

## Illustrative List

Plasmid DNA isolation – 1 day	Genomic DNA isolation – 1 day
Agarose gel electrophoresis – 1 day	Isolation and cultivation of Microorganisms – 1 day
Determination of microbial activity in soil (Physiology) – 1 day	Antimicrobial susceptibility testing in accordance with NCCLS guidelines - 3 days
Microwave assisted extraction for plant materials - 2 days	Analysis of functional microbial communities of environmental samples using substrate utilization profiles and multivariate analysis statistical tools - 3 days
Protein purification techniques – 5 days	Polyacrylamide gel electrophoresis : native and denaturing – 2 days
Separation and purification of components by HPLC – 2 days	Isolation, purification and characterization of Probiotic strains and their future applications. – 3 days
Assessment of Male reproductive functioning. – 3 days	Chromosome studies by short term culture of human lymphocytes and bone marrow – 3 to 7 days
Introduction to molecular cytogenetics: Lectures and Demonstration - 2 days	Applied Clinical Cytogenetics: Can be a certificate course for 2 weeks to 3 weeks
Karyotyping of human chromosomes: Certificate course for 2 weeks	Chromosome breakage & Micronucleus assay - 3 to 7 days
COMET assay - 3 to 7 days	Laboratory and regulatory aspects of in vitro genotoxicity assessment - Can be a certificate course for 2 weeks
Microscopy Lectures and Demonstration - 1 days	Tissue culture facility: Making and maintaining Lectures and Demonstration - 1 days
Animal Handling for biological research – 2 days	Total RNA extraction and cDNA synthesis – 2 days