

1059
B.E. (Biotechnology) Fourth Semester
BIO-415: Immunology and Immuno-Technology

Max. Marks: 50

Allowed: 3 Hours

Attempt five questions in all, including Question No. 1 which is compulsory and selecting two questions from each Unit.

x-x-x

I Describe the following:-

- a) Opsonins.
- b) Adjuvants.
- c) Mononuclear cells.
- d) CDR's.
- e) MAC
- f) Haptens.
- g) H-2 complex
- h) Western blotting
- i) Chemical properties of Antigens.
- j) ELISA

(10x1)

UNIT - I

- II a) Describe the structure and functions of primary lymphoid organs.
- b) Give an account of the morphology and functions of mononuclear cells. (2x5)
- III Describe the basic structure. Of immunoglobulin. Differentiate between the structure of different classes of immunoglobulin's. Draw suitable diagrams. (10)
- IV. a) What are the factors which affect the immunogenicity of an antigen.
- b) What are Antigen presenting cells? Explain their functions and different types. (2x5)
- V. Describe the structure and functions of Class I and II MHC molecules. Draw diagrams. (10)

UNIT - II

- VI. a) Give a brief account of organ specific autoimmune diseases.
- b) Explain the role of IgE antibodies and Mast cells in Type I Hypersensitivity. (2x5)

P.T.O.