts to run the college. The college is affiliated to Kakatiya University, Warangal.

Commencement of Science courses:

2008-2009, GORT No. 846 & 58, Rc. No. 439/ Admn 1-1/2008

The department of Botany has started functioning since the academic year 2019-2020 with the reestablishment of science courses. Main objective is to impart quality education in the field of Botany with the help of rapidly evolving Information and Communication Technology. At present the college offers Under Graduate Programme B.Sc. Life Science with a combination of courses Botany, Zoology, Chemistry, Botany, Zoology, Computer Science and Botany, Chemistry, Computer Application in Telugu and English medium with the aim to develop core competence in Botany and prepare the students to improve in the subject to face various exams. The department has also been working to promote the comprehensive development of the students, creating environmental awareness and to sustain the academic creativity and inventiveness. The department engages in a number of seminars, guest lectures and faculty development programmes. Currently the department is headed by Sri. D. Thirupathi.

As per the Almanac issued by the Kakatiya University, Warangal and the academic Organizer issued by the Commissionerate of Collegiate Education, Telangana the academic schedule is prepared and followed strictly. All the academic records are regularly maintained and scrutinized by the in charge of the department.

EXECUTIVE SUMMARY

With a view to provide quality Science Education to the students of this region, the department of Botany was established during the academic year 2019-2020 with B.Sc., B.Z.C.& B.Z.CA in both Telugu and English media. The department works to the highest standard thereby enhancing the reputation of the college.

Well experienced teacher is presently working.

Admissions surged in the course of Botany from 64 during the academic year 2019-20 to 94 during the academic year 2020-2021 with the efforts of staff as part of “Door to Door Admission Campaign”.

Botany Department has conducted a good number of co-curricular activities such as Student Seminars, Assignments, Group Discussions, Extension Lectures, Science Quiz, Elocution, Essay Writing, Field Visits and Study Projects etc. to increase the participative and collaborative learning.

The faculty of Botany department is efficiently using ICT for making the teaching-learning more effective.

To provide first-hand knowledge to the students, Field Trips and Study Tours have been organized.

The Department of Botany has a spacious digital classroom which is partitioned for the laboratory .

In addition to the college library, the department also maintains a departmental library with textbooks and reference books.

Apart from the regular curricular activities a good number of students also participate in co and extracurricular activities.

- Durgam Meghana, the student of B.Z.CA bagged the second prize in Yuvatharanga Cluster Level in Essay writing competition held at Adilabad 2019-2020 - AIDS
- Jadi Samatha of Iyr B.Sc. B.Z.C. student bagged Santoor Merit scholarship in the academic year 2020-2021

The Teacher of the Department of Botany is rendering her valuable services in various Academic, Administrative committees.

The Botany Department has played a significant role in initiation and adoption of Best Practices such as making eco-friendly clay Ganesh idols and preparation of natural colours organized by the NSS unit of the college. Students played an important role in plantation and maintenance of the college garden as members of Eco club and Harithaharam committees. The department has adopted best practices like maintaining a personal library.

Vision:

- To impart quality education in the field of Botany by updating knowledge using latest teaching techniques
- To inculcate highest values of life, respect for nature
- To sensitize human society for animal welfare, conservation and protection
- To transform the students into self reliant and mould them as socially responsible citizens

Mission:

- **Adoption** - By adopting student-centric and outcome based learning methods coupled with ICT tools to equip the students with required knowledge and skills
- **Awareness** - By conducting various programs on importance of nature and natural activities the department strives to prepare the students as responsible manpower in animal sciences and the same to propagate among the society
- **Visiting & Practising** - Sensitizing the students for animal welfare, protection and conservation by organising field visits and adopting certain practices for protection
- **Offering**-The department will endeavor to introduce Certificate Courses in future to equip the students with skills required to get employment opportunities to mould them into self-reliant individuals

STRENGTHS, WEAKNESSES, OPPORTUNITIES & CHALLENGES

Strengths:

- ❖ Well qualified teachers with rich and varied experience in teaching.
- ❖ Digital Classroom for ICT teaching.
- ❖ Well ventilated and spacious classrooms.
- ❖ Considerably good strength of students.

Weaknesses:

- ❖ Less number of Teachers than required.
- ❖ Non-availability of adequate infrastructure to accommodate the laboratory separately
- ❖ Lack of attached hostels for boys and girls

Opportunities:

- ❖ There is a lot of potential to increase the admissions in the coming days.
- ❖ P.G course i.e., M.Sc., can be introduced to cater to demand of students.
- ❖ More Certificate and Value Added Courses can also be introduced in future.
- ❖ New combinations of job oriented and skill development science courses can be introduced

Challenges:

- ❖ Tough competition from private colleges which are indulging in unfair practices during admission process
- ❖ Distant location of the college building from the TSRTC bus stand.
- ❖ Heavy workload

BASIC INFORMATION

The department is located in room no. 6 on the ground floor with good cross ventilation.

Programs and courses offered:

Programs offered: B.Sc. Life Science

Courses Offered:

B.Sc. (B.Z.C). T/M, E/M , B.Sc. (B.Z.CA) & B.Sc.(B.C.CS) T/M, E/M for Academic year 2019-2020

B.Sc. (B.Z.C). T/M , E/M & B.Sc. (B.Z.CS) E/M from 2020 - 2021

Sanctioned strength: 60 in each section

Duration: CBCS System (Six Semesters)

Eligibility Criteria at Entry Level: For admission into B. Sc. B.Z.C. the candidate should have passed Bi.P.C/ MLT/ or any other equivalent qualification, with life science as one of the subjects at Intermediate level

Academic Information

Academic Year	Name of the Programme	Duration in Years	Medium of Instruction	Sanctioned Strength	No. of Students Admitted	Total
2018-2019	B.Sc. Life Science	3 Years (6 Semesters)	Telugu	60	0	0
2019-2020	B.Sc. Life Science	3 Years (6 Semesters)	Telugu	60	39	67
	B.Sc. Life Science	3 Years (6 Semesters)	English	60	28	
2020-2021	B.Sc. Life Science	3 Years (6 Semesters)	Telugu	60	45	96
	B.Sc. Life Science	3 Years (6 Semesters)	English	60	51	
2021-2022	B.Sc. Life Science	3 Years (6 Semesters)	Telugu	60	43	85
	B.Sc. Life Science	3 Years (6 Semesters)	English	60	42	

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Details of qualification of teaching faculty

Academic Year	Name	Qualification	Designation	Experience
2018-19	D. Thirupathi	M. Sc., B.Ed.	Lecturer	13 Years
2019-20	D. Thirupathi	M. Sc., B.Ed.	Lecturer	
2020-21	D. Thirupathi	M. Sc., B.Ed.	Lecturer	
2021-22	D, Thirupathi	M. Sc., B.Ed.	Lecturer	

Non Teaching Faculty:

