



## CLINICAL RESEARCH

**Duration: 30-45 days**

**Code: CR-45**

- An introduction to Clinical Diagnostics.
- Blood components and their importance in Clinical Diagnostics.
- An overview of Molecular Diagnosis.
- Overview of clinical research in healthcare.
- Clinical Research and Disease management
- Biases in decision making
- Clinical / Biomedical data analysis and use of different software e.g
- SAS, SPSS, ORACLE CLINICA.
- Oncoinformatics, treating cancer with cancer database management.
- Drug types and different metabolic pathways
- QSAR and QSPR
- Isolation of DNA from Blood
- Agarose gel electrophoresis
- CRF
- Toxicity Test
- QSAR, QSPR studies on different drugs.
- Clinical data Management with SAS

**WET LAB PART (Any two diseases)**

### HEPATITIS/CIRRHOSIS/LIVER DISEASES

- Detection of albumin levels
- Estimation of Serum bilirubin
- Determination of Creatinine levels
- Determination of serum SGPT levels

### RENAL DYSFUNCTION

- Estimation of levels of Chloride ions

### THYROIDISM

- Determination of Serum / Plasma Calcium levels

### CORONARY HEART DISEASE

- HDL Cholesterol detection by PEG PPT
- CK-MB activity determination by modified IFCC method

### DIABETES

- Estimation of Glycosylated Haemoglobin
- Determination of  $\Gamma$ -GT levels.
- Detection of Serum magnesium levels
- Detection of urine micro protein levels

**Project (Optional)**