

B.Sc. Semester-V Examination, 2022-23**PHYSIOLOGY [Honours]****Course ID : 52517 Course Code : SH/PHY/504/DSE-2(T)****Course Title : Microbiology and Immunology**

Time : 1 Hour 15 Minutes

Full Marks : 25

*The figures in the right-hand margin indicate marks.**Candidates are required to give their answers in their own words as far as practicable.*1. Answer any **five** questions of the following:

1×5=5

- What is epitope?
- Write any two features of 'Prion'.
- Define monoclonal antibody.
- What do you mean by T lymphocyte trafficking?
- What do you mean by psychrophilic bacteria?
- Define 'Disinfectants'.
- What is capsid?
- What do you mean by 'T-independent antibody response'?

2. Answer any **two** questions of the following:

5×2=10

- Define antigen-antibody reaction. Describe any two serological methods to demonstrate agglutination reactions along with their principle and example. 1+4
- What do you mean by transduction? Illustrate the lytic cycle of bacteriophage. 1+4
- Describe in brief about endocytic and cytosolic pathway of antigen presentation. $2\frac{1}{2}+2\frac{1}{2}$
- State the universal protocol for immunization. What are the schedules of Immunization? 2+3

3. Answer any **one** question of the following:

10×1=10

- Discuss about classical pathway of activation of complement system. What is MAC? 8+2
- Describe different stages of bacterial curve with diagram. Why are bacteria most susceptible to antibiotics during the log/exponential stage? 6+2+2