NAGARJUNA GOVERNMENT COLLEGE NALGONDA

(Autonomous)

Affiliated to Mahatma Gandhi University 2019-20

DEPARTMENT OF BIOTECHNOLOGY PROFILE



DEPARTMENT OF BIOTECHNOLOGY

- ABOUT THE DEPARTMENT
- LIST OF FACULTY MEMBERS
- COURSES OFFERED
- BOARD OF STUDIES(BOS)
- CURRICULUM ASPECTS
- RESULT ANALYSIS
- LIST OF GOLD MEDALS
- BIOTECHNOLOGY LAB
- WORK SHOPS/SEMINARS
- GUEST LECTURES
- PHOTO GALLERY
- SYALLABUS

• QUESTION PAPERS

ABOUT THE DEPARTMENT

| > Name of the Department | BIOTECHNOLOGY | | | |
|--|--|--|--|--|
| Year of Establishment | 2001. | | | |
| Courses/ Programmes and subjects combinations offered | UG . Biotechnology,Botany, Chemistry BT .B.C(E.M), Biotechnology,zoology,chemistry BT.Z.C(E.M)(2018 introduced), Biotechnology,Botany,Zoology(BT.B.Z)(E.M,2019 Introduced. | | | |
| Number of Teaching posts sanctioned and filled | Sanctioned - 01 Guest faculty - 01(WORKING AGAINST SANCTIONED POST) | | | |
| Number of administrative Staff | Nil | | | |
| Number of Technical Staff | Lab attender- NIL | | | |
| Number of Students (Men/ Women) Give details course-wise | Group Men Women Total I 25 15 40 | | | |

| | II | 48 | 53 | 101 |
|---|----------|---------|-----------|-----|
| | III | 12 | 21 | 33 |
| | Total | 85 | 89 | 174 |
| Ratio of Teacher to students | UG 1 : 1 | .75 | - | |
| Ratio of Teachers to ResearchScholars | NIL | | | |
| Number of research scholars who have obtained master's degree from other institutions | Nil | | | |
| Number of teachers in academic bodies of other Autonomous Colleges and Universities | Nil | | | |
| > Latest revision of curriculum (year) | 2009,20 | 14, 201 | 6,2018,20 | 019 |
| Number of students passed in NET/SLET etc. (last 5 years) | Nil | | | |
| Success Rate of students | 75% | | | |
| Demand Ratio (No. of seats: No. of applications) | 1:6 | | | |
| Awards and recognition received by faculty (last 5 years) | Nil | | | |
| Faculty who have Attended National/ International Seminars (last 5 years) | 02 | | | |
| Number of National/ Inter National Seminars organized (Last 5 years) | Nil | | | |

| Number of teachers engaged in consultancy and the revenue | Nil |
|---|-------|
| generated | |
| Number of Ongoing projects and their total outlay | Nil |
| · | |
| Research projects completed during last five years& their Outlay | Nil |
| Number of inventions and patents | Nil |
| Number of PhD Theses guided during the last five years | - Nil |
| Publications by faculty (Last 5 years) | Nil |
| Average citation index and impact factor of publication | Nil |
| > Number of Books in the Departmental Library, if any | Nil |
| Number of Journals/ Periodicals in the departmental library | Nil |
| Number of Computers | 01 |
| Annual Budget (excluding salary) | Nil |

Nagarjuna Government college was established in 1956 ,Department of Biotechnology established in 2001 B.sc (BBC) English Medium course was wound up after a careful understanding of the need for training and developing highly skilled and qualified microbiologists.

The Department of Biotechnology was established in 2000-01as a self financed course with strength of 28 students with Botany, Chemistry combination the annual fee is Rs 3000/- per student as fixed by the University.

Sri .T. Krishna Reddy ,lecturer in Botany was in charge of the Department. He was trained in Osmania University and attended refresher course. He continued up to the academic year 2007-08 and Retired from his services.

Later on the 2007-08 Biotechnology hand over charge to Dr. B. Venkataiah lecturer n zoology, and then one year of period a new panel committee resolved and hand over charge to sir **D.Ramamurthy lecturer in chemistry.In the academic year 2012-13 the charge handed over toA.RamanaRao Asst.professor of botany.** And after being awarded the autonomous in 2007-08, Department is acting to the extent of its permissibility on its own designing the syllabus taking into consideration the local and day by day changes in and around of the college.

