

#### GOVERNMENT DEGREE COLLEGE NARSAPUR MEDAK DISTRICT Affiliated to Osmania University

## WELCOME TO NAAC PEER TEAM

BY

# DEPARTMENT OF BOTANY GOVERNMENT DEGREE COLLEGE NARSAPUR, MEDAK DISTRICT



#### PREPARED BY

Mrs.B.Rukmini Devi M.Sc.,M.Phil .,TS AP SET Assistant Professor of Botan





#### **HISTORY**

The department of Botany is one of the science departments of Government Degree College Narsapur, Medak District, established in 2008. The College is affiliated to the Osmania University, Hyderabad. Right from 2008 the department offered a 3 year undergraduate program in Botany with Zoology and Chemistry as subsidiary subjects. The course was modeled on the annual evaluation system and the instruction was tailored to address the learning objectives defined in the syllabus. With the introduction of choice based credit system the department moved to more flexible and innovative space in terms of the form and content of the program from 2016 onwards. The new program is structured on semester basis which runs through 3 years from the entry level.

### VISION AND MISSION

#### ✓ VISION:

- To provide quality education to the socially, economically, culturally backward people and under privileged sections of this part of Telangana region.
- ❖ To promote research and learning at the UG level and beyond.

#### ✓ MISSION :

Click to add text

- To bring up the innate talent through effective dissemination of knowledge in plant sciences.
- ❖ To encourage the students to attain excellence in plant sciences.
- To offer academic programs at under graduate and post graduate levels in the discipline of Botany.

#### CRITERIA-I CURRICULAR ASPECTS

# ACADEMIC PROGRAMMES BACHELOR OF SCIENCE IN BOTANY

The academic program at the undergraduate level with Botany as major and Zoology and Chemistry as minor (subsidiaries) leads to Bachelor of Science in Botany. It is a 3 years program with (CBCS) choice based credit system.

PROGRAMME AND MEDIUM OF INSTRUCTION

B.Sc (BZC)., E/M & T/M.., BZCS,BCCS E/M

# THE CORE PAPERS (NEW CBCS SYSTEM)-2019-2020

## (SEMESTER SYSTEM).

- ➤ Semester I Microbial Diversity and Lower plants
- Semester II Gymnosperms, Taxonomy of
- > Angiosperms & Ecology
- Semester III Plant Anatomy & Embryology
- ➤ Semester IV Cell Biology, Genetics and Plant Physiology
- ➤ Semester V Biodiversity and Conservation
- > Semester VI Tissue Culture and Biotechnology.

#### COURSE OUTCOMES OF BOTANY

-YEAR SEMESTER-

TITLE: Microbial Diversity and Lower Plants

## On completion of the courses students will be able

- ✓ CO1: Understand the characteristics of bacteria and viruses
- ✓ CO2: Understand the classification and characteristics of Algae and fungi
- ✓ CO3: Understand the morphological diversity of Bryophytes and Pteridophytes
- ✓ CO 4: Know the taxonomic position, occurrence, thallus structure, reproduction of Bryophytes, Pteridophytes.

## I-YEAR SEMESTER-II

TITLE: Gymnosperms, Taxonomy of Angiosperms and Ecology

## On completion of the courses students will be able:

- ✓ CO1: Understand the diversity of Gymnosperms and economic importance.
- ✓ CO2: Learn about the characters of biologically important families of angiosperms.
- ✓ CO3: Understand various rules, principles and recommendations of plant nomenclature in plant identification.
- ✓ CO4 : Understand the concept, components, energy flow in an ecosystem, food chain and food web.

### II YEAR SEMESTER-III

TITLE: Plant Anatomy and Embryology

### On completion of the courses students will be able:

- CO1. Develop an understanding of concepts and fundamentals of plant anatomy.
- CO2. Examine the internal anatomy of plant systems and organs.
- CO5. Learn about double fertilization and their significance.
- CO6.Know the structure and development of monocot and dicot embryos.

## II- YEAR SEMESTER-IV

TITLE: Cell Biology, Genetics and Plant Physiology

## On completion of the courses students will be able:

CO1: Know the structure of Cell wall components, Nucleus and their functions.

