BMPC2002 HUMAN PHYSIOLOGY AND ANATOMY (3-0-0)

MODULE-I

Cells: Introduction to cells, Composition of cells, movements of the cell membrane,Life cycle of cells, Action Potential

Blood: Composition of blood,Production of blood, blood groups, Identification of blood groups

MODULE-II

Blood vessels and cardiac system: Types of blood vessels, Structure of blood vessels,blood supply to different organs including Lungs, Heart, Liver & Kidney, Structure of the Heart, Electrophysiology of Heart, Cardiac Cycle, blood Pressure.

Nervous System: Structure of the Nervous cells, Classification of neurons and nerve fibers,the synapse, the nerve pathways, general functions of the nervous system, nervous tissue, cell membrane Potential, Brain, Spinal Cord.

MODULE-III

Respiratory System: Anatomy of respiratory System, Physiology of Respiration, Regulation of respiration

Musculoskeletal System: Structure of skeletal Muscle, Muscle Contraction, Muscular Response, Smooth muscles, Cardiac muscles,Skeletal muscles,Bone structure,Bone development,functions of bones, organization of skeleton, joints of the skeletal systems, types of joints and joint movement.

MODULE-IV

Digestive system: Gastrointestinal tract, movement of the gastrointestinal tract,Liver,Pancreas,

Excretory System: Kidney, nephrons, mechanism of urine formation, skin & Sweat glands

Module-V

Somatic and special senses: Introduction, Receptors and sensation, special senses, sense of smell, sense of taste, sense of hearing, sense of equilibrium, sense of sight.

BOOKS

- Martini and Nath, Fundamentals of Anatomy and Physiology,Pearson,11th ed,2018
- Wood,Laboratory Manual for Anatomy and Physiology,Pearson,6th ed,2007
- K.Saladin,Anatomy and Physiology,McGraw-Hill,5th ed,2016
- Richard S Snell, Cinical Anatomy by Regions,Lippincott,Willioams and Wilkins,8th ed,2007