

## LABORATORY FACILITIES

1.	Cell Biology and Microbiology Lab	6.	Immunology Lab
2.	Biochemistry Lab	7.	Plant Tissue Culture Lab
3.	Instrumentation Methods of Analysis Lab	8.	Genetic Engineering and Molecular Biology
4.	Bio-Process Engineering – I Lab	9.	Down stream Processing Lab
5.	Bio-Process Engineering – II Lab	10.	Bioinformatics Lab

## LAB INFRASTRUCTURE



1. Incubation Chamber

### CELL BIOLOGY AND MICROBIOLOGY LAB

This Laboratory equipped with facilities such as Aseptic culture room, washing and dressing rooms. In addition to this, this laboratory includes various instruments like Laminar Air Flow Cabinet, COD Incubator, BOD Incubator, Autoclave, Hot Air Oven, Incubators, Confocal Microscopy, Compound Microscopes, pH meter, Micrometry, Calorimeter, Refrigerator and Nephelometer.



2. Laminar Air Flow Cabinet



3. Serological Water bath

### BIOCHEMISTRY LAB

This Laboratory equipped with Calorimeter, Water bath, Electronic balance, pH meter, Magnetic stirrer and Cyclomixer.



4. Biochemistry Lab Facility



5. Students handling UV Visible Spectroscopy

### INSTRUMENTATION METHODS OF ANALYSIS LAB

Instrumentation lab equipped with High performance liquid chromatography, UV visible spectroscopy single and double beam, Spectrofluorimeter, Fourier Transform Infra red Spectrophotometer, Gas Solid Chromatography, Flame Spectroscopy, Lyophilizer, pH meter, E.C Meter, Turbidity meter, Chromatographic Glass Chambers and Air driers.



6. Lyophilizer and BOD incubator



7. Bioprocess Lab facility

### BIOPROCESS ENGINEERING LAB – I & II

These Laboratories are equipped with various instruments like- Fermenter, Spectrophotometer, Peristaltic pump, Laminar Air flow chamber, Autoclave, Hot Air Oven, Incubator, Orbital shaker Cum Incubator, Centrifuge, pH meter, Magnetic Stirrer, Cyclo mixer, Electronic balance, Refrigerator and Micrometry.



8. Students during fermentation Process



9. Immunology Lab facility

#### **IMMUNOLOGY LAB**

Immunology lab equipped with various instruments like, Animal House Facility, ELISA reader, Gel filtration, Defreeze, Cooling Centrifuge, Normal Centrifuge, Refrigerator, pH meter, Haemocytometer, Platform of Rocket gel and ice faker.



10. Immunology practical experiment



11. Plant Tissue Culture Lab

#### **PLANT TISSUE CULTURE LAB**

This laboratory has been equipped with facilities such as Dressing room, Media Preparation Room, Inoculation Room, Plant Growth Room etc. In addition to this, prominent instruments include Laminar Air flow chambers, Growth Chamber, Autoclave, Orbital shaker cum Incubator, Refrigerator, Electronic balance, Magnetic Stirrer, Cyclomixer, pH meter and others.



12. Research Microscopy



13. Deepfreeze (- 120°C) & Laminar Air Flow Cabinet

#### **GENETIC ENGINEERING AND MOLECULAR BIOLOGY LAB**

Molecular biology and Genetic Engineering techniques are important tools for molecular studies, gene transformation for production of genetically modified products developments and gene characterization studies etc. This lab equipped with Micro Centrifuge, Cooling Centrifuge, Deep freezer, UV transilluminator, UV Visible Spectrophotometer, Electrophoresis units, Laminar air flow cabinet, Gel Rocket, UV Transilluminator and ELISA.



14. Molecular biology and Genetic Engineering Lab



15. Down Stream Lab

#### **DOWN STREAM PROCESSING LAB**

The purpose of this laboratory to learn the techniques employed in the Isolation and Purification of desired product using various Unit Operations like Filtration, Centrifugation, Extraction, Precipitation, Chromatography and Electrophoresis. This Laboratory has been equipped with, Orbital Shaker cum incubator, Filtration Unit, Vacuum filtration Unit, Chromatography Columns, Vertical and Horizontal electrophoresis units and others.



16. Down Stream Lab

#### **BIOINFORMATICS LAB**

This Laboratory has been equipped with Main server and computers with Internet. The following Bioinformatics software's are available like-Accelrys and other freeware like EMBOSS, JEMBOSS, AUTODOCK, etc.