

TRAINING MODULE – BASIC PROTEIN BIOLOGY

COURSE DURATION: 6 DAYS FEE: 3000 INR

DAY 1: Introduction to Protein Biology and Essential Calculations

- Overview of proteins: structure, function, and their role in biological system
- Basic calculations and reagent preparation

DAY 2: Protein Isolation Technique

- Protein extraction from various samples
 1. Bacteria
 2. Plant
 3. Tissue

DAY 3: Quantification of Proteins

- Overview of the Lowry and Bradford methods, principles, and sensitivity

DAY 4: Quality Control of Protein Samples Using SDS-PAGE

- Overview of SDS-PAGE and its role in assessing protein size, purity, and integrity
- Explanation of SDS, gel composition, and electrophoresis principles
- Preparation of gel (casting, loading) and buffer setup for protein separation

DAY 5: Running SDS-PAGE

- Running extracted protein samples through SDS-PAGE
- Staining and visualizing the gel to assess protein quality and purity

DAY 6: Report Submission and Certificate Issue