

## HANDS ON WORKSHOP ON DNA FORENSICS

### Day 1: Module One - Introduction to DNA Profiling & Applications

**Topics include:** Basics of DNA Forensics , Application of DNA Fingerprinting , Techniques of DNA Profiling through Molecular Marker , Designing of experimental plan.

### Day 2: Module Two – DNA Extraction for Forensic Samples

**Topics include:** DNA Extraction Strategies , Quality importance of DNA , Techniques for DNA Quality check.

### Day 3: Module Three : PCR Optimization , Troubleshooting ,

**Topics include:** PCR reaction setup Strategies , GC contents in Primers , Role of annealing temperature , Role of Contamination , Role of PCR Cycles etc.

### Day 4: Module Four – PCR Reaction setup for Fingerprinting

**Topics include:** DNA Dilution , Primer Selection , Primer Screening , PCR Optimization , PCR of DNA Samples

### Day 5: Module Five – DNA Profiling Data Analysis

**Topics include:** DNA Scoring and software analysis , Dendogram Generation / Construction of Phylogenetic Tree / Similarity Matrix

**Eligibility :** Students of Biotechnology / Forensic Science / Microbiology / Biochemistry / Forensic Sciences / Life Science background

**Service Charges :** Rs 4000 / - Per Attendee