Keeping in view of the up to date trends in the world of globalization, theDepartment has established a well equipped laboratory with all infrastructural facilities Department has two laboratories with built up area of 48 sq.ft length, 28sq.ft breadth in 48x21.2=1017.6sq.ft.Teh Department has latest equipment including

- **\Delta** UV/Vis-Spectrophoto meter.
- Laminar air flow chamber
- **❖** BODincubator
- Autoclave
- Centrifuge
- Electrophoresis
- Colony counter
- Electronic Balance
- pH meter
- **❖** Magnetic stirrer
- **❖** Hot air oven
- Homogenizer
- Trance illuminator
- Hot plate
- **❖** Incubator
- Distilled water plant

| S.NO | Name | Educational Qualification | Designation | Teaching & Research Experience | Specialization |
|------|--------------------------------------|---------------------------|----------------------------|--------------------------------|----------------|
| 1. | Y.YADAGIRI RAO Acting Incharge | M.Sc. | Asst.Prof. of Chemistry | 07 years | Chemistry |

| 2. | G.ANJAIAH | M.Sc | Guest Faculty | 6 yea | ars | Biotechnology |
|----|-----------|------|---------------|-------|-----|---------------|
| | | | | | | |

1. Faculty profile, adequacy and competency of faculty



BIO DATA

Name of the Faculty : G.ANJAIAH

Designation : GUEST LECTURER

Academic qualifications : M.Sc Biotechnology

Area of Research : Nil

Native place : Nalgonda

Date of first appointment : July23-2013

Date of joining in the present cadre: July23-2013

Date of joining in the present college : July23-2013

No of refresher courses attended : Nil

No of seminars/workshops attended : 3

No of extension lectures given under DRC: Nil

Co & extra – curricular activities : Nil

Award & recognitions : Nil

Research activities : Micropropagation on ficus carica,

Isolation and cultivation of

PSB(Phosphate solubilising

Bacteria), Handling of Molecular

techniques(Agarose gel

electrophoresis, SDSPAGE)

Publications : Ni

2. Student profile according to programs of study ,gender ,region etc

| Programmes | No of students | Gender | Region |
|-------------------|----------------|-----------|----------|
| Bsc | Total | | |
| BT.B.C, | | Boys -85 | |
| BT.Z.C BT.B.Z | 175 | Girls -89 | Nalgonda |
| | | | |

- 3. Changes made in the course or programmes during the past five years and the contribution of the faculty to those changes the CBCS system has been introduced from 2014.
- 4. Trend in the success rate and dropout rate of students during the last five years.
 - The success rate is 75% and the dropout rate is 20%
- 5. Learning resources of the Department like library, computers laboratories and other such resources. Departmental library is yet to be established. Computer with internet, facility and a good laboratory are made available.
- 6. Enhancement of the learning resources during the past five years. The faculty has undergone refresher course trainings
- 7. Modern teaching methods in practice other than the lecture methodSeminars and group discussions are regular conducted.LCD,OHP and Bio-visual charts are regularly used as teaching aids.
- 8. Participation of teachers in academic and personal counseling of students.

The faculty actively involved in offering academic and personal counseling ,particularly with regard to the Opportunities of higher studies and employment.

- 9. Details of faculty development programmes and teachers who benefited during the past five years.
 - The faculty members have attended Extension lecture, seminars and paper presentations in national seminar.
- 10. Participation of teachers in Academic activities other than teaching and research.
 - Teachers participate in various programs other than teaching and research as and when they are assigned to by the department or the Principal or the BOS or any other authority concerned.
- 11. Collaborations with other Departments and institutions at the National and International level and their outcome during the past five years.
 - The Department maintains regular contact and communication with Osmania University and Mahatma Gandhi University's Biotechnology departments for guidance and improvement.
 - It regularly keeps in touch with other related Departments in the college too.
- 12. Participation of the department in the extension activities of the college.

13. Method of continuous student assessment

Through regular internal tests, Semester-wise examinations and personal observations regarding their academic performances the Department keeps watch on the progress of the students.

- 14. Placenebt record if the past students and the contribution of the departments to the placements.
- 15. Significant achievements of the Department or faculty or students during the past five years .

During last 5 years our students achieved gold medals list enclosed

COURSES OFFERED

Department of Biotechnology offers Three years B.ScDegree course wih the following combinations and syllabus schemes

B.B.C SUBJECTS

| Languages | Core subjects | Electives |
|-----------|---------------|-------------------|
| English | Biotechnology | Biotechnoloy(A&B) |
| Telugu | Botany | Botany(A&B) |
| Hindi | Zoology | Zoology(A&B) |
| urdu | Chemistry | Chemistry(A&B) |

CURRICULUM ASPECTS

SEMESTER SYSTEM

- The college follows semester system of academic instruction and examination. The details of which are as follows.
- There will be Two Semester in each academic year
- There will be a Theory and practical final examination at the end of each semester.
- There will be no detention at the end of first ,third and fifth semesters.
- There will be detention at the end of second and fourth semesters.
- If a student fails in more than 50% of the total papers of first and second semesters if a student fails to obtain more than 25% aggregate of semesters put together he/she will be detained at end of fourth semester.

