Microbiology Department

Infrastructure

- Staff room with well equipped computer & Internet facility is available.
- The department is well equipped with 3 laboratories for intermediate and degree students.
- Good classroom facility along with labs is provided.
- Labs are well equipped with volumetric and non volumetric glassware, chemicals, instruments, equipments like laminar air flow, hot air oven, incubator, Autoclave, UV chamber, microscopes with stage and oil immersion, etc for practical's.
- To gain the subject knowledge, apart from college main library (379 number) , department has 203 books for students reference.
- Students are provided with protocols to perform experiments at different levels such as;

INTERMEDIATE LEVEL-MLT (Medical lab technician)

- Vocational course – MLT(Medical lab technician)
- Subjects- MLT I yr- Biochemistry, Microbiology& pathology, Anatomy & physiology

  MLT II yr - Biochemistry, Microbiology & pathology
- Students learn about the following
  - Biochemical testing methods, various specimens collection and processing, Blood sample collection, Different Diagnostic test .
  - Qualitative and quantitative estimation methods for sugars, Proteins, lipids,etc. Serological test (WIDAL and VDRL)
  - Haematology- RBCcount, WBC count, CBP, estimation of DLC, etc
  - Identification of organisms- Bacterial, Fungal forms, Histopathology and Cytology.

GRADUATION LEVEL

- Isolation, identification, cultivation and preservation of bacterial pure cultures by different microbial techniques.
- Isolation of various types of halophiles, antagonistic, commensals, symbiotic, etc
- Isolation and identification of probiotic bacteria and yeast, coliform tests, BOD, Mycotoxins- detection and extraction

- Haematology- RBCcount, WBC count, CBP, estimation of DLC, serological test etc
- Biochemical tests – IMVIC, oxidase, catalase, coagulase, etc.
- Colorimetric estimation of protein, DNA, RNA, extraction of genomic RNA& DNA.
- Seperation and observation of genomic DNa and plasmid DNA by Agarose gel electrophoresis.
- Isolation and enumeration of rhizosphere microorganisms, mass production of rhizobium, Mycorrhizae, Pseudomonas, etc
- Industrial production of different products like citric acid, Alcohol, Beer and Antibiotics etc.
- Anitbiotic sensitivity test.
- Coliform test (Multiple Tube Method)
- MBRT (Methylene Blue Dye Reduction Test) for Assessing the Raw milk Quality.
- Isolation and identification of bacteria and fungi from spoiled fruits and vegetables.

MICROSCOPIC EXAMINATION OF MICROBIAL SLIDES BY STUDENTS

STUDENTS PERFORMING HAEMATOLOGY PRACTICALS




Infrastructure details:

Lab I

Lab II

Lab III

Instruments in Microbiology lab


INCUBATOR
INCUBATOR


HOT AIR OVEN


EDISON
An ISO 9001:2000 Co.
WATER BATH
12 HOLES
Rectangular Water Bath
THERMOSTAT
CONTROL
MAIN


BOD INCUBATOR
Mfr. RIA INSTRUMENTS
HYDERABAD
BOD INCUBATOR