

1058

B.Sc. (Hons) Bio-Informatics
Sixth Semester
BIN-6003: Immunology

Time allowed: 3 Hours

Max. Marks: 60

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

x-x-x

I. Attempt the following:-

- a) Give the functions of IgE and IgG.
- b) Differentiate between functions of helper and suppressor T-cells
- c) What is an epitope?
- d) Give full forms of ELISA and MHC.
- e) Name any two diseases for which humans are vaccinated before 5 years of age.
- f) Name two autoimmune diseases. (6x2)

UNIT – I

- II. a) Discuss the humoral immune response?
b) Write a note on various types of antibodies and their functions. (8,4)
- III. a) Differentiate between allotypes and idiotypes. (4)
b) Write notes on the following
 - i) Class switching in antibodies
 - ii) Immunologic memory and its implications (2x4)
- IV. a) Discuss Cell mediated immune response.
b) Draw a well labeled diagram of an immunoglobulin? (8,4)

UNIT – II

- V. Write notes on the following:-
 - a) Recombinant vaccines (giving suitable example)
 - b) Active and passive immunization (6,6)

P.T.O.

(2)

- VI. a) Discuss the technique of ELISA.
b) Write a note on any one autoimmune disease giving its cause and pathophysiology.
(6,6)
- VII. a) Compare and contrast MHC class I and class II.
b) Write a note on RIA?
(8,4)

x-x-x