No. of Non Teaching posts sanctioned: Nil

No. of Non Teaching faculty working: Nil

Technical faculty:

No. of Technical posts sanctioned: Nil

No. of Technical faculty working: Nil

EXTENDED PROFILE

Program: B.Sc. Life Science

Number of students year wise

2018-19	2019-20	2020-21	2021-22
2	67	141	199

Number of seats earmarked for reserved category as per State Government rule

2019-2020	2020-2021	2021-2022
65	65	65

Number of Outgoing students year wise

2018-19	2019-20	2020-21	2021-22
1	1	0	39

Teachers

Number of full time teachers

2018-19	2019-20	2020-21	2021-22
01	01	01	01

Number of sanctioned posts

2018-19	2019-20	2020-21	2021-22
01	01	01	01

CRITERION WISE ANALYSIS OF THE BOTANY DEPARTMENT

CRITERION : I - CURRICULAR ASPECTS

Curricular planning and Implementation:

The College is affiliated to Kakatiya university, Warangal and the curriculum for the B.Sc.courses is prescribed by the Board of Studies, Department of Botany of the University. The curriculum planning and implementation work is undertaken in a planned way. The Curriculum is being implemented according to the Almanac provided by the Affiliated University and Academic Calendar issued by the Commissioner of Collegiate Education, Hyderabad, Telangana. The In-charge of the Department reviews the status of the completion of syllabus and monitors the conduct of other co-curricular activities such as Remedial classes, Student Seminars, Quiz Competitions, Assignments, Group Discussions and Internal Exams etc. The faculty is encouraged to adopt modern technology to make the teaching- learning process more effective. The Department also organizes various programs related to academics such as Field Trips, Educational Tours etc.

Students were taught One paper in each semester from I to IV semesters and Two papers in each semester in V & VI semesters until the Academic Year 2018-19. As the Govt. of Telangana introduced Common Core Syllabus for all Universities from Academic Year 2019-20, students are offered One paper in each semester from I to VI Semesters. In addition, Skill Enhancement papers are offered in III & IV semesters. Students are offered to choose a Generic Elective paper in V semester and a Project work in VI semester which were newly introduced as part of the new curriculum

Academic Flexibility:

The Government of Telangana has introduced Choice Based Credit System in the state as per the guidelines given by the UGC in all universities including the Kakatiya University to which this college is affiliated from the academic year 2016-17. There are two groups of elective papers for B.Sc., B.Z.C. final year both in English and Telugu mediums.

Curriculum Enrichment

According to the suggestions and guidelines of the Telangana State Council of Higher Education (TSCHE), the Affiliating University i.e., Kakatiya University, revises the curriculum from time to time to suit the industry requirements. The Department in line with College focuses on effective implementation. Besides core courses, the Department also implements the Skill Enhancement Courses such as Environmental Science, Gender Sensitization, Communication Skills in English and Basic Computer Skills, and Generic Electives such as Public Health and Hygiene and Water Resource Management etc. Human Values and professional Ethics Course was implemented till the academic year 2016-17. The department actively participates in the programmes related to enrichment of curriculum such as awareness programmes on gender sensitization through Women Empowerment Cell and ICC, environmental sustainability through eco club ,eco friendly activities by NSS unit.

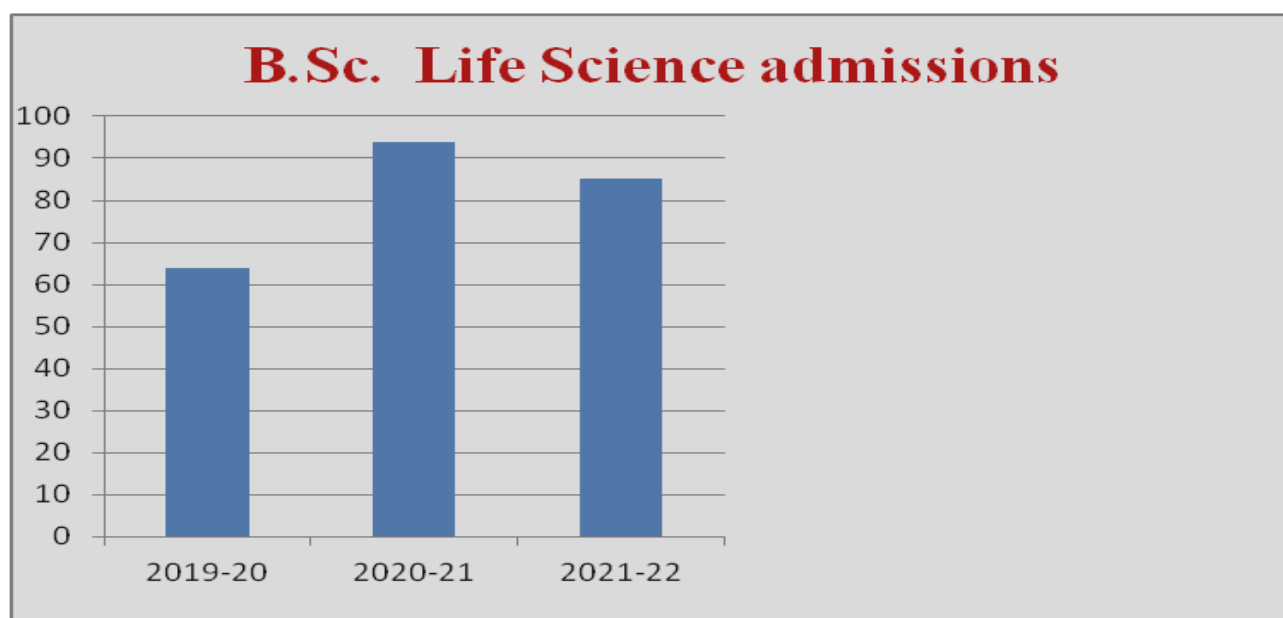
Feedback system

The department collects feedback on curriculum from different stakeholders like students, teachers etc., analyses the feedback and keeps it for communication to the affiliated university.

