

Bankura University
B.Sc 5th Semester (Honours) Theory Examination,2021

SUB: Microbiology

Course ID: 52212

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

Course Title: Immunology

Full Marks: 25

Time: 1h 15 min

The figures in the margin indicate full marks

Answer all the questions.

UNIT I

1. Answer *any five* of the following questions: 1x5=5

- a) What do you mean by adaptive immunity?
- b) What is haptan.
- c) Which antibody contains secretory piece?
- d) What is the full form of ADCC?
- e) What is Freund's incomplete adjuvant?
- f) Give one example of innate immunity.
- g) What is the role of thymus gland?
- h) What is paratope?

UNIT II

2. Answer *any two* of the following questions: (5x2=10)

- a) Write short note on B-Cell activation.
- b) Describe the structure of a typical antibody with diagram.
- c) Write a short note on sandwich ELISA.
- d) What is active immunization? Describe the different methods of active immunization.

UNIT III

3. Answer *any one* of the following questions: (10x1=10)

- a) Describe the structure of MHC-I and MHC-II molecule. Explain how antigens are processed and presented by these two molecules? 4+6
- b) What is complement? Describe the classical pathway of complement activation. What is agglutination? 2+6+2