

## General Anatomy including Embryology and Histology

### Course outcome

CO 1: To locate the normal position of structures in the human body for clinical examination and clinical procedures in patients.

CO 2: To explain the anatomical basis of disease and injury.

CO 3: To execute provisional diagnosis with the help of anatomical knowledge and do further investigation related to anatomical structures for final diagnosis.

CO 4: To describe the microscopic structure of the various tissues, a pre-requisite for understanding the pathology and pathophysiology of disease.

CO5: To identify the basis of abnormal development, effects of teratogens, congenital and genetic diseases.

CO 6: To describe the sectional anatomy to read the radiographs and pictures taken by modern imaging techniques.

**Biochemistry**  
**Course outcome**

CO 1. To explain the biochemical concepts, structure and function of biological molecules - carbohydrates, proteins, lipids, nucleic acids, enzymes and minerals and the role of nutrition in health & diseases.

CO 2. To explain the biological mechanisms such as the processes and control of bioenergetics and metabolism, the chemical reactions and the intermediary metabolism.

CO 3. To explain the biochemical processes that underlie the relationship between health and diseases focusing on impairments in metabolism including inborn errors of metabolism.

CO 4. To demonstrate an experiential learning and critical thinking attributed to various blood and urine parameters of normal, abnormal and of diagnostic importance.

CO 5. To examine and interpret the biochemical values in diseases, e.g., Diabetes mellitus, Cardiac Diseases, Renal diseases, Liver diseases etc.

CO 6. To explain the catalytic role of enzymes, the importance of enzyme inhibitors in the design of new drugs, therapeutic and diagnostic applications of enzymes and the principles of biochemical techniques (e.g., chromatography, electrophoresis, RIA, ELISA, RT-PCR etc.), Molecular Biology and Genetics.

## **General Human Physiology**

### **Course outcome**

CO1: To explain about normal functions of the organ systems of the body to facilitate an understanding of the physiological basis of health and their interactions for well-co-ordinated total body function.

CO2: To explain all the organ systems (haematology, digestive system, respiratory system, CNS and endocrinology etc.) and its regulatory mechanisms.

CO3: To list the physiological principles underlying the pathogenesis and treatment of disease.

CO4: To distinguish between normal and abnormal data derived as a result of tests which he/she has performed and observed in the laboratory.

CO5: To execute experiments designed for the study of physiological phenomena and interpret experimental and investigative data.

## **Dental anatomy, embryology and oral histology**

### **Course outcome**

CO1: To describe the normal development, morphology, & functions of teeth and oral soft tissues.

CO2: To demonstrate the basic skill in Carving of crown and root of permanent teeth in wax blocks.

CO3: To accurately identify Deciduous & Permanent teeth using FDI/Palmer tooth notations.

CO4: To explain the histology of dental and oral tissues and physiologic ageing process in the dental tissues.

CO5: To correctly identify the oral tissues from their Microscopic appearance through slides.

CO6: To estimate age based on patterns of tooth eruption from plaster casts of different age groups.