CRITERION: II - TEACHING, LEARNING AND EVALUATION

Number of sanctioned seats and admitted year wise

Year & Course	2019-2020		2020-2021		2021-2022	
	Intake	Admitted	Intake	Admitted	Intake	Admitted
B.Sc. Life Science T/M	60	39	60	45	60	42
B.Sc. Life Science E/M	60	28	60	51	60	43
Total	120	67	120	96	120	85



Students admitted from the Reserved Categories

Category	SC		ST		OBC		General		Total		Grand Total	
	A.Y	M	W	M	W	M	W	M	W	M		W
2018-19	0	0	0	0	0	0	0	0	0	0	0	0
2019-20	06	15	04	07	10	19	0	06	20	47	67	
2020-21	13	39	02	01	10	27	01	03	26	70	96	
2021-22	04	21	05	07	13	32	01	02	23	62	85	
Total	23	75	11	15	33	78	02	11	69	179	248	

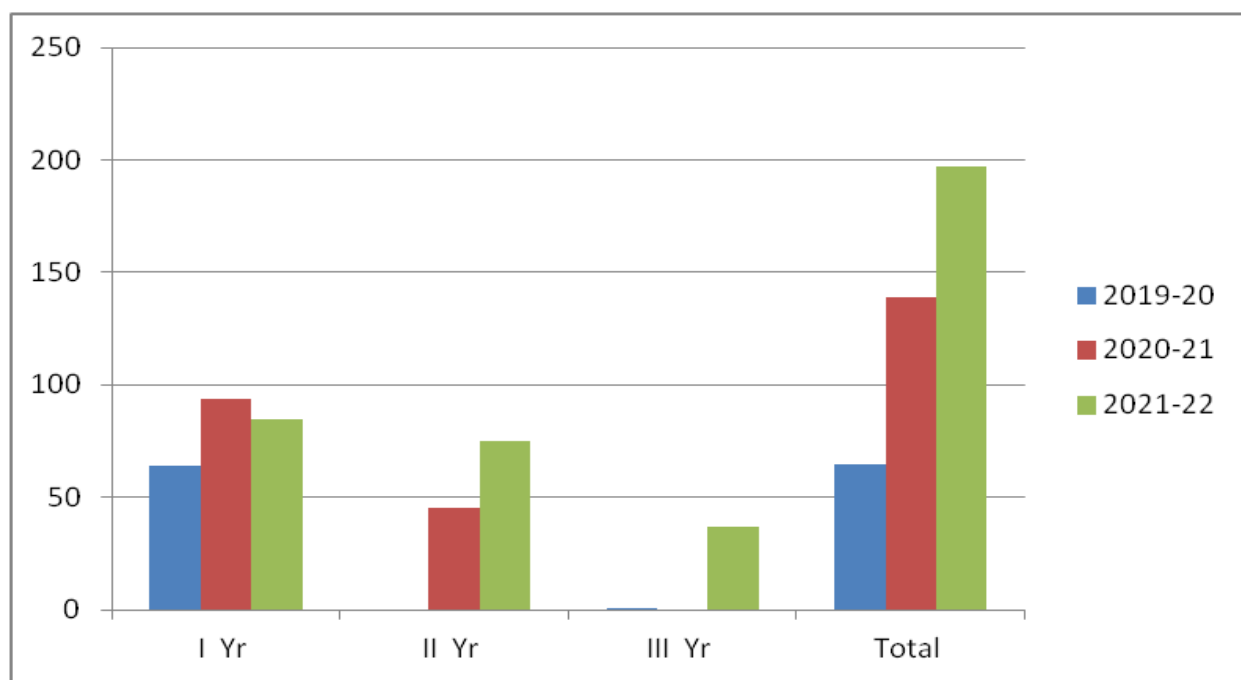
Students strength particulars: 2018 -2019 to 2021 - 2022

S.No	A.Y	Programme&	Medium	Men	Women	Total	Yearwise	Grand Total
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.		Yr					Total	
1	2018-2019	B.Sc. Life Science I year	T/M	0	0	0	0	2
			E/M	0	0	0		
		B.Sc. Life Science II year	T/M	0	1	1	1	
		B.Sc. Life Science III year	T/M	0	1	1	1	
5	2019-2020	B.Sc. Life Science I year	T/M	10	29	39	67	68
			E/M	10	18	28		
		B.Sc. Life Science II year	T/M	0	0	0	0	
		B.Sc. Life Science III year	T/M	0	1	1	1	
6	2020-2021	B.Sc. Life Science I Year	T/M	14	31	43	96	141
			E/M	12	39	51		
		B.Sc. Life Science II year	T/M	4	23	27	45	
			E/M	1	18	19		
		B.Sc. Life Science III year	T/M	0	0	0	0	
		B.Sc. Life Science I Year	T/M	16	27	43	85	
			E/M	08	34	42		

7	2021-2022	B.Sc. Life Science II year	T/M	12	25	37	75	199
			E/M	11	30	42		
		B.Sc. Life Science III year	T/M	4	20	24	39	
			E/M	5	10	15		

Student Strength Analysis (2019-20 to 2021-22)



Catering to Student Diversity:

The Department of Botany takes every measure possible to understand the needs and requirements of the students before the commencement of the program. Students are counseled at the time of admission and an orientation program is organized in which students are familiarized with the course, mode of internal assessment as well as facilities available in the college. Teachers before beginning their courses informally get the pulse of the students in the class, their knowledge about the course and their comfort level with English as a medium of instruction. Teachers during class interaction identify students' potential and then devise strategies to reduce the gap in the knowledge and skills. Identified slow learners are provided intense attention. Assignments and slip tests are conducted to understand their progress. Advanced students are encouraged to aim high and provided competitive books. Slow learners are identified and are given remedial coaching to help them to reach the curricular plan. Faculty pays close attention through the mentor mentee system to understand their problems and counsel them.

Student - Full time teacher ratio

Ratio of students to full time teachers

Academic Year	Students, full time teacher Ratio
2018-2019	2:1
2019-2020	66:1
2020-2021	141:1
2021-2022	199:1

Teaching Learning Process

Teaching learning process at the department has been changed from teacher centred to student centric after introduction of the CBCS. The experiential and participative learning are the effective and active modes of learning which are being adopted enormously by the Department of Botany. Teaching learning activities are made effective through illustrations, visits to other institutes, field and educational tours, seminars and talks by experts are organized every year. Students are given individual projects and class assignments, focusing on self-study and independent learning. They are also assigned group projects and activities which promote peer

learning and team building. Classroom discussions, debates, seminars, quiz programmes, presentations by students, brainstorming activities, creating mind maps facilitate participative learning. Extension activities, skill oriented training are provided to ensure experiential learning for students. The faculty and students efficiently use ICT methodologies like PPT, YouTube Channel and online videos for teaching learning to optimize learning experience. ICT tools such as ZOOM, Google Meet are used for online teaching, conducting Webinars and online Quiz programs. T-Sat Nipuna classes are being engaged.

The following innovative and creative Teaching-Learning techniques have been adopted:

- Sharing the subject and competitive information in the ‘WhatsApp’ group.
- Prepares the subject PPTs in an effective manner and teaches on smart interactive boards to create more interest in learning among students.
- For better understanding of the subject concepts group discussions and debates are organized among the students.
- To inculcate critical thinking, problem solving and research bent, students were encouraged to undertake Study Projects as part of JIGNASA program

Study Tours and Field Trips

The Department has arranged Study Tours and Field Visits to various departments to enhance experiential learning

Details of Field Trips organised

S.No.	Date	Place of visit	No. of students involved	Name & Designation of the Resource Person
1	30-01-2020	Krishi Vigyana Kendra Bellampally	20	Dr. Rajeshwar Kumar Naik Program Coordinator KVK, Bellampally Dr. I. Thirupathi Scientist (Crop Production)
2	27-10-2021	Gandhari Vanam Mancherial	24	D. Thirupathi Lecturer

Field visit to Krishi vignyankendhram & Gandharivanam



Details of Guest Lectures:

The Department of Botany conducts Guest Lectures on latest topics in Botany by inviting eminent Lecturers from other colleges.