INTERNAL ASSESSMENT

Students are required to write two internal assessment tests in each paper as part of continuous internal evaluation. The each paper and the best out of two will be taken into account for the end examination result.

END EXAMINATION(EACH SEMESTER)

The maximum marks in theory paper in each subject in each paper are 70 and for internal assessment 30. The students has to get a minimum of 36 marks out of 100(70+30) to passin each paper and minimum pass marks for each paper in the theory subject in the end exam is 14.

PROJECT WORK

The student of sixth semester should submit a project work in a subject of their choice and the details of the project work will be intimated for the subject faculty at the beginning of the fifth semester. The Project work is compulsory for every student and a minimum pass in the project work is essential before the declaration of final result and award of degree.

BRIDGE COURSES, REMEDIAL COURSED&COURSES&STUDY PROJECTS

The Department conducts bridge classes at the beginning of the academic year for 1st year students and remedial classes to slow learners. The advanced learners are encouraged to participate in seminars and pursue study projects.

WORKSHOPS /EXTENSION LECTURES/GUEST LECTURES

The Department conducts Workshops /Extension /Lectures/Guest lectures to students by inviting experts from various colleges and organizations to expose the students to the latest trends in their subjects.

EVALUTAION

Apart from internal assessments continues evaluation of students is done through unit test/Assignments/Class room seminars and Question answer sessions.

EXTRA CURRICULAR ACTIVITES

A part from the regular curriculum the Departments conducts various competitions like Quiz ,Elocution and Essay writing etc.

<u>Placement record of the past students and the contribution of the department to</u> the placements.

- 1.Our student **CH.SWATHY** D/O.D.V.Chary (02609-2907)has got appointment in **Dr.Reddys lab Hyd.**
- 2. M.Mahesh (02605-2925) has clear his IISC entrance and doing his Ph.D(SRF)in Biotechnology at IISC,Bangalore.
- 3. Rabiya khatun (02605-2012)has got SBI-PO in Bank Exams.
- 4.V.Naveen Naidu (02605-2926) has did his MS in Bioinformatics in London.
- 5.R.Naga Laxmi(02605-2910) has got a job in Postal department
- 6.G.Narasimha (02629-2937)has got a job in Postal department
- 7.Janardhana Chari (02629-2931) has got a job in Postal department
- 8.G.Varaprasad(02629-2940) has got appointment in Indian Army(LABS)
- 9.**Mr.Mahesh** student of Biotechnology 2005-08 has joined in **Novartis PharmaCompany** based in Hyd.
- 10.L.Spandana got a VRA job in 2013.
- 11.G.Narendar (4028-11-572-035) got a job in Axisbank in Nalgonda in 2013.
- 12.A.Santoshivani (4028-13-572-009) got a M.Sc seat in UOH Hyd in 2017.
- 13.G.Bhargavi got a MSC Seat in Kerala Central university in 2019.
- 14.K. Venkatesh got a MSC Seat in Puduchery Central university in 2019.

BIOTECHNOLOGY LAB

- ➤ Biotechnology is the branch of science which deals with living organisms and there fermented products that are useful to human welfare
- ➤ Louis pasture is the father of Ancient Biotechnology
- > Our Department has 2 labs which are well equipped, advanced instruments
- > These labs were maintained neat and under aseptic conditions



Students performing practicals



Laminar air flow chamber



Students observing isolated colonies of Bacteria



Operating Autoclave



StudentsSeminar





Group discussion Of students





NAGARJUNA GOVERNMENT COLLEGE (AUTONOMOUS)NALGONDA

(Re –Accredited by NAAC with "A" Grade)

Gold Medal Winners Academic year 2011-12 to 2015-16

Gold Medal Winners from 2011-2012

| S.NO | SUBJECT | NAME OF THE | ROLL NO |
|------|---------------------------------------|------------------------|-----------------|
| | | STUDENT | |
| 1. | | | 4028-09-572-004 |
| | B.Sc Life sciences | FATHIMA SHANZA USRA | |
| | | D/O AHMED SHAREEF | |
| 2. | | | 4028-09-572-004 |
| | Biotechnology | FATHIMA SHANZA USRA | |
| | | D/O AHMED SHAREEF | |
| 3. | X (), | | 4028-09-572-004 |
| | Best Girl student with Distinction in | FATHIMA | |
| | Bio-Sciences | SHANZA USRA | |
| | | D/O AHMED SHAREEF | |

