

Exam.Code:0044

Sub. Code: 1017

2054

B.Sc. (Hons) Bio-Informatics

Sixth Semester

WIN-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. Answer the following briefly:-

- a) CDR
- b) Class switching
- c) Cytokines
- d) AIDS
- e) TCR
- f) Immunologic memory
- g) Allelic exclusion
- h) Humoral immune system

(8x1½)

UNIT - I

II. a) Write an overview on the components of the innate immune system.

b) Draw a well labelled diagram of antibody molecule.

(2x6)

III. a) Discuss the process of antibody affinity maturation.

b) Explain the different types of T-cells.

(2x6)

IV. a) Differentiate between allotype and idiotype.

b) Elaborate on the clonal selection theory.

(2x6)

UNIT - II

V. a) Discuss the role of adjuvant in vaccines with examples.

b) Explain the applications of ELISA.

(2x6)

VI. a) Elaborate on the antigen processing by Class - I MHC.

b) Discuss any bacterial vaccine.

(2x6)

VII. a) Write any organ specific autoimmune disorder.

b) Discuss the properties of class - II MHC antigens.

(2x6)

X-X-X