

SH-V/MCB-502/C-12/19

B.Sc. 5th Semester (Honours) Examination, 2019-20

MICROBIOLOGY

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 side margin indicate full marks.
Candidates are required to give their answers in their own words
as far as practicable.*

1. Answer *any five* of the following questions: 1×5=5
- (a) What is Hapten?
 - (b) What do you mean by opsonization?
 - (c) What is APC?
 - (d) What is NK cell?
 - (e) What is interferon?
 - (f) Name the antibody produced during primary and secondary immuno response.
 - (g) Write the contribution of Robert-Koch in immunology.
 - (h) Give one example of artificial passive immunity.
2. Answer *any two* of the following questions: 5×2=10
- (a) What is MHC? Write the function of MHC-I and MHC-II. 1+4=5
 - (b) Write short note on ELISA.
 - (c) Outline briefly three pathways of complement-activation.
 - (d) Describe the process of Monoclonal antibody production. What are its uses? 3+2=5
3. Answer *any one* question: 10×1=10
- (a) Describe with diagram the structure of a typical antibody. Describe the proteolytic cleavage of antibody. 7+3=10
 - (b) Write schematically the different components of immuno system. What is the difference between Humoral and cell mediated immunity? What is agglutination and precipitation? 4+3+3=10