CO2: Understand cell division types in plants.

CO3: Acquire the knowledge law of inheritance and genetic interaction.

CO5: Understand water relation of plants with respect to various physiological processes.

III YEAR - SEMESTER-V
DSE 1A

TITLE: BIODIVERSITY AND CONSERVATION

### On completion of the courses students will be able:

- CO1. Understand the various concepts of Biodiversity, values and factor influence its loss.
- CO2. Identify the threats to biodiversity and its habitat loss.
- CO3. Understand the need for conservation of biodiversity.
- CO4. Understand the role of Plants in relation to Human life.

## III- YEAR- SEMESTER-VI - DSE 2B

### TITLE: TISSUE CULTURE AND BIOTECHNOLOGY

### On completion of the courses students will be able:

CO1. Understand the principles and techniques of plant tissue culture.

CO2 .Understand the basic knowledge about tissue culture tools, medium, sterilization and techniques of tissue culture.

CO4.Understand the fundamentals of Recombinant DNA Technology.

CO5. Know about the Gene libraries, PCR and its applications.

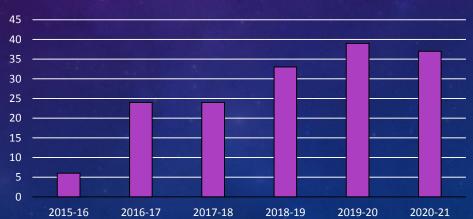
# CRITERIA-II TEACHING-LEARNING AND EVALUATION

#### STUDENTS ENROLLMENT FROM 2015-2021

GROUP&MEDIUM	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021
BZC	6	24	24	33	39	37

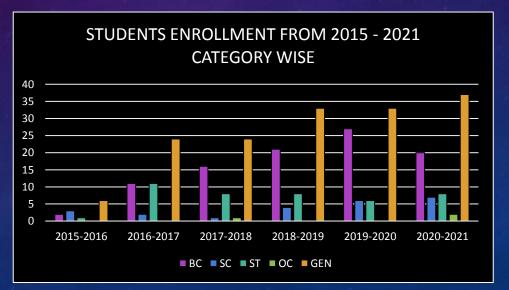
#### Students Enrollement from 2015 - 21

■ Students Enrollement from 2015 - 21



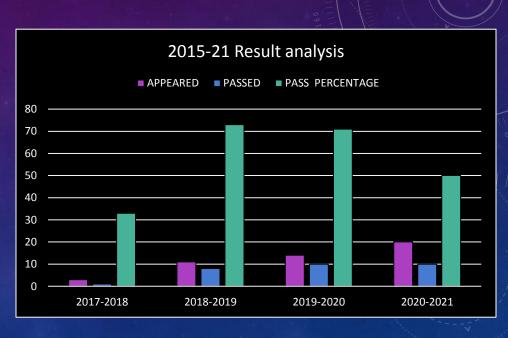
#### STUDENTS ENROLLMENT FROM 2015-2021 CATEGORY

CATEGORY	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021
ВС	2	11	16	21	27	20
SC	3	2	1	4	6	7
ST	1	11	8	8	6	8
ос	-	-	1	-	-	2
GEN	6	24	24	33	39	37



#### RESULT ANALYSIS- 2015-2021

STUDENTS	2017- 2018	2018- 2019	2019- 2020	2020- 2021
APPEARED	03	11	14	20
PASSED	1	8	10	10
PASS PERC ENTAGE	33.3	72.72	71.42	50



#### NUMBER OF TEACHING POSTS:

Designation	Sanctioned	Filled
Professors	Nil	Nil
Associate Professors	Nil	Nil
Assistant Professors	1	1



Faculty profile: Mrs.B.Rukmini Devi

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D Students guided for the last 4 years.
Mrs.B.Rukmini Devi	M.Sc., M.Phil.,TS AP SET	Asst.Professor of Botany	Plant Molecular Genetics	05	

# The faculty member should maintain the following academic records for teaching process:

- Time table
- Teaching plan
- Teaching Diary
- Attendance registers
- Academic Schedule
- ❖ ICT register
- Remedial coaching register
- Students study projects register
- Students Seminar register
- Quiz competition register
- Assignments register
- Osmania university/ Internal marks register
- Result Analysis register
- Certificate course register....etc

