2023

Time - 3 hours

Full Marks - 60

*Answer **all groups** as per instructions.*
Figures in the right hand margin indicate marks.
Draw labelled diagrams wherever necessary.

GROUP – A

1. Fill in the blanks. (all