

# **ADVANCED BIOCHEMICAL TECHNIQUES (15 Days)**

- General, safety instructions & Good laboratory practices of lab.
- Principle and handling of biochemical equipments
- Basics of calculations, weighing and measurements.
- Preparation of reagents and standard solutions.

## **CARBOHYDRATES**

- Extraction of crude carbohydrate
- > Qualitative analysis of carbohydrate
- > Estimation of total carbohydrate by Anthrone method
- > Estimation of total carbohydrate by Phenol sulphuric acid method

#### **PROTEIN**

- Isolation of crude protein
- Protein precipitation
- Qualitative analysis of protein
- Estimation of total protein by Lowry's method
- Estimation of total protein by Bradford method
- SDS-PAGE GEL electrophoresis
- Western Blotting

### **LIPIDS**

- Extraction of Total lipid
- Estimation of total lipid

### **NUCLEIC ACIDS**

- Extraction of DNA & RNA
- Estimation of DNA by DPA method
- Estimation of RNA by Orcinol method
- > Agarose gel electrophoresis
- Southern & Northern Blotting

### **AMINOACIDS**

- Extraction of amino acids
- > Estimation of Amino acids by Ninhydrin method
- Thin Layer Chromatography
- Paper chromatography