Gold Medal Winners from 2012-2013

| S.NO | SUBJECT | NAME OF THE | ROLL NO |
|------|---------------|----------------|------------------|
| | | STUDENT | |
| 1 | | | 44028-10-572-023 |
| 1. | Biotechnology | DUBBA NAGARAJU | 44028-10-3/2-023 |
| | | S/O SAILU | |

Gold Medal Winners from 2013-2014

| S.NO | SUBJECT | NAME OF THE STUDENT | ROLL NO |
|------|---------------|------------------------|-----------------|
| 1. | | | 4028-11-572-010 |
| | Biotechnology | RUDRAKSHA | |
| | | RADHA | |
| | 10/0 | D/O VENKAIAH | |

Gold Medal Winners 2014- 2015

| S.NO | SUBJECT | NAME OF THE | ROLL NO |
|------|--|--------------|-----------------|
| | | STUDENT | |
| 1. | | | 4028-12-572-009 |
| | B.Sc Life sciences | KATHI SWATHI | \bigcirc |
| | | D/O BHASKAR | |
| 2. | | · Blo | 4028-12-572-009 |
| | Biotechnology | KATHI SWATHI | |
| | | D/O BHASKAR | |
| 3. | | O | 4028-12-572-009 |
| | Best Girl student with Distinction in Bio- | KATHI SWATHI | |
| | Sciences | D/O BHASKAR | |

Gold Medal Winners in 2015

| S.NO | SUBJECT | NAME OF THE STUDENT | ROLL NO |
|------|--------------------|-------------------------------------|-----------------|
| 1. | B.Sc Life sciences | AKKENAPALLY SANTHOSHIVANI | 4028-13-572-009 |
| | | D/O AKKENAPALLY VENUGOPALA CHARY | |

| 2. | | | 4028-13-572-009 |
|----|--|-------------------------------------|-----------------|
| | Biotechnology | AKKENAPALLY SANTHOSHIVANI | |
| | | D/O AKKENAPALLY VENUGOPALA CHARY | |
| 2 | | | 4028-13-572-009 |
| 3. | | | 4028-13-372-009 |
| | Best Girl student with Distinction in Bio- | AKKENAPALLY | |
| | Sciences | SANTHOSHIVANI | |
| | | D/O AVVENADALIV | |
| | | D/O AKKENAPALLY VENUGOPALA CHARY | |
| | | VENOGOI ALA CHART | |

DEPARTMENT OF BIOTECHNOLOGY

BOARD OF STUDIES(BOS)

ACADEMIC YEAR 2014-15

| S.No | Category | Name and Designation |
|------|---|--|
| 1 | Chairman Board of Studies | Sri A.Ramana Rao, Asst.Prof Incharge Dept. of Biotechnology, N.G. College.Nlg. |
| 2 | University Nominee | 1.Dr T.Sivaram, Asst.Prof, Head Dept of Biotechnology, MGU, Nlg. |
| 3 | Subject expert- from outside the college | 1.Dr.K.Prem Sagar, Asst.Prof, MGU, Nalgonda. 2. Dr.M.Ramchander, Dept.of Biochemistry, MGU.Nalgonda. |
| 4 | Members: The Faculty Members of the Dept. | 1.G.Anjaiah,Guest Faculty in Biotechnology.2.Ayesha,Guest Faculty in Biotechnology. |

DEPARTMENT OF BIOTECHNOLOGY BOARD OF STUDIES(BOS)

ACADEMIC YEAR 2015-16

| S.No | Category | Name and Designation |
|------|------------------------------|----------------------------------|
| 1 | Chairman Board of Studies | Sri A.Ramana Rao, Asst.Prof |
| | | Incharge Dept. of Biotechnology, |
| | | N.G. College.Nlg. |
| 2 | Linivargity Naminas | 1.Dr T.Sivaram, Asst.Prof, |
| 2 | University Nominee | |
| | | Head Dept of Biotechnology, |
| | | MGU, Nlg. |
| | | |
| 3 | Subject expert- from outside | 1.Dr.K.Prem Sagar, Asst.Prof, |
| | the college | MGU, Nalgonda. |
| | | |
| | | 2. Dr.M.Ramchander, |
| | | Dept.of Biochemistry, |
| | | MGU.Nalgonda. |
| | | |
| 4 | Members: The Faculty | 1.G.Anjaiah, |
| | Members of the Dept. | Guest Faculty in Biotechnology. |
| | | 2.Ayesha, |
| | | Guest Faculty in Biotechnology. |

