BIOCHEMISTRY (BS-ADP 7th Semester)

Module Code:	**Chem-438**
Module Title:	**Human Physiology**
Name of scheme:	**BS-ADP 7th Semester**
Department:	**School of Chemistry**
Faculty:	**Science**
Module Type:	**Compulsory**
Module Rating:	**2 credits**

OBJECTIVES

After studying this course, students will be able to understand human physiology and body fluids. It will help to understand composition of blood and CSF. It will also help to explain the structure, functioning and importance of human immune system in term of health and disease. Identify the major components of the endocrine system and describe their functions. The mechanisms of hormone action and the role hormones play in body.

SYLLABUS OUTLINES

Introduction to human physiology. Body fluids; General composition of Blood and blood plasma. Biosynthesis and metabolism of Porphyrin and Hemoglobin. Coagulation and anti-coagulating agents of blood. Composition and Biochemical effects of urine. Composition and importance of CSF. Structure and detoxification function of liver and Kidney. Introduction to Endocrine system. Mechanisms of action, and Biological functions of Pancreatic, Pituitary, Gonadal, Adrenal, Thyroid and Parathyroid hormones. Pheromones.

RECOMMENDED BOOKS:

1. Principles of Biochemistry by Lehninger AL, Nelson DL and CoxMN,200 Pub: worth Publishers
2. Biochemistry by Lubert Stryer(2006) Pub: Freeman and Company
3. Harpers Biochemistry, 27th ed. (2006) McGraw Hill Inc.
4. Guyton and Hall Textbook of Medical Physiology (12th Edn)