Seat No. _____

HO-003-1132002

M. Sc. (Biotech) (Sem. II) (CBCS) Examination

April - 2023

BT - 207 : Immunology

Faculty Code : 003

Subject Code : 1132002

Time : $2\frac{1}{2}$ Hours / Total Marks : **70**

1 Answer the following : (any **seven** out of ten, each of 2 marks) **14**

(1) What is functions of lymph node?

(2) Write different signs of inflammatory response.

(3) What is lattice hypothesis? How does it explain antigen-antibody complex formation?

(4) What are polyclonal antibodies?

(5) What is the biological function of complement C3?

(6) What is lymphocyte trafficking?

(7) What is HLA typing?

(8) What are the biological significances of MHC-III molecules?

(9) What is Arthus's reaction?

(10) What are the consequences of clonal selection?

2 Answer the following : (any **two** out of three, each of 7 marks) **14**

(a) Enlist various cells of the immune system and describe them in brief.

(b) Describe three major events in the inflammatory response.

(c) Discuss specific host defense mechanisms of innate immunity.

3 Answer the following : (each of 7 marks) **14**

(a) Highlights the principle and application of Radio immunoassay.

(b) Explain ELISA as an immunologic technique.

OR

3 Answer the following : (each of 7 marks) **14**

(a) Write an essay on structure and functions of immunoglobulin.

(b) Write an essay on antibody diversity.

4 Answer the following : (each of 7 marks) **14**

(a) Briefly discuss graft rejection mechanism.

(b) Discuss in detail the structure and functions of various classes of MHC molecules.

5 Answer the following : (any two out of four, each of 7 marks) **14**

(a) Write an essay on mechanism of hypersensitive reactions.

(b) What is autoimmunity? Explain giving any one autoimmune disease as an example.

(c) Briefly discuss-AIDS.

(d) Explain type-I hypersensitivity.