DEPARTMENT OF BIOTECHNOLOGY **BOARD OF STUDIES(BOS) ACADEMIC YEAR 2016-17**

| S.No | Category | Name and Designation |
|------|------------------------------|--|
| 1 | Chairman Board of Studies | Sri. A.Ramana rao, Asst.Prof |
| | | Incharge Dept. of Biotechnology, N.G. College.Nlg. |
| 2 | University Nominee | 1.Dr.K.Premsagar, Asst.Prof, |
| | | Head Dept of Biotechnology, |
| | | MGU, Nlg. |
| 3 | Subject expert- from outside | 1.Dr.T.Sivaram, Asst.Prof, |
| | the college | Dept of Biotechnology |
| | | MGU, Nalgonda. |
| | | 2. Dr.M.Ramchander,Asst.Prof, |
| | | Dept.of Biochemistry, |
| | | MGU.Nalgonda. |
| 4 | Members: The Faculty | 1.G.Anjaiah, |

| Members of the Dept. | Guest Faculty in Biotechnology. |
|----------------------|---------------------------------|
| | 2.Ayesha, |
| | Guest Faculty in Biotechnology. |

BOARD OF STUDIES(BOS)ACADEMIC YEAR 2017-18 DEPARTMENT OF BIOTECHNOLOGY

Board of Studies in the Department of Biotechnology has been constituted with the following members for the year 2017-18.

| S.No | Category | Name and Designation |
|------|--|---|
| 1 | Chairman Board of Studies | Sri M.V.VSatyaveni, Incharge Dept. of Biotechnology, N.G. College.Nlg. |
| 2 | University Nominee | 1.Dr.K. Prem Sagar, Asst.Prof, Head Dept of Biotechnology, MGU, Nlg. |
| 3 | Subject expert- from outside the college | 1Dr.T.Sivaram, Asst.Prof, MGU, Nalgonda. 2.Dr.Ramchander, Asst.prof Dept.of Biochemistry, MGU, Nalgonda |

| 4 | Members: The Faculty | 1.G.Anjaiah, |
|---|----------------------|---------------------------------|
| | Members of the Dept. | Guest Faculty in Biotechnology. |
| | | 2.Ayesha, |
| | | Guest Faculty in Biotechnology. |

DEPARTMENT OF BIOTECHNOLOGY BOARD OF STUDIES(BOS)

ACADEMIC YEAR 2018-19

| S.No | Category | Name and Designation |
|------|--|--|
| 1 | Chairman Board of Studies | Sri .B.Nagaraju , Asst.Prof Incharge Dept. of Biotechnology, N.G. College.Nlg. |
| 2 | University Nominee | 1.Dr.K.Premsagar, Asst.Prof, Head Dept of Biotechnology, MGU, Nlg. |
| 3 | Subject expert- from outside the college | 1.DrT.Sivaram, Asst.Prof, MGU, Nalgonda. |

| | | 2. Dr.K.Madhuri |
|---|----------------------|---------------------------------|
| | | Dept.of Biotechnology, |
| | | MGU.Nalgonda. |
| | | |
| 4 | Members: The Faculty | 1.G.Anjaiah, |
| | Member of the Dept. | Guest Faculty in Biotechnology. |
| | | |

DEPARTMENT OF BIOTECHNOLOGY BOARD OF STUDIES(BOS)

ACADEMIC YEAR 2019-20

| S.No | Category | Name and Designation |
|------|--|--|
| 1 | Chairman Board of Studies | Sri .Y.Yadagiri Rao , Asst.Prof Incharge Dept. of Biotechnology, N.G. College.Nlg. |
| 2 | University Nominee | 1.Dr.T.Sivaram, Asst.Prof, Head Dept of Biotechnology, MGU, Nlg. |
| 3 | Subject expert- from outside the college | 1.Dr.K.Premsgar, Asst.Prof, MGU, Nalgonda. |

| | | 2. Dr.K.Madhuri,Asst.profDept.of Biotehnology, MGU.Nalgonda. |
|---|--|--|
| 4 | Members: The Faculty Member of the Dept. | 1.G.Anjaiah, Guest Faculty in Biotechnology. |
| | | |

PHOTOGALLERY

<u>2012-13</u>

Study tour to Krishi Vignana Kendra, Gaddipally Nalgonda





Explainging the activities of KVK Scientist by B. Lava kumar





HOD Addressing the students at KVK





Mr.Suresh explaining about Biofertilizer production
M.RangaReddy explaining Grafting techniques





