TTWRDC, (W), JANGAON.

DEPARTMENT OF MICROBIOLOGY

About Department:

Microbiology has spawned a plethora of jobs in wide spectrum of industries from pharmacy to cosmetics. It is a department where the local knowledge, originality, creativity and motivations are considered more than conventional methods in teaching and producing well-trained students who are more capable to meet the challenges in the current scenario. The department always encourages the students for their higher studies and research field by recognizing the student's individual potentiality. The students after completion of the course are leaving the portals of the department with great confidence in the competitive world. The subject offers students in many activities during their course like classroom learning, hands on training in various practical's , outstation excursions, field exploration studies, minor research projects, etc. The students can learn the biology, interrelationships and behaviour of various kinds of organisms from microbial diversity ,agriculture related organisms .

OBJECTIVES:

•Enhance opportunities for research for undergraduate students.
•Preserve, add to, evaluate, and transmit knowledge in the field of Microbiology.
•Prepare graduate students (M.Sc within –depth knowledge and research skills for professional careers in Microbiology.

VISION OF DEPARTMENT

We help students assimilate the true meaning of education in the real sense enabling them to carve a niche for themselves in the society. Our approach not only makes them succeed in the competitive scenario, but teaches them the right attitude towards life so that they can become better citizens of the country.

MISSION OF DEPARTMENT

- To edify the students with basics to advanced concepts of microbiology that will train the students at a high standard of scientific literacy and impart appropriate skill sets.

- To promote high-impact education and innovative research in a diverse and inclusive environment by using contemporary and innovative approaches.

- To engage in outreach activities to enhance community understanding of the importance of microbiology and to contribute to the mission of the college.

PROGRAMS AVAILABLE:

UG Program
I Year
I Semester (Paper-I): INTRODUCTORY MICROBIOLOGY
II Semester (Paper-II): MICROBIAL PHYSIOLOGY & BIOCHEMISTRY
II Year
III Semester(Paper-III):BASICS OF MEDICAL MICROBIOLOGY& ADVANCED IMMUNOLOGY
IV Semester (Paper- IV): MICROBIAL BIOTECHNOLOGY &GENETICS
III Year

V Semester (Paper- V): INDUSTRIAL & FOOD MICROBIOLOGY

VI Semester (Paper- VI): ENVIRONMENTAL MICROBIOLOGY

CAREER PROSPECTS:

Graduates with specialist degree in microbiology are equipped to enter employment with more focused functions such as microbiological analysis, quality assurance or research and development, Food, Industrial, Environmental microbiologists, Sales or technical representatives,Medical Technologists., Biomedical Scientists, Clinical Research Associates, Pharmaceutical analytical associates and Teaching.

Status of the Department

Dr. Gousiya Begum (Head of the Department)

Qualification: (M.sc., Ph.D).

Date of joining : 10 th october 2023

Designation : Guest Degree lecturer in Microbiology

Teaching experience: 12 YEARS

Mobile no: 9985607074

Email id: naazgousiya@gmail.com

DEPARTMENTAL INFRASTRUCTURE:

The Department of Microbiology has a well-equipped laboratory with modern research facilities including UV-Visible Spectrophotometer, Centrifuge, Autoclave, Incubator, UV-Transilluminator, and Gel Electrophoresis apparatus etc.

Activities of Department

GUEST LECTURES:

Dr.RENUKA , HEAD DEPARTMENT OF MICROBIOLOGY ,PINGLE COLLEGE delievered a lecture on Basics of Immunology.

DEPARTMENT INFRASTRUCTURE UPGRADATION

1. Lab equipment up gradation.
2. Procurement of Teaching aids like Laptops, LCD,OHP, Charts etc.,
3. Department collaboration with PINGLE COLLEGE, HANAMKONDA.

Faculty Research Publications

- **Gousiya Begum** and Srinivas Munjam, (2019). Isolation, identification and screening of pectinolytic fungi from vegetable waste dump yards, Warangal (Telangana State, India). Reseach Journal of Agricultrural Sciences an International Journal. 10(5/6): 755-764 2.
- **Gousiya Begum** and Srinivas Munjam, (2020). Optimization of cultural conditions, Temperature and pH for Production of pectinases by two species of Aspergillus. Biosc. Biotech. Res. Commn. 13(1): 353-361.
- **Gousiya Begum** and Srinivas Munjam, (2020). Utilization of agroindustrial wastes for the production of industrially important pectinases by Aspergillus niger in submerged fermentation. *Reseach Journal of Agricultrural Sciences an International Journal.* **11**(4): 731-738.
- **Gousiya Begum** and Srinivas Munjam, (2021). Carbon and nitrogen sources effect on synthesis of pectinase by Aspergillus niger under submerged fermentation. *Biotechnology Research Asia Journal.*
- **Gousiya Begum** and Srinivas Munjam, (2022). Efficacy of purified pectinase obtained from A.niger in extraction and clarification of juice. AFST.

Students Achievements

M.Rasagna attended master student programme om May 16th 2022 (TSAT LIVE programme) by Head office. **Topic-Isolation of pure culture.**