

SARDAR PATEL UNIVERSITY
Programme: MSC (Biochemistry)
Semester: III
Syllabus with effect from: June 2011

Paper Code: PS03CBIC03	Total Credits: 4
Title Of Paper: Human Physiology	

Unit	Description in detail	Weightage (%)
1	Blood - composition and functions of plasma, erythrocytes including Hb, leucocytes and thrombocytes and plasma proteins. Hemoglobinopathies, thalassemias and anemias. Blood clotting - extrinsic and intrinsic pathways of blood clotting, laboratory test to measure coagulation and thrombolysis.	25 %
2	Digestive system - Composition, functions and regulation of saliva, gastric, pancreatic intestinal and bile secretions - digestion and absorption of carbohydrates, lipids, proteins nucleic acids, minerals and vitamins.	25 %
3	Excretory system - structure of nephron formulation of urine, glomerular filtration, GFR, tubular reabsorption of glucose.	25 %
4	The Muscular System - Types of muscles and their functions Nervous System Structure of neuron, function and organization of nervous system, Nerve impulse transmission. Endocrine glands - secretion and function Reproduction, pregnancy and lactation. Hormonal disturbances.	25 %

Basic Text & Reference Books:

- Molecular Biology of the cells: Alberts et.al., Garland Publications Inc. NY.
- Cell and Molecular Biology by E D P de Robertis and E M F de Robertis.
- Text book of Medical Physiology by A. C. Guyton and J. E. Harcourt.
- Text book of Medical Physiology by Ganong.
- Text book of Biochemistry and Human Biology by Talwar.
- Principles of anatomy and physiology by Tortora Grabowski, 10th edition.

