

Microbiology [Honours]

[CBCS]

B.Sc. Fifth Semester End Examination-2023

(Regular & Supplementary Paper)

PAPER-C12T

Full Marks: 40

Time: 02 Hrs

The figures in the right hand margin indicate marks

Candidates are required to give their answers in their own words as

far as practicable

Illustrate the answers wherever necessary

Group A

Answer any FIVE questions of the following: 5x2= 10

1. What is opsonin & cytokines?
 2. Write the four differences of ELISA and ELISPOT.
 3. Write the characteristics of SCID mice.
 4. What do you understand by valency of antigen?
 5. Write three main differences of natural and adaptive immunity.
 6. What is allotype and idiotype antibody?
 7. Name of the immunoglobulin which is help in opsonization?
 8. What is class switching?
-

(2)

Group B

Answer any FOUR questions of the following: 4x5 = 20

1. How macrophage involved in phagocytosis Process? Write two main differences between Td and Ti antigen 4+1
2. How NK Cells defence against intracellular Pathogens? 5
3. Describe the ultra-structure of IgG molecule with suitable diagram. 5
4. Write the process of MAC formation with suitable diagram. 5
5. Write the antigen presentation pathway class II MHC molecule? 5
6. What is hapten? Write the importance of HAT medium in monoclonal antibody production. 2+3

Group C

Answer any ONE question of the following: 1x10 = 10

1. a) What are the similarities between chimeric and Humanized Antibody. Why does the immune system attack the body?
b) How Td antigen activated the B cell for immune response?
c) Write the differences between autoimmunity and immunodeficiency. Why osteoarthritis less danger than RA?
(3+2+2+3)
2. Answer short note on (any 4)
 - a. VDJ rearrangement
 - b. MHC restriction.

(3)

- c. Immunoglobulins types.
- d. Erythroblastosis fetalis
- e. Monoclonal antibody

4x2.5