S.No.	Date	Topic	No. of students involved	Name & Designation of the Resource Person
1	05-11-2019	Energy Dynamics in an Ecosystem (Energy Flow)	30	S. Srinivas Associate Professor Govt. Degree College, Mancherial, Mancherial
2	27-02-2021	Organic Grower	25	Dr. I. Thirupathi, Scientist (Crop Production), KVK, Bellampally



Guest Lecture

Guest lecture given by
S Srinivas
 Asst. Prof of Botany
Dr. I. Thirupathi
 Agrarian Scientist

Remedial Coaching:

Remedial classes are engaged every year to the academically slow learners to support them. These students are given extra coaching in various subjects and topics to improve their academic performance.

Details of Remedial Coaching

S. No.	Name of the teacher	No. of students taken Remedial coaching
		2019-2020
1	D. Thirupathi	15

Student Study Projects

S.No.	Title of the Project	Name of the Supervisor	Submitted by
1	Millets & Cereals- Benefits	Sri. D. Thirupathi	P. Manasa D. Meghana P. Jayanthi D. Rajkumar of B.Sc. Life Science I year
1	Wheat Grass Benefits	Sri. D. Thirupathi	M Sai Sahaj Sk Shabana Azmin P. Srivani P. Prathyusha G. Srilekha



Student study Project on Wheat Grass

Student Seminars

Botany department has conducted a good number of student seminars in various topics to enhance the knowledge, skills and encourage participatory learning

Details of Student Seminars

S.No.	Name of the student	Group, Medium & Semester	Academic Year	Topic	Teaching aids used
1	E Laxmi	Sem-1	2019-202	Bacteria Cell Structure	Blackboard
2	P.Jayanthi	Sem-1	2019-2020	Mycoplasma	Blackboard
3	A Krishnaveni	Sem-II	2019-2020	Pinus Stem	Blackboard, chalks
4	D Meghana	Sem-II	2019-2020	Pinus Needle	Blackboard
5	P Prathyusha	Sem-I	2020-2021	Archaeobacteria	Blackboard, chalks
6	P Srivani	Sem-I	2020-2021	Chara	Blackboard
7	B. Sandhyarani	Sem-III	2020-2021	Mitochondria	Blackboard



Student Seminars

A Krishnaveni

P Jayanthi

D Meghana

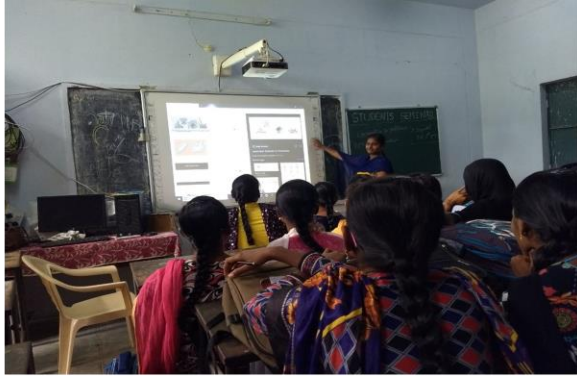
B Sandhyarani

ICT enabled tools for teaching learning process

Modern teaching tools such as LCD Projectors, Smart Boards, YouTube Channels and T-SAT live presentations are widely being used. Interestingly, the teacher is effectively using the ICT based teaching methods with the help of PPTs, online videos. Online Platforms such as ZOOM, Google Meet are being used for online teaching, conducting Webinars and Online Quiz programmes etc.

The following innovative and creative Teaching-Learning techniques have been adopted:

- Subject teacher shares the subject and competitive information in the 'WhatsApp' group.
- The subject teacher prepares the subject PPTs in an effective manner and teaches on smart interactive boards to create more interest in learning among students.
- For better understanding of the subject concepts group discussions and debates are organized among the students.
- To inculcate critical thinking, problem solving and research best students were encouraged to undertake Study Projects as part of JIGNASA program
- Dept. of Zoology takes part in celebration of 'Science Day' and Science Quiz competitions conducted by involving the large number of students to acquaint themselves with the Science subjects.



**USE OF ICT(Information Communication Technology tools.)
FOR EFFECTIVE TEACHING BY STUDENTS**

- ▶ **P Jayanthi**
- ▶ **G Gamy**
- ▶ **P Manasa**

Details of Group Discussions

Promoting positive Peer Support & Building Leadership qualities

S.No.	Academic Year	Semester	Topic
1	2019-2020	Sem-I	Bt Cotton Seeds
2	2020-2021	Sem-II	Polytrichum
3	2020-2021	Sem-III	Medicinal Botany



GROUP DISCUSSION
TOPICS:
Bt Cotton
Environmental Pollution
Medicinal Plants

D Laxmi
Maheshwari

Details of Science Quizzes conducted

S.No.	Academic Year	Topic	No.of teams/students participated
1	2019-2020	GeneralBiology	3 teams-12 students
2	2020-2021	Diseases caused by microorganisms(e-Quiz)	3 teams-12 students



QUIZ PROGRAMME

Conducted by
D. Thirupathi
Lecturer in Botany

Skill Enhancement - Making Models



Best Practices

Collection of Monocot & Dicot Seeds

Collection of Medicinal Plants

Fossil Collections



Ratio of students to mentor (For Academic and Stress related activities)

Academic Year	Ratio of mentees to mentor
2018-2019	18:1
2019-2020	30:1
2020-2021	44:1
2021-2022	56:1

Teacher Profile and Quality

There is only one teaching post sanctioned and filled with a regular faculty.

The particulars of the present faculty:

The department has one regular faculty as per the existing State Government guidelines. The staff member is actively engaged in academics. She is experienced with adequate efficiency, maintains accurate academic plan and imparting teaching to students as per the academic schedule. The department of Botany has the best faculty in respect of teachers who are the catalysts for the next generation.

Percentage of full time teachers against sanctioned posts in the department: 100%

Academic Year	Name of the Teaching Faculty	Qualification	Designation	Experience in the same institution
2018-19 to till date	D. Thirupathi	M. Sc., B.Ed.,	Lecturer	3 years

Evaluation Process and Reforms

The department conducts two Internal Assessments, two assignments for each semester and University semester final examination. The subject wise marks registers are maintained both for Internal Examinations and University examinations separately. Practice tests and assignments are conducted as per the lesson plan. Internal Examination carries 20 marks and the semester final examination 80 marks.

Grievances from the students regarding Internal examinations are brought to the notice of the principal and resolved. In case of University examinations if the student is not satisfied with the marks they can apply for revaluation under the guidance of examination coordinator and administrative staff.