Demonstration of Vermi compost Grading

<u>2013-2014</u>

Study tour to **ICRISAT, Hyderabad.**

Dr.Sharma Explaining the Importance of Agriculture









GENETIC ENGINEERING LAB



POWER POINT PRESENTAION OF ICRISAT ACTIVITIES



NET HOUSE RESEARCH FIELD





2014-2015

Study tour to Krishi Vignana Kendra ,Gaddipally Nalgonda Scientist B.Lava kumar PPT presentation about KVK



B.Lavakumar interacting with students



Lava kumar explaining vermi compost beds



Demo on Ayurvedic medicines prepared at KVK



Production of Biofertilizer Azolla



Demonstrating Vermi wash production





2015-16 Extension lecture on Molecular farming by Dr.K. Venugopal Rao





Group Discussion of Studnets



Seminars by students



HARITHA HARAM













BIOTECHNOLOGY Departmental profile 2019-20





2017-2018

Extension lecture-Genome Imprinting

In 2017-18 BSc (BBC) Department of Biotechnology conducted co -curricular activity Extension lecture on 31-01-2018.





Extension lecture conducted by Incharge M.V.V.Satyaveni ,BBC,BZC,MZC,MBC students attended. Lecture delivered byDr.K.Premsagar Asst.prof of Mahathma Gandhi university,Nalgonda,

On the topic Genomic Imprinting..

STUDY TOUR

Conducted on 17th February 2018 to KVK Gaddipally

Vermi compost preparation





Medicainal Plants Observation:



Students Interacting with Scientist of KVK

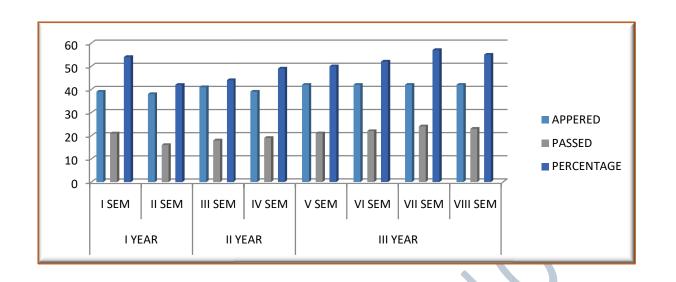


BIOTECHNOLOGY Departmental profile 2019-20

RESULT ANALYSIS

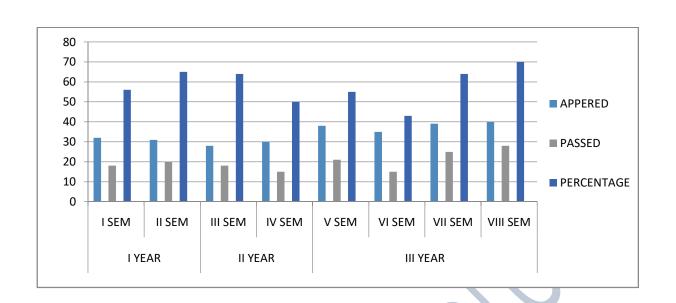
ACADEMIC RESULT OF 2014

| | I YEAR | R II YEAR III YEAR | | 2 | | | | |
|------------|--------|--------------------|------------|-----------|-------|-----------|------------|-------------|
| YEAR | I SEM | II SEM | III SEM | IV SEM | V SEM | VI SEM | VII SEM | VIII SEM |
| APPERED | 39 | 38 | 41 | 39 | 42 | 42 | 42 | 42 |
| PASSED | 21 | 16 | 18 | 19 | 21 | 22 | 24 | 23 |
| PERCENTAGE | 54% | 42% | 44% | 49% | 50% | 52% | 57% | 55% |



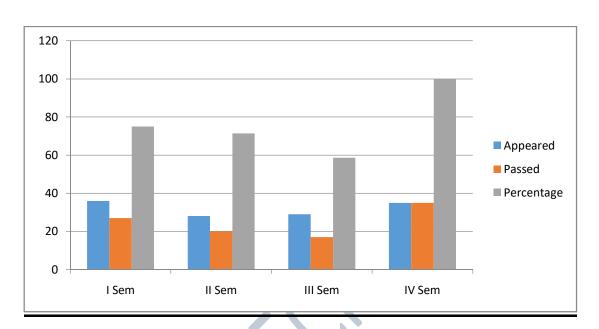
ACADEMIC RESULT OF 2015

| YEAR | I YEAR | | II YEAR | | III YEAR | | | |
|------------|--------|--------|------------|-----------|----------|-----------|------------|-------------|
| | I SEM | II SEM | III SEM | IV SEM | V SEM | VI SEM | VII SEM | VIII SEM |
| APPERED | 32 | 31 | 28 | 30 | 38 | 35 | 39 | 40 |
| PASSED | 18 | 20 | 18 | 15 | 21 | 15 | 25 | 28 |
| PERCENTAGE | 56 | 65 | 64 | 50 | 55 | 43 | 64 | 70 |



