



## **Pathological Tools & Techniques for biomedical applications**

The objectives of this training course are to generate skilled human resources ready for employment in the hospital/ diagnostic pathology/ Forensic laboratory/ research industry/ laboratory and academia. This is a unique opportunity for skill development and basic training in the area of pathology starting from the basic steps to generalized report preparation. The course will cover the basic important technique of how to work with the pathology/ diagnostic laboratory or drug research area to support the pathology point of view etc. The dearth of proper & expert pathology technicians within the arena of Medical Services coupled with a low livelihood opportunity for the youth is the main motivation behind designing the course. The courses are targeted to candidates having a biological background. Such a course can provide excellent opportunities for the youth as well as bridge the gap in medical services of our country. The candidates will have excellent opportunity work with pathology laboratory, practical exposure of equipment and sample handling of various laboratory animals CSIR-CDRI.

**Duration:** 6 Weeks

**No of Seats:** 20

**Essential Qualification:** Minimum intermediate pass out in science field

**Fees:** 10000/- rupees

**Training Curriculum-** The course structure consists of both theoretical and hands on-training. General introduction to Pathology & Pathological techniques with hands on exposure to basic laboratory instruments used in Pathology Laboratory. It includes the Basic introduction

- Blood collection and necropsy of laboratory animals
- Clinical Pathology: Reception & labelling of samples, record keeping, cleaning. Preparation of various Stains & reagents.
- Stool Examination: - Routine & Microscopically, Occult blood test
- Urine Examination: - Routine & Microscopical, Preservative and fixation of various samples
- Haematology analysis
- Blood smear preparation,
- Staining of blood smear and Differential leucocyte count (DLC) analysis
- Biopsy/ Cytology: - Collection of material, Preparation of stain and staining by Leishman / Giemsa.
- Diagnostics
- Demonstration the process of Histopathology, slide preparation and staining
- Genotoxicity test procedure 1) Micronucleus test 2) Chromosomal aberration 3) Bacterial reverse mutation assay (Ames assay)
- Organization and Management of laboratory
- Quality control
- Communication skill
- Preparation for interview

to provide pathological support in the area of medical sciences.