Participation of teachers in evaluation duties:

The teacher of the department is extensively involving in examination duties like External examiner

for Botany practical examinations, invigilation, observers for Kakatiya University.

Reforms in evaluation process:

Introduction of Semester System (CBCS): The examination system for evaluating the students' performance has been changed from existing year-wise examination to semester wise examination for continuous evaluation of the students since 2016-17 onwards. Moreover, the credit system has replaced the existing awarding of marks system. The Kakatiya University to which this college is affiliated, has introduced the new CBCS syllabus, specially designed for semester system, from the academic year 2016- 17.

Student Programme Outcomes:

- **Enabling students to develop a positive attitude towards Botany as an interesting and valuable subject of study.**
- **Introduction to various courses like Biotechnology, Microbiology**
- **,crop production, Forensic science etc.**

Attainment of Programme and Course outcomes and their evaluation

The Program Outcomes (POs), Program Specific Outcomes (PSOs) and the Course Outcomes (COs), of all the programs offered by the institution are well communicated to the teachers before beginning of the every academic year in the form of manuals or handouts by the IQAC and Academic Coordinator and the same will be communicated to the students by the concerned teachers in their classrooms Internal college examination committee deals with the effective implementation of the evaluation reforms regarding the attainment of course outcomes and programme outcomes. Besides, our department also tries to attain the course and program outcomes through conducting the activities such as career counselling, personality development programs, Yuvatharangam, health awareness programs, life skills development programs, student study projects, field survey, study tours, practical work, seminars etc.

The detailed Program Outcomes, Program Specific Outcomes and Course Outcomes are placed on the college website and are made available to all the stakeholders such as teachers, students, parents and alumni. The relevance of the COs will be discussed by the faculty with the students and the feedback on COs is obtained from the students. Program-Specific Outcomes of

all the departments are highlighted through career options open to students after completion of the programs and the achievements of the alumni are also highlighted.

POs, PSOs and COs of B. Sc. (BZC):

Programme Outcomes: The primary objective of the department is to impart quality education in the subject of Botany as a basic science and its applied branches to the students from rural Telangana with very minimum fees.

- ❖ To provide quality education in a branch of Biological sciences i.e Botany with different specializations. To facilitate Higher education & research in Botany.
- ❖ To provide quality education offering skill based programs and motivate the students for self employment in applied branches of Botany.
- ❖ To inculcate the value based education and entrepreneurial skills among the students.
- ❖ To Inculcate the spirit of resource conservation and love for nature.
- ❖ To conduct field studies and different projects of local and global interests.
- ❖ To provide opportunities for professional and personal development through curricular and co- curricular activities.
- ❖ Provide consultancy and organize extension activities

Programme Specific Outcomes:

- ❖ The specific learning goals for General Botany are to provide students with a working knowledge of fundamental principles in Botany that will provide a foundation for their later advanced course work in more specific biological subjects.
- ❖ As General Botany is a basic course, students will become familiar with animal classification schemes and associated taxonomic group diagnostic characteristics as well as developing an understanding of and ability to apply basic principles.
- ❖ The laboratory and lecture sections of the course are highly integrated and directed toward teaching students the principles of animal evolution, classification, form and function.

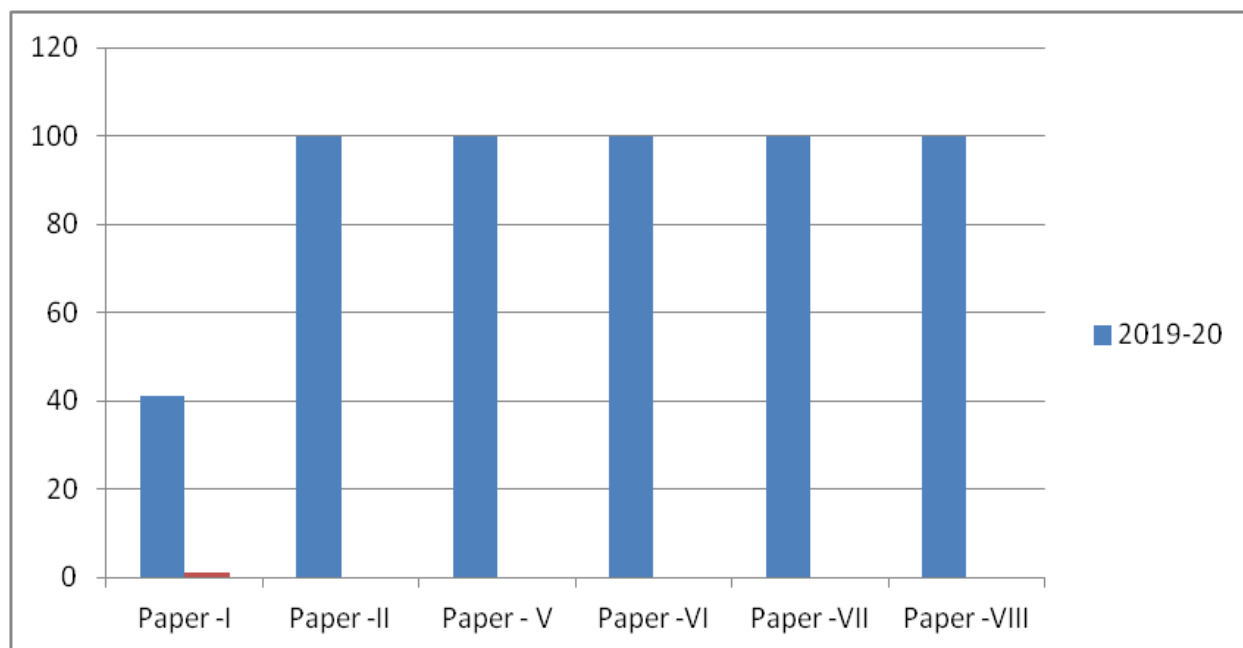
Average Pass percentage of the students

The percentage of university results in the subject concerned is maintained. The department discusses the review of results and proper steps will be taken for the improvement of academic performance of the students.

