

2022

Microbiology

[HONOURS]

(CBCS)

(B.Sc. Fifth Semester End Examination-2022)

PAPER-CC12T

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

Immunology

Group-A

Answer any five questions of the following:

5x2=10

1. What are PAMPs? 2
2. What is Monoclonal anti-body? 2
3. Differentiate between Tdepended and T independent Antibody. 2
4. Give an example of lipid antigens 2
5. What are Fab and Fc? 1+1
6. Define optionization. 2
7. What are secondary lymphoid organs? 2
8. Write down the difference between MHC I and MHC II molecules.

2

(2)

Group-B

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

1. a) What is humoral immunity?
b) State the difference between active and passive immunity. 3+2
2. Write a short note on ADCC and GALT. $2\frac{1}{2} + 2\frac{1}{2}$
3. a) Why is complement system essential in immunological defences?
b) Describe lactic pathway of complement system? 2+3
4. Discuss about the killing mechanism of virusis by CTL and NK cells. 5
5. a) Define adjuvants.
b) Write down the characteristics features of an antigen. 1+4
6. What is clonal selection theory, Write a short note on hybridom technology. 2+3

Group -C

Answer any one question: 1x10 = 10

1. Write short notes on the following (any four)
 - a) Antibody diversity.
 - b) VDJ rearrangement.
 - c) Immuno diffusion.
 - d) ELISPOT

(3)

- e) Flow CYTOMETER. $4 \times 2\frac{1}{2}$
2. Write short notes on the following (any four)
 - a) Myasthenia gravis.
 - b) Agglutination Test.
 - c) Hashimoto thyroiditis.
 - d) Chimeric Antibody.
- a) MALT $4 \times 2\frac{1}{2}$