

SWAMI SHRADDHANAND COLLEGE, UNIVERSITY OF DELHI

DEPARTMENT OF MICROBIOLOGY

I. LABORATORY & RESEARCH FACILITIES

Department of Microbiology has two well-furnished laboratories with the necessary equipments and infrastructure to cater the need of undergraduate level practicals and basic research in various fields. Departmental Instrumentation Facility is ICT enabled with suitable infrastructure as per the Good Microbiological Laboratory Practices. The equipments are regularly added up as per the requirement and are maintained in a good condition by regular servicing. The equipments include digital microscopes, compound microscopes, PAGE and agarose gel electrophoresis units, transilluminator, temperature control centrifuges, BOD incubators, shaker incubator, incubators, autoclaves with variable pressure limit, ovens, spectrophotometers, etc.

The basic research that involves bacterial isolation, culturing under different conditions and preservation; quantitative and qualitative analysis of biomolecules, practicals related to Molecular biology and Genetics such as estimation of DNA and RNA, electrophoresis, replica plating, genomic and plasmid DNA isolation; microbial production and detection and estimation of industrially relevant products; water quality testing, blood group determination, TLC & DLC, DOT ELISA, immunodiffusion and immunoelectrophoresis, biochemical test for identification of bacteria, checking antibacterial sensitivity, etc. can be conveniently carried out.

a) ICT enabled Laboratories:

Lab 1:



Lab 2:



b) Instrumentation Facility includes the following:

- Autoclaves



- Laminar flows





➤ **Cooling microfuge**



➤ **Cooling centrifuge**



➤ **Digital Microscopes:**



➤ **Compound monocular and binocular Microscopes:**



➤ **Incubators**



➤ **BOD Incubators**



➤ **Orbital Shakers**





➤ **Static water baths**



➤ **Shaking water baths**



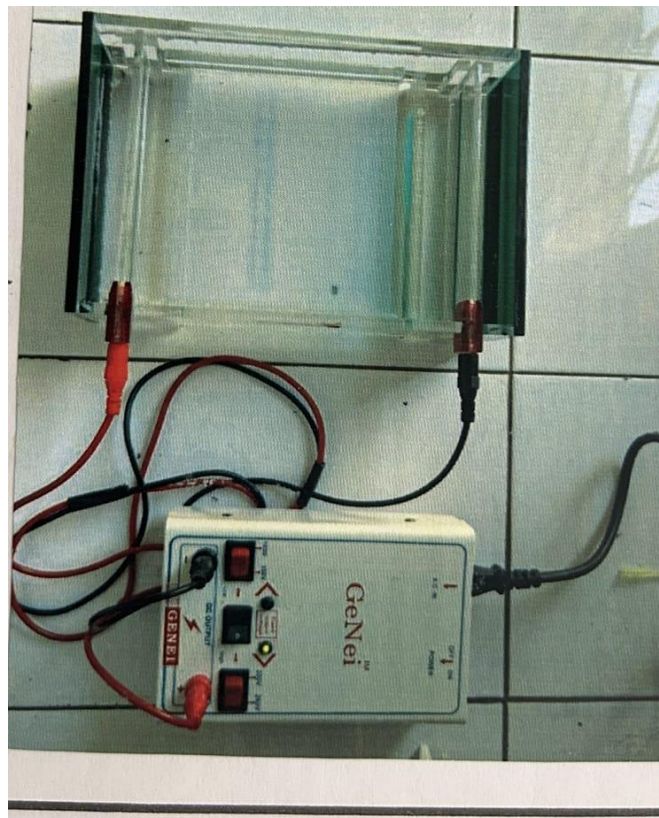
➤ **Hot air oven**



➤ **Magnetic stirrer with hot plate**



➤ **DNA Electrophoresis unit**



➤ **SDS PAGE Electrophoresis unit**



➤ **Electronic balance**



➤ **Ultra violet fluorescence analysis cabinet**



➤ **Spectrophotometer**



➤ Cyclomixture



➤ Distillation apparatus



➤ pH meters



➤ Microwave oven



b) ICT enabled classroom

