

B.Sc. Semester-V Examination, 2022-23**MICROBIOLOGY [Honours]**

Course ID : 52212 Course Code : SH/MCB/502/C-12

Course Title : 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.***UNIT-I**1. Answer any **five** of the following questions:

1×5=5

- Write the full form of ADCC.
- What is the function of complement system?
- Mention the function of Interferons.
- Antibodies received through mother's milk fall under which type of immunity.
- How active immunization differs from passive one?
- Write the contribution of Louis Pasteur in immunology.
- What are epitopes?
- Write the full form of RIA.

UNIT-II2. Answer any **two** of the following questions:

5×2=10

- Write a short note on cell mediated immune response.
- Write the principle and application of Sandwich ELISA.
- Write down the differences between monoclonal and polyclonal antibodies. What is HAT medium and why is it used in hybridoma technology? 3+2
- What do you mean by innate immunity? How skin acts as a first line of defense? 2+3

UNIT-III3. Answer any **one** of the following questions:

10×1=10

- Describe the features of MHC-I and MHC-II molecules with labeled diagrams. How MHC-I aids in presenting an endogenous antigen to a CTL? Describe. $(2\frac{1}{2} + 2\frac{1}{2}) + 5 = 10$
- Name different immune cells. Write functions of any three of them. What is western blotting? 2+6+2=10