ACADEMIC RESULT OF 2016:

| YEAR | I YEAR | II YEAR | III YEAR | III YEAR |
|------------|--------|---------|----------|----------|
| | x (b) | | Paper I | Paper II |
| APPERED | 32 | 30 | 40 | 40 |
| PASSED | 20 | 15 | 25 | 28 |
| PERCENTAGE | 62.5 | 50 | 62.5 | 70 |

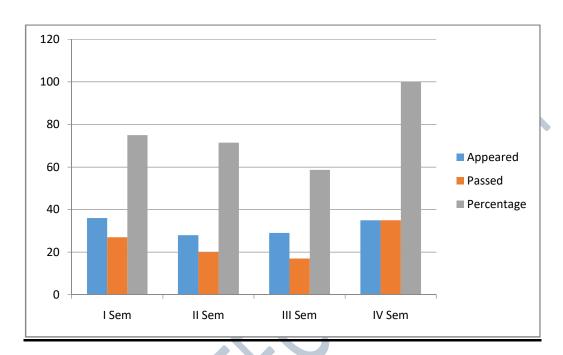


ACADEMIC RESULT: 2015-2016

Academic Result of 2017

| YEAR | I YEAR | II YEAR | III YEAR | III YEAR |
|---------|--------|---------|----------|----------|
| | | | Paper I | Paper II |
| APPERED | 36 | 28 | 29 | 29 |
| PASSED | 27 | 20 | 21 | 17 |
| | | | | |

| PERCENTAGE | 75 | 71.5 | 72.5 | 58.6 |
|------------|----|------|------|------|
| | | | | |
| | | | | |

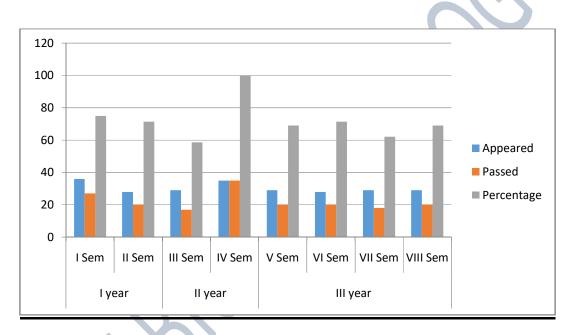


ACADEMIC RESULT: 2016-2017

Academic result of 2018

| YEAR | I YEAR | | II YEAR | | III YEAI | ₹ | | | |
|---------|--------|--------|------------|-----------|----------|-----------|------------|-------------|--|
| | 1 SEM | II SEM | III SEM | IV SEM | V SEM | VI SEM | VII SEM | VIII SEM | |
| APPERED | 32 | 32 | 33 | 35 | 29 | 28 | 29 | 29 | |
| | | | | | | | | | |

| PASSED | 31 | 31 | 28 | 35 | 20 | 20 | 18 | 20 |
|------------|----|----|----|----|----|----|----|----|
| | | | | | | | | |
| | | | | | | | | |
| PERCENTAGE | 56 | 65 | 64 | 50 | 55 | 43 | 64 | 70 |
| | | | | | | | | |
| | | | | | | | | |

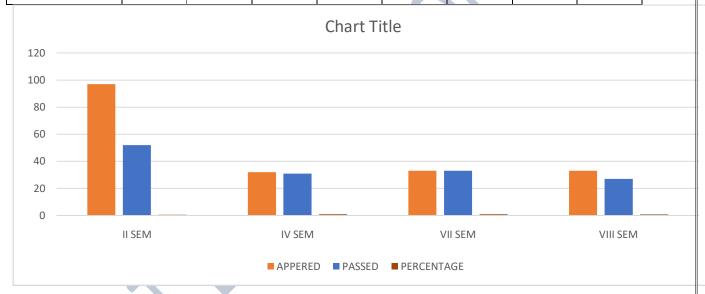


Academic Result 2018

Academic Result of 2019

| YEAR | I YEAR | | II YEAR | | III YEAR | | | |
|------|--------|--------|------------|--------|----------|--------|------------|-------------|
| | I SEM | II SEM | III SEM | IV SEM | V SEM | VI SEM | VII SEM | VIII SEM |

| APPERED | 97 | 32 | | 33 | 33 |
|------------|-----|-----|---|-----|-----|
| PASSED | 52 | 31 | | 33 | 27 |
| PERCENTAGE | 54% | 97% | 7 | 94% | 82% |



