

Objective - To enable the students to understand the normal functioning of various organ systems of the body, and their interactions.

- UNIT – 1** Musculo-Skeletal System and Joints: Introduction, structure of skeleton, divisions of skeletal system. Classification of bones & joints, salient features & functions of bones, structure & organization of skeletal muscle, physiology of muscle contraction,
- UNIT – 2** Digestive system: Introduction, basic anatomy of gastrointestinal tract (esophagus, stomach, small intestine, large intestine, liver, gall bladder, pancreas), physiology of GIT, Excretory System: Introduction, Basic anatomy of kidney and associated organs, Nephron- structure & function, Mechanism of Excretion, Urine formation (Glomerular filtration and Tubular reabsorption),
- UNIT – 3** Cardio Vascular System – Introduction, general anatomy of heart and its functions, anatomy of vascular system (blood vessels), Blood circulation, heart's conduction system, cardiac cycle, heart sounds, blood pressure, Respiratory System: Basic anatomy of respiratory system(nose, larynx, trachea, bronchi & lungs), external & internal respiration, respiratory volumes & regulation of respiration.
- UNIT – 4** Nervous System: Basic anatomy of brain and spinal cord, major types of cells in nervous system, neurons, divisions of nervous system, mechanism of nerve impulse, Reproductive System: male & female reproductive system, sex hormones, secondary sexual characteristics, spermatogenesis, oogenesis, menstrual cycle, pregnancy, menopause & contraceptive measures, Endocrine System: Brief introduction about glands and their secretion, classification of glands, endocrine & exocrine hormones (release, secretion, action).

Recommended Books:

- Anatomy and Physiology for Nurses by Ian Peate & Muralitharan Nair
- Comprehensive Radiographic Pathology. Ronald L. Eisenberg, NancyM. Johnson
- Surface and Radiological Anatomy – Hamilton et al (Heffer)
- An Atlas of normal radiographic Anatomy – Ross and Wilson.