Semester wise pass percentage of University Exams

A.Y.	Programme& Medium	Semester	Paper	Appeared	Passed	Percentage
2018-2019	B.Sc. Life Science	IV	IV	01	00	00
		V	V	01	01	100
			VI	01	01	100
		VI	VII	01	01	100
			VIII	01	01	100
2019-2020	B.Sc.Life Science T/M	I	I	32	17	53
	B.Sc.Life Science E/M			20	07	35
	B.Sc.Life Science T/M	II	II	21	21	100
	B.Sc.Life Science E/M			18	18	100
	B.Sc.Life Science T/M	V	V	01	01	100
				VI	01	01
		VI	VII	01	01	100
				VIII	01	01

Result Analysis 2019-20 to 2020-21



CRITERION: III- RESEARCH, INNOVATION AND EXTENSION

The Department always encourages the students to undertake study projects as a part of their regular

activities to inculcate a research bent in the minds of the students and to develop innovative outlook and creativity. It is widely believed that 'Innovations are the integral part of teaching and as one of the primary objectives of education'. Keeping this in view, the Commissioner of Collegiate Education, Hyderabad introduced 'JIGNASA – Students Study Projects' program in the year 2016-17 which encourages research projects in about 15 subjects in the Govt. Degree Colleges across the State. As part of this program, Cash Prizes are given to the State Level First (Rs. 30,000) and Second Best Project(24,000). Commendation prize will also be given to the third best project in each subject. As part of this initiative, Botany students have undertaken some study projects

Extension and outreach activities

- The students of Department of Botany have extensively participated in various extension activities
- conducted by the different wings of the College such as NSS, RRC, Women Empowerment Cell,
- Health Club, Red Cross, Consumer Club, Swachh Bharath, Telanganaku Haritha Haram, AIDS Awareness, Gender Issues, TSKC and IQAC Activities etc.

- The department of Botany organizes and participates in various extension activities to sensitize the students to various social issues and to strengthen their participation in community development.
- Participated in Gnana Jyothi Programme, a series of Quiz programmes organised under the Career Guidance Cell of the institution during the academic year 2018-2019
- Organised an awareness programme on "Consequences of Eve teasing and Sexual Harassment" on 01-09-2018 organised by ICC of the college
- Organised a free Dental camp for the students and staff of Government Degree College, Bellampally in collaboration with the college NSS unit on 08-11-2019
- Organised an awareness programme on "On Child abuse and Protection Laws" on 19-11-2019 in connection with "World Child Abuse and Prevention Day"
- Organised an awareness programme on "Women Rights" on the occasion of "International Women's Day" on 11-03-2020
- Organised an Awareness programme on CoronaVirus Disease at the college on 12-03-2020 and the students actively participated in the awareness of COVID-19 as a part of their outreach programs during the NSS camp
- Participation in COVID-19 vaccination camp-2021
- Organised and participated in government initiated programmes like Swach Bharath, Telangana Ku Harithaharam, AIDS awareness rally and the program initiated by the college NSS unit regarding road safety, eco friendly activities.

Plantation Programme



Celebration of Floral festival of Telangana-Bathukamma



Swachh Bharat



Telangana Ku Haritha Haram



Number of linkages for Faculty Exchange, Student Exchange, Field Trips

Sl. No.	Title of the Program	Name of the partnering institution/Industry	Date
1	Field Trip	Krishi Vigyan Kendra, Bellampally	29-01 2020
2	Field Trip	Gandhari Vanam, Mancherial	27-10-2021

Funcional MOU

Between Department of Lifesciences and Central Silk Board Chennoor, District: Mancherial. with effect from 23.11.2021 to 22.11.2023(For 2 Years).

MEMORANDUM OF UNDERSTANDING

This memorandum of understanding is signed between:

The Department of Life Sciences, Government Degree College Bellampally, Dist. Mancheril, located at Bellampally, affiliated to Kakatiya University, Warangal, established in the year 2008 and acting through

The In-charge, Department of Life Sciences (Botany and Zoology), GDC Bellampally, Dist. Mancheril.

AND

Central Silk Board, Ministry of Textiles, Government of India acting through Scientist D, B.S.M & T.C

Objective: The prime objective of the Memorandum of Understanding is for the promotion of:

- i. Innovations in education by practical method of learning
- ii. Interdisciplinary and multi disciplinary studies.
- iii. Exposure to applicable knowledge.
- iv. Generating interest in working with research institutions

NOW THEREFORE, THE DEPARTMENT OF LIFE SCIENCES (BOTANY & ZOOLOGY), GOVERNMENT DEGREE COLLEGE, BELLAMPALLY AND B.S.M & T.C CENTRAL SILK BOARD, CHENNOOR have intended, agreed and consented to the following terms and deeds in pursuance of a common intent to promote Study of Life Sciences and expose to enhanced level of knowledge and application.

FIELD OF COOPERATION:

1. Faculty visits, Student visits, Extension Lectures, Value Added Courses, Field Projects, Workshops and Seminars.
2. Awareness on Sericulture: To create awareness on the type of silk, type of food, rearing techniques and method of extracting silk from silk worms, advanced technologies used and market value.

CONDITIONS OF AGREEMENT:

- a. The details of the effective implementation of this Memorandum of Understanding shall be jointly worked out on mutually acceptable terms within the parameters of the policies, rules and regulation of both the institutions.
- b. The parties to the memorandum may, by mutual consent, add, modify, amend, delete and review any item(s) and condition(s) of this agreement.
- c. The intent and implementation of this memorandum is subject to the policies, rules and regulations of the respective institutions.
- d. The parties to this MOU undertake to treat as confidential and privileged information of the other institution which is so classified in advance. The terms of confidentiality and mode of disclosure shall be as per mutually acceptable terms. This MOU shall require the ratification of the competent academic/ executive body of both the institutions.

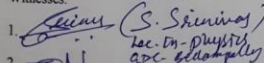
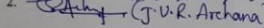
PERIOD OF AGREEMENT: The MOU shall remain in force for a period of 2(two) years from the date of signature and seal and may be terminated by either side by giving a one month notice to that effect in writing. However, notwithstanding the notice of the intent to terminate the memorandum, all rights, obligations and corresponding duties and subsisting therein shall be respected and mandated till the finalization and accomplishment thereof.

Signed to & On behalf of
Government Degree College, Bellampally
District Mancheril, Telangana State
Date: 23-11-2021

PRINCIPAL

Govt. Degree College
Bellampally-504 251
Dist:Mancheril (T.S.)

Witnesses:

1.  (S. Srinivas)
Sec. to Principal
GDC Bellampally
2.  (J.V.R. Archana)

Asst. Professor of English,
GDC, Bellampally.

Signed to & On behalf of
B.S.M & T.C CENTRAL SILK BOARD,
CHENNOOR
Date: 23-11-2021
Scientist-D
B.S.M. & T.C.
Central Silk Board
CHENNOOR



CRITERION: IV- INFRASTRUCTURE AND LEARNING RESOURCES

Physical facilities

Spacious class rooms:

The department is located on the ground floor of the college building. It has one spacious and fully ventilated classroom with proper electrification, lights and fans, LCD projector, dual desks etc.

Digital classroom:

The CCE has sanctioned Digital Classroom to the Botany Department in the year 2019. A Smart-board projector and computer system with speakers is installed in the room . It is expected that the students will learn the advanced topics with the help of audio-visual mode of teaching. Students' seminars are being conducted in this room so that the students can show their talent by creating curiosity.

Pic

IT Infrastructure and Maintenance of college facilities

CCTV Camera Surveillance

Presently the department is provided with a CC Camera installed in the corridor to enhance the protection from untoward incidents



Departmental library:

The Faculty of the department of Botany has been maintaining a separate library with 25 books of various kinds like Textbooks, Reference books, Study material and others for circulation among the students.