### TEACHING METHODS ADOPTED TO IMPROVE STUDENT

REMEDIAL CLASSES-SLOW LEARNERS

MANATV CLASSES

SLIDES, CHARTS SPECIMENS & MODELS

TEACHING METHODS

ICTTOOLS
PPTS, VIDEOS

**LIBRARY** 

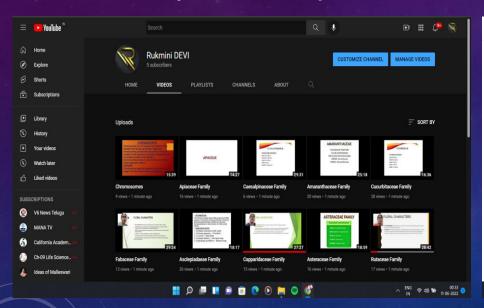
STUDENTS SEMINAR

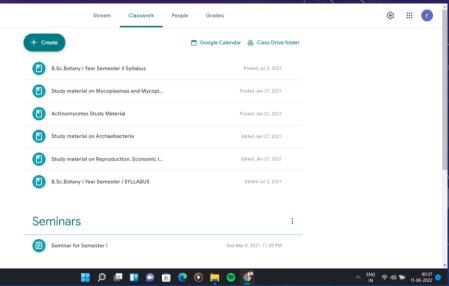
STUDY PROJECTS

EXTENSION LECTURES

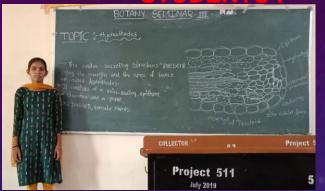
FIELD TRIPS QUIZ, GROUP DISCUSSION CAREER COUNSELLING

- Videos on important topics are uploaded on YouTube channel during the pandemic situation of COVID-19.
- Study material was uploaded in "GOOGLE CLASSROOM".





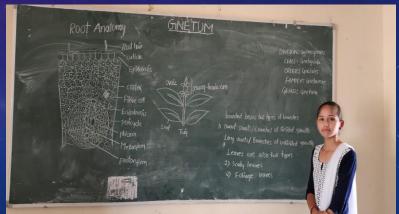
STUDENTS SEMINAR & GROUP PRESENTATION BY STUDENTS:











# DEPT. OF BOTANY - QUIZ COMPETITION'S









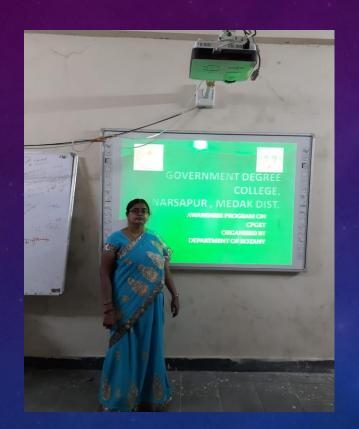


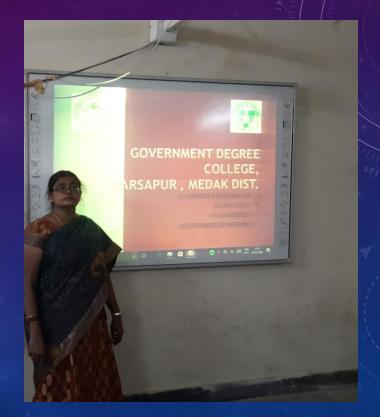
EXTENSION LECTURE ON "TAXONOMY OF ANGIOSPERMS AND "GENETICS" BY SEMIOR FACULTY DR.G.VIJAY KUMAR ASST. PROFESSOR. OF GENETICS & SRI.T.NARENDER ASST. PROFESSOR OF BOTANY. NIZAM COLLAGE HYDERBAD TS





# CAREER COUNSELLING TO STUDENTS





## DEPT. OF BOTANY- STUDENTS STUDY PROJECTS.

Sl. No.			
	Year	Class	Topic
1.	2017-18	IB.Z.C. E.M	Rasayana Vyavasayam – Sendriya Vyavasayam
4.	2018-19	IB.Z.C. E.M	"Determining The effects of temperture on seed Germination"
5.	2021-22	IB.Z.C, II B.Z.C E.M	"Preperation of natural Dyes".