SYLLABUS

NAGARJUNA GOVERNMENT COLLEGE, NALGONDA (AUTONOMOUS) ALLOCATION OF CREDITS AT SUBJECT LEVEL

College: N.GCOLLEGE Course: B.Sc I YEAR., Subject: BIOTECHNOLOGY

| S.NO | Semester | Module(Paper) | Credits | Max.marks |
|------|---------------|-------------------------------------|------------------|-----------|
| 1. | I(CORE) | CELL BIOLOGY AND GENETICS | 04 | 100 |
| 2. | Practicals- 1 | CELL BIOLOGY AND GENETICS | 01 | 50 |
| 3. | II (Core) | NUCLEIC ACIDS AND BIOINFORMATICS | 04 | 100 |
| 4. | practical - 2 | NUCLEIC ACIDS AND BIOINFORMATICS | 01 | 50 |
| | 1 | | Total credits=10 | 1 |

NAGARJUNA GOVERNMENT COLLEGE, NALGONDA (AUTONOMOUS) ALLOCATION OF CREDITS AT SUBJECT LEVEL

College: N.GCOLLEGE Course: B.Sc II YEAR., Subject: BIOTECHNOLOGY

| S.NO | Semester | Module(Paper) | Credits | Max.marks |
|------|----------------------------------|-------------------------------|-----------------|-----------|
| 1. | III (Core) | BIOLOGICALCHEMISTRY | 04 | 100 |
| 2. | Practicals-3 | BIOLOGICAL CHEMISTRY | 01 | 50 |
| 3. | SEC-1 | ANALYTICAL CHEMISTRY | 01 | 50 |
| 4. | IV (Core) | MICROBIOLOGY AND IMMUNOLGY | 04 | 100 |
| 5. | Practicals-4 | MICROBIOLOGY AND IMMUNOLGY | 01 | 50 |
| 6. | SEC-2 (SKILL ENHANCEMENT COURSE) | FOOD ADULTERATION | 01 | 50 |
| | | To | otal credits=12 | 1 |

NAGARJUNA GOVERNMENT COLLEGE, NALGONDA (AUTONOMOUS) ALLOCATION OF CREDITS AT SUBJECT LEVEL

College: N.GCOLLEGE Course: B.Sc III YEAR PAPER-V., Subject: BIOTECHNOLOGY

| S.NO | Semester | Module(Paper) | Credits | Max.marks |
|------|--------------------------------|--|---------|-----------|
| 1. | V (Core) | MOLECULARBIOLOGY AND RECOMBINANT TECHNOLOGY | 04 | 100 |
| 2. | Practicals-5 (CORE) | MOLECULAR BIOLOGY AND RECOMBINANT TECHNOLOGY | 01 | 50 |
| 3. | V -Elective (A) | PLANT BIOTECHNOLOGY | 04 | 100 |
| 4. | V-Elective(A- Practical-6) | PLANT BIOTECHNOLOGY | 01 | 50 |
| 5. | V-Elective-(B) | MEDICAL BIOTECHNOLOGY | 04 | 100 |
| 6. | V-Elective-(B- Practical-6) | MEDICAL BIOTECHNOLOGY | 01 | 50 |
| | | Total credits | 10 | |

NAGARJUNA GOVERNMENT COLLEGE, NALGONDA (AUTONOMOUS) ALLOCATION OF CREDITS AT SUBJECT LEVEL

College: N.GCOLLEGE Course: B.ScIII YEAR PAPER-VI., Subject: BIOTECHNOLOGY

| S.NO | Semester | Module(Paper) | Credits | Max.marks |
|-----------|----------------|--|--------------|-----------|
| | | | | |
| 1 | VI(Core) | MICROBIAL TECHNOLOGY | 04 | 100 |
| | | (CORE) | , (| 10, |
| 2. | Practicals-7 | MICROBIAL TECHNOLOGY | 01 | 50 |
| | (CORE) | (CORE) | <i>11</i> 0, | |
| 3. | VI-Elective(A) | ANIMAL BIOTECHNOLOGY | 04 | 100 |
| J. | | | | |
| 4. | VI-Elective(A- | ANIMAL BIOTECHNOLOGY | 01 | 50 |
| | Practical) | | | |
| 5. | VI-Elective(B) | ENVIRONMENTAL BIOTECHNOLOGY AND BIODIVERSITY | 04 | 100 |
| 6. | VI-Elective(B- | ENVIRONMENTAL | 01 | 50 |
| | Practical) | BIOTECHNOLOGY AND BIODIVERSITY | | |
| | 1 | Total credits | 10 | |
| | | | | |
| | PF | ROJECT WORK | 4 | 100 |
| | TC | OTAL CREDITS | 46 | 1200 |