Laboratory Equipment:

The department has one laboratory which is equipped with basic facilities. The laboratory can accommodate 25 students at a time. The department has only a very few instruments. Recently the requisition proposal has been sent to the Commissionerate of Collegiate Education to provide lab equipment.

(Infrastructural facilities and lab equipment are mentioned in the Appendix -III)

Facilities for Cultural activities, Sport and Games:

- The department encourages the students to participate in extracurricular activities such as cultural activities, sports and games.
- The college has a spacious playground for outdoor games.
- As a part of Yuvatharangam, a programme initiated by the Commissionerate of Collegiate education, the college organises various competitions every year.
- D. Meghana of B.Sc. I year student bagged second prize at cluster level in Essay writing during 2019-2020.

Student Support

Number of Students Benefited by Scholarships and Free-ships provided by the Government

Students Benefited by Scholarships provided by the Government

S.No	Academic Year	Total No. of Students	No of students benefited by scholarships
1	2015-2016	05	05
2	2016-2017	02	02
3	2017-2018	02	Nil
4	2018-2019	02	Nil
5	2019-2020	65	04
6	2020-2021	139	20

Number of Capability Enhancement and Development Schemes

Students of the Department of Botany have actively participated in various capability enhancement and Development Courses conducted by the concerned Department/Cell in the College. The important capability enhancement and development programmes are as follows:

In the beginning of every academic year, the college Principal constitutes various committees such as Academic, Administrative, IQAC and Extension Committees for smooth and effective conduct of curricular, co-curricular and extra-curricular activities. Students of the Department of Botany participate in various committees.

Representation of Students in academic Administrative Bodies/ of the Institution

S.No	Academic Year	Name of The academic/ Administrative committee	Student representatives from Botany department
1	2018-2019	Special Fee Committee	K.Soundarya, B.Sc. B.Z.C.II yr
2	2019-2020	Special Fee Committee	K.Soundarya, B.Sc. B.Z.C.II yr
		Sports and Games Committee	O. Venkatesh, B.Sc. B.Z.C. I yr
		Cultural & Literary Committee	Y. Vamsi Krishna,B.Sc. B.Z.C. I yr
3	2020-2021	Sports and Games Committee	A.RajeshB.Sc. B.Z.C. I yr
		Cultural & Literary Committee	Y. Vamsi Krishna,B.Sc. B.Z.C. I yr
		Special Fee Committee	P. Manasa B.Sc. B.Z.C. II yr
		Student Council	P. Manasa& D. Meghana B.Sc. B.Z.C. II yr
4	2021-2022	Anti Ragging Committee	P .Prathyusha BSc. B.Z.C. II yr
		Eco Club Committee	P. Amulya BSc. B.Z.C. II yr
		Cultural & Literary Committee	D. Meghana, Y. Vamsi Krishna BSc. B.Z.C. III yr

No. of Awards received by the students

1. DurgamMeghana of B.Sc.(BZCA I yr E/M) student selected in Yuvatharangam Cluster Level Essay writing competition held at Adilabad in Academic Year 2019-20.
2. Jadi Samatha of I yr B.Sc.B.Z.CS. student bagged Santoor Merit scholarship In the academic year 2020-2021

Alumni Engagement

The college has an alumni association which is a registered body actively functioning for the overall development of the institution.

CRITERION-6:GOVERNANCE, LEADERSHIP AND MANAGEMENT

Institutional vision and Leadership

The Staff and students of the department of Botany strive hard with heart and soul to fulfill the vision and mission of the college.

Vision

- To impart quality education in Botany using latest teaching techniques
- To inculcate values of life, respect for nature
- Imparting Botanical knowledge to agrarian rural students

Mission

The department strives to focus its efforts to realize its vision through the following mission statements:

- Involving Best Practices
- Infusion ICT Based Learning
- Offering Certificate Courses in future to equip the students with skills required to get employment opportunities.

Additional Responsibilities (2019-2020)

S.No.	Committee	Responsibility
1	Harithaharam Committee	Convener
2	Eco Club	Convener

Performance Appraisal of Teaching staff

The IQAC appraises the performance of the teaching staff by adopting two methods such as Feedback System and elf Appraisal Forms (API)

Feedback System: The performance of the teacher is assessed based on the feedback received from the students. The feedback is collected annually through a structured questionnaire across various teaching quality parameters and analyzed to assess the performance and to take necessary steps to plug the loopholes if any. The feedback from the students, peers and principal is also collected and analysed for sending the proposals for the best teacher award under the Yuvatarangam program organised by the CCE, Hyderabad.

Teacher wise Feedback Analysis Overall Response

Sl. No.	Name of the Teacher	Feedback overall response in %- 2019-2020
1	D. Thirupathi	--% good/ Excellent

Internal Quality Assurance System

The Department of Botany is always in forefront in adopting the quality initiatives undertaken by the IQAC and has contributed significantly in various practices

- Academic calendar and Institutional annual academic plan
- Comprehensive feedback mechanism
- Internal academic audit
- Teaching Innovations
- Library practices and Best practices
- Preparation of reports
- Mentor Mentee System etc.

Review of Teaching Learning process, Structure & Methodologies of Operations and Learning outcomes at Department of Botany:

The Department reviews teaching learning process through the following methods:

- Monitoring Classes
- Feedback from students, teachers
- Internal Academic Audit
- Review of Examination Results
- Reports on Teaching Methodologies
- Self Appraisal Form

CRITERION:VII- INSTITUTIONAL VALUES AND BEST PRACTICES

Green Campus Initiatives:

The faculty and the students of the Department of Botany play a significant role in maintenance of the college garden. Every year as a part of Telangana Ku Haritha Haram program initiated by the Government of Telangana. Under the Eco club and TKHH committees the students and the staff participate in plantation programmes every year. A garden of fruit plants and medicinal plants are being maintained separately.



Efforts/Initiative in providing an inclusive environment:

The students of the Department of Botany participate in several programs and observe commemorative days like Ekta Divas, Telugu Bhasha Dinotsavam, National Integration Day, Constitutional Day etc. Students celebrate regional festivals like Bathukamma, Maha Shivaratri Jathara, SammakkaJathara.

Sensitization of students to Constitutional Obligations:

The department of Botany actively participates in the programs/ initiative taken by the institution to sensitize the students and staff to the constitutional obligations. Take part in

- Electoral Literacy Club
- National Voters Day(25th January every year)
- Constitution Day(26th November) etc.

Celebration of National, International commemorative days, events and festivals:

Students and staff participate in the national festivals like Independence Day, Republic Day, Birth and death anniversaries of great personalities Mahatma Gandhi, Sardar Vallabhbhai Patel, KomuramBheem, Abdul Kalam etc. organised by the institution every year. Students enthusiastically participate in the celebration of National Science Day, Teachers Day, National youth Day etc.

Best Practices:

The department of Botany has adopted the following best practices:

- Maintenance of Book Bank consisting of Text books, Reference books, Study material, Books for competitive examinations, General Knowledge etc.
- Student Study Projects
- QR Code generated to the Plants



Plan of action of the Department for the next five years:

In addition to normal academic works we strongly desire to handle some minor research projects.

1. Motivating the students to gain minimum technical knowledge and skill in order to make them competent to cope up with new learning strategies
2. To conduct student support and progressive activities like Quiz, Study Projects, Guest Lectures and etc.
3. To conduct tutorials, inculcate reading of Life Sciences related topics in news papers and magazines and collecting press clips from news papers and magazines.
4. Strategies for advanced learners inculcating the habit of consulting the reference books for knowing more information about subject topics
5. Besides academic teaching instruction for developing positive attitude, good manners and good behavior.
6. The Department wishes to apply for the sanction of P.G course for M.Sc. Botany
7. To inculcate social awareness, attitude, practice regarding dreadful diseases like Dengue, Anthrax, Encephalitis, Hepatitis etc

APPENDICES

APPENDIX - I: TEACHER'S PERSONAL PROFILE

APPENDIX - II: DEPARTMENTAL TIME-TABLE (2019-20) & WORK LOAD

APPENDIX - III: BOTANY (CBCS) SYLLABUS AND STRUCTURE

INDIVIDUAL PROFILE OF THE FACULTY MEMBER

1. Name in Full (with Surname) : Durgam Thirupathi
2. Designation : Lecturer in Botany
3. Father's name : Shanker
4. Mother's name : Ammakka
5. Date of Birth : 15/06/1984
6. Qualifications (copies of certificates) : MSc, B.Ed
7. Teaching Experience (enclose DL Appointment Order): 13 Years
8. Books Published: (Title Page, concerned pages, Last Page, ISBN/ISSN No.)
 - a. Authored /Course Writer
 - b. Edited
 - c. Journals Edited
 - d. Anthologies Edited
9. Research Papers (Title Page of the Journal, concerned pages and Last Page, ISSN/ISBN :
 - a. Presented : National / International (with Impact Factor) : **NIL**
 - b. Published: Single/ Joint :
 - c. Abstracts in Conf/Seminar Proceedings Published :
10. Training Programmes Attended (RC/OC/Workshops etc.): **Nil**
11. No. of Workshops/Seminars/Conferences Organized :
12. Invited Talks/Resource Person/ Key Note Speeches: **00**
13. Chaired Conference Sessions : National /International /State etc.,
14. Research Graph: Supervised (M.Phil./Ph.D.) **NA**
15. Membership on Academic Bodies (BOS): -NA
16. Membership in Standard Journals : NA

17. Member on Editorial Board of Research Journals: -NA
18. Extension Services (Guest Faculty/NSS/NCC/ T-SAT Mana TV Lessons with URLs on Youtube): NO
1. Given Extension Lectures at various Degree colleges in Mancherial District.
19. Awards Received : International/National/State/Institution : NIL
20. Computer Skills: DCA
21. Confidential Services to Govt. Bodies (State/National/International):
1. Observer in University level.
2. Invigilator in various examination at Degree College Level.
22. E-mail: thirupathidurge@gmail.com
23. Contact No.: 9848557570
24. Residential Address: H.No:2-20/2,
Ityala,
Komuram Bheem Asifabad- 504273
25. Any other information (you wish to provide):
1. Served as a OPO in MP Elections.
- 2..Served as One of judge at District level Science Fair & Inspire Mela's in School Education.
- 3.Served as OPO in MPTC & ZPTC Elections.
- 4.Given support to MPC & BZC students as Mentor in Degree College Level.

Declaration

I declare that the particulars furnished above are true to the best of my knowledge and belief. I am liable for the authenticity of each and every bit of this information and indemnify the college administration that I take full responsibility in this regard.

Signature

Date:

(D THIRUPATHI)

APPENDIX - II

DEPARTMENTAL TIME-TABLE (2019-20)

DEPARTMENT OF BOTANY

DAY	I	II	III	IV	V	VI
	10:00 to 11:00 a.m.	11:00 to 12:00 noon	12:00 to 1:00 p.m.	1:30 p.m. to 2:30 p.m.	2:30 p.m. to 3:30 p.m.	3:30 p.m. to 4:30 p.m.
MONDAY	B.Z.C. III YR T/M (BN3)	B.Z.C. I YR T/M		B.Z.C., BZC &BCCA E/M		LAB – B1
TUESDAY	B.Z.C. III YR T/M (BN3)	B.Z.C. I YR T/M		B.Z.C., BZC &BCCA E/M		LAB – B2
WEDNESDAY	B.Z.C. III YR T/M (BN3)	B.Z.C. I YR T/M		B.Z.C., BZC &BCCA E/M	EST (BCOM CA) E/M & T/M	
THURSDAY	B.Z.C. III YR T/M (BN4)	B.Z.C. I YR T/M		B.Z.C., BZC &BCCA E/M		LAB – B3
FRIDAY	B.Z.C. III YR T/M (BN4)			LAB – B2	LAB – BN4	
SATURDAY	B.Z.C. III YR T/M (BN4)	LAB-B1		LAB – B2	LAB – BN3	

Work Load Details 2019-20

S.No	Course & Year	Workload Of Practical Classes No. of Batches X No. of Classes per week @ 2hrs each	Workload of Theory Classes in Hrs per week	Internal subjects	TOTAL
1	BZC –I Yr. T/M	2*2=4	4	02	10
2	BZC –I Yr. E/M	1*2=2	4	*	6
3	B.Z.CA-I Yr. E/M	*	4	*	4
4	B.C.CA-I Yr. E/M	*	4	*	4
5	B.Z.C III Yr. T/M	2*2= 4	6	*	10
TOTAL		10	22	02	34

Total workload/week = 34

Sanctioned posts & number of lecturers = 01 & 01

Yet to be sanctioned and no. of lecturers required = 01

INFRASTRUCTURE AND LEARNING RESOURCES

Stock Registers

Departmental Library

Equipment

Stock registers:

Departmental Library: 30 books are available.

Apart from the text books and reference books, magazines the question papers of previous exams, study material are kept in the departmental library

Equipment:

Compound Microscopes:

Student Microscopes:

Learning Resources:

Specimens

Slides

LCD Projectors and Smart Boards For ICT teaching

College Library

SYLLABUS UNDER CHOICE BASED CREDIT SYSTEM 2019-2020

S.No	Paper	Paper Code	Paper Title	Credits
1	I		Microbial Diversity & Lowerplants	4+1
2	II		Gymnosperms, Taxonomy & Ecology	4+1
3	III		Plant Anatomy & Embryology	4+1
4	IV		Cell Biology & Plant Physiology	4+1
5	V		Economic Botany	4+1
6	VI		Tissue Culture & Bio Technology	4+1