#### FIELD TRIPS- NARSAPUR CENTRAL NURSERY, PRAKRUTI VANAM









#### TEACHING-LEARNING EVALUATION PROCESS

- **❖** It is done by analysing the feedback forms from students, parents and Alumni association
- **Students are assessed by conducting internal examination, Assignments and project work.**

# CRITERIA-III RESEARCH CONSULTANCY AND EXTENSION

# RESEARCH PUBLICATIONS

NAME OF THE FACULTY	RESEARCH PAPERS PUBLISHED	NATIONAL LEVEL	INTERNATIONAL LEVEL	CONFERENCES /WORK SHOPS ATTENDED (NATIONAL)	BOOKS
Mrs.B.Rukmini Devi	-	-	-	04	-

# TRAINING PROGRAMMES

NAME OF THE FACULTY	ORIENTATIO N TRAINING PROGRAM	REFRESHER COURSE	SHORTTERM COURSE	ON-LINE QUIZ PARTICIPATIO N
Mrs.B.Rukmini Devi	01	01	02	02





#### UGC-HRDC & RUSA

Opp. Law College, Osmania University, Hyderabad-500 007, Telangana
Phone No: 040-27098102, 27682346, Website: https://www.osmania.ac/in/brdc/ E-Mail: hrdcon@gmail.com

#### E - Certificate of Participation

This is to certify that B.RUKMINI DEVI, Asst.professor, Botany, Govt. Degree College for Women (A), Begumpet, Hyderabad, Osmania University, has participated in the UGC-HRDC-RUSA Sponsored FIP Online Short Term Course on 1 C T Tools in higher Education organized from 20.8.2020 to 26.8.2020.









#### Teaching Learning Centre, Ramanujan College University of Delhi

under the aegis of MINISTRY OF EDUCATION

PANDIT MADAN MOHAN MALAVIYA NATIONAL MISSION ON TEACHERS AND TEACHING

This is to certify that

Mrs.B.RUKMINI DEVI , Asst.Professor of Botany

Govt.Degree College for Women (A) , Begumpet, Hyderabad, Telangana

has successfully completed ONLINE TWO - WEEK INTER-DISCIPLINARY REFRESHER COURSE/FACULTY DEVELOPMENT PROGRAMME on

"Managing Online Classes & Co- Creating MOOCS (Level 2)" from 02 - 16 June, 2021 and obtained



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Sl. No. 50734



డా॥ మల్లి చెన్నారెడ్డీ మానవ వసరుల అభివృద్ధి సంస్థ, హైదరాబాద్ Dr. MCR HRD INSTITUTE, HYDERABAD

#### **CERTIFICATE**

Sri/S	mt/Kum. B. RUKMINI DEVI	
Designation	Asst. Professor, Govt. Degree Co	llege, Begampet, Hyderabad
has attend	led the programme titled	"
	Basic Course on Disaster Mana	gement
C	31-01-2017 to 02-	-02-2017







#### INFRASTRUCTURE OF THE LABORATORY

- Specimens
- Slides
- Glassware
- Autoclave
- Chemicals

- Anatomy, Embryology slides
- Compound Microscopes
- Simple Microscopes
- Glassware
- charts

#### LEARNING RESOURCES

Departmental
 Library,ICT tools,youtube
 channel,T-SAT MANA TV

# BOTANY LABORATORY





PLASTIC FREE CAMPUS International day of forests

SWACHH BHARATH

AWARENESS PROGRAMME TO PUBLIC

EXTENSION ACTIVITIES

HARITHA HARAM

EARTH DAY

WORLD WATER DAY- AIDS DAY RALLY

# "HARITHA HARAM" PROGRAMME- STEPS TOWARDS MAKING "GREEN CAMPUS".













#### SWACHH BHARATH ABHIYAN- STEPS TOWARD MAKING THE CAMPUS CLEAN







#### STEPS TOWARDS MAKING "PLASTIC FREE CAMPUS"









### CONSERVATION OF WATER RESOURCES: "WORLD WATER DAY 22ND MARCH"







# STUDENTS SUPPORT AND PROGRESSION

- Students gets the scholarships
- Career counselling is given
- For slow learners remedial coaching is given
- For advanced learners P.G. Coaching is given
- Personal counselling is given by Mentor-Mentee system
- Various committees were constituted which provides student support.
- 1. Women Empowerment Cell
- 2. Internal complaints committee
- 3. Grievance Redressal Cell
- 4. Anti-Ragging committee

## STUDENTS ACHIEVEMENTS

- BZC student G. Anusha got 1st prize in Elocution Competition in international Telugu Mahasabhalu and State level Yuvatarangam program.
- First BZC student Sk. Shadualla got 2nd prize in video making competition conducted by EPTRI, State pollution control board in collaboration with Commissionerate of Collegiate Education Hyderabad, Telengana.







### STUDENTS PROGRESSION TO HIGHER EDUCATION/PLACEMENT

NAME OF THE STUDENT	ВАТСН	P.G	OTHER COURSES	PLACEMENT
M. Vinod Kumar	2017-20	M.Sc .,Zoology,at Govt.Degree and PG Collage (A)SIddipet	-	-
G.Anusha	2017-20	M.Sc .,(Psycholog y)	B.Ed.,	_
D.Vijya Laxmi	2017-20	M.Sc Chemistry	-	-
V .Kalpana	2017-20	-	B.Ed	_
D.Pavani	2018-2021	M.A	_	_

# STUDENTS PROGRESSION TO HIGHER EDUCATION, PLACEMENTS



BZC Student G.Anusha got selected for T SAT MANA TV STUDENT AS TEACHER PROGRAM And presented a lecture on DNA Structure



### **Internal Quality Assurance System:**

- Almanac of the University
- CCE Academic calendar
- Departmental meetings on syllabus coverage
- Periodical verification of Academic records
- Results analysis
- Academic audits by external auditors appointed by CCE
- Feedback Analysis

### CRITERIA-VI

## GOVERNANCE, LEADERSHIP & MANAGEMENT

- Departmental meetings
- Students encouraged to participate in all events like NSS, AIDS Day etc,
- Faculty member is actively involving in many committees

Mrs.B.Rukmini Devi : IQAC Co-ordinator

**Eco Club Convenor** 

**Haritha haram Convenor** 

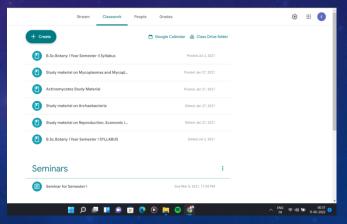
**Women Empowerment Cell & ICC Convenor** 

CRITERIA-VII

## **BEST PRACTICES & INNOVATIONS**

- 1. Soil sample Testing
- 2. SWACHHBHARAT INNOVATIONS
  - Taking classes in ZOOM app, Google meet
  - ❖ GOOGLE CLASSROOM
  - **YOUTUBE CHANNEL**
  - ❖ WHATTS app for fast communication





## DEPARTEMENTAL PRACTICES

- Making of seed balls
- Preparations of herbal products
- Seed bank
- Skill Development program on Herbarium preperation









# **ACHIEVEMENTS**

Plants are given QR codes

• Seed bank is maintained.

### SWOC ANALYSIS

### **STRENGTHS**

- Highly qualified faculty
- Remedial classes for slow learners
- Free P.G. Coaching
- Career counselling
- Motivating the students towards employability skills

#### WEAKNESS:

- Low placements
- Linkages with industries/organisation is scarce
- Students with poorbasics
- ❖ Alumni participation is less

#### **OPPORTUNITIES**

- Usage of ICT tools
- Preparing students for competitive exams
- To provide experiential learning

## **CHALLENGES**

- Providing campus selections
- Counselling to dropout students

## **FUTURE PLANS**

- Upgradation of existing laboratory
- Organisation of seminars, workshops
- Collaboration with industries, institutes
- Establishment of P.G. course in Botany
- ❖ To get MRPs
- ❖ To attend FDP

