

CENTRAL LEPROSY TEACHING AND RESEARCH INSTITUTE
CHENGALPATTU

F.No.2/Lab Activity/2023

10.02.2023

Training schedule for Biotechnology Students (5 days program)

Date	Session	Section	Learning objectives
Day 1	Forenoon	Lab Division	Introduction & Pre-test
		Clinical pathology	Slit Skin Smear: Site selection Collection of specimen for SSS SSS smear preparation ZN staining methods Microscopy and reporting of reports
	Afternoon	Lab Division	Lecture: Laboratory diagnosis techniques Recent developments
Day 2	Forenoon	Molecular Biology	PCR & RT-PCR basics Primer designing
	Afternoon	Hematology	Observe the techniques of measuring blood parameters and to observe the various serological assays performed in the section
Day 3	Forenoon	Molecular Biology	DNA isolation & quantification Preparation of reaction mixture
	Afternoon	Molecular Biology	Electrophoresis and gel documentation

Day 4	Forenoon	Microbiology	<p>Observe standard microbiological techniques</p> <p>Sample collection for microbiological investigations</p> <p>Inoculation of the samples</p> <p>Direct smear for gram stain</p> <p>Procedure for Antibiotic Sensitivity Test</p> <p>Biochemical characterization to identify the microorganisms</p> <p>Reporting the Results</p>
	Afternoon	Molecular Biology	<p>Demonstration of blot techniques:</p> <p>Western blot technique</p> <p>Southern blot technique</p> <p>RFLP</p>
Day 5	Forenoon	Animal House	<p>Animal care</p> <p>Observe the animal colonies</p> <p>Animal handling</p> <p>Animal nutritional requirements</p> <p>Mouse foot pad inoculation</p> <p>Other animal experiments</p>
	Afternoon	Biochemistry	<p>observe and learn the principle, procedure and interpretation of various biochemical tests performed in the section</p>
		Lab Division	<p>Post-test & Valedictory</p>


DIRECTOR