

BIOCHEMISTRY (BS-ADP 7th Semester)

Module Code:	CHEM-442
Module Title:	Immunochemistry
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, student will be able to understand antigens, antibodies and immunity. It will also help to understand the abnormalities of immune system.

SYLLABUS OUTLINES

The immune system. Detailed structure, chemistry and synthesis of immunoglobulins. Immunogenicity and antigenicity. Properties of Immunogens for B and T lymphocytes activation. Myeloma and hybridoma immunoglobulins. Complement system. Inflammatory process. Peripheral leucocytes and Macrophages. Abnormalities of the immune system- autoimmunity.

Diagnostically important plasma enzymes and proteins, identification and treatment of enzyme deficiencies. Assessment of cell damage, factors affecting results of plasma essay, abnormal plasma enzymes

RECOMMENDED BOOKS:

1. Principles of Biochemistry by Lehninger AL, Nelson DL and CoxMN,2000
Pub: worth Publishers
2. Biochemistry by Lubert Stryer (2006) Pub: Freeman and Company
3. A biologist's guide to Principles and Techniques of Practical Biochemistry by Bryan L Williams and Keith Wilson Pub: Edward Arnold Ltd.
4. Harpers Biochemistry, 27th ed. (2006) McGraw Hill Inc.
5. Lecture notes on clinical chemistry, Alistaire F Smith, Geoffrey Beckett, Simon walker, Peter Rae 6th Edition, John Wile & Sons, 1998