

Honours:

IMMUNOTECHNOLOGY/PROSTHETIC DESIGN

PBM7D001 IMMUNOTECHNOLOGY

Module-I:

The origin of Immunology, types of immunity, humoral and cell mediated immunity, Primary and secondary lymphoid organ, antigen, cells of immune system, immunoglobulin and antibodies, Major Histocompatibility Complex (MHC)

Module-II:

Antigen processing and presentation, synthesis of antibody and secretion, Molecular basis of Immunology, Molecular basis of antibody diversity, polyclonal and monoclonal antibody, complement system, antigen-antibody reaction.

Module-III

Immune response and tolerance: Regulation of immune response, immune tolerance, hyper sensitivity, autoimmunity; graft versus host reaction, Immuno- deficiency and immuno-proliferate diseases. Dysfunctions of immune system and their modulation, Approaches for correcting immune dysfunction, Vaccinology, Monoclonal antibody technology.

Text Books:

1. Immunology: Lydyard, P.M., Whelan, A., Fanger, M.W., 1st Ed., Viva Books.
2. Essential Immunology: Roitt, I.M., 9th Ed.(1997) Blackwell Scientific, Oxford, UK.
3. Immunology: Kuby, J. 3rd Ed. (1997) Freeman W. H., oxford.
4. Immunotechnology by A Khan, Pearson Publication

Reference:

1. Microbiology and Immunology by B K Patnaik, T.C. Kar, H.N. Thatoi, India-Tech publication. New Delhi