

2.12 40133 IMMUNOLOGY

UNIT-1 INTRODUCTION TO IMMUNOLOGY

- 1.1 Historical perspective of Immunology,
- 1.2 Contributions of Edward Jenner, Louis Pasteur and Metchnikoff,
- 1.3 Scope of Immunology

UNIT-2 IMMUNITY

- 2.1 Definition,
- 2.2 Innate Immunity,
- 2.3 Acquired Immunity, Vaccines

UNIT-3 CELLS & ORGANS OF THE IMMUNE SYSTEM ORGANS

- 3.1 Organs of the immune system,
- 3.2 Cells of the Immune system,

UNIT-4 ANTIGENS

- 4.1 Definition, Immunogenicity,
- 4.2 Antigenicity and epitopes, Haptens and adjuvants,
- 4.3 Factors influencing antigenicity

UNIT-5 ANTIBODIES

- 5.1 Definition, General structure of Immunoglobulin,
- 5.2 Antibody classes and biological activities,
- 5.3 Production of Antibodies- monoclonal antibody

UNIT-6 ANTIGEN-ANTIBODY REACTION

- 6.1 Immune complex, Specificity of antigen
- 6.2 Antibody reaction – binding sites, binding forces,
- 6.3 Precipitation, Agglutination, Cytolysis,
- 6.4 Complement fixation, Opsonization, Immunofluorescence, RIA and ELISA

UNIT-7 IMMUNE RESPONSE

- 7.1 Humoral Immune response, Cell mediated Immune response
- 7.2 Dissertation on Industrial Innovation

Reference Books:

1. Kuby Immunology by Thomas J. Kindt, Richard A. Golsby, Barbara A. Osborne
2. Immunology by Saras publications
3. Text book of Microbiology by Ananthanarayan & Paniker
4. Immunology by W. E. Paul
5. Immunology by Carpenter