SEM-2

VDT-201 General Human Anatomy & Physiology-II

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
- An Atlas of normal radiographic Anatomy - Ross and Wilson.
- Ross and Wilson ANATOMY and PHYSIOLOGY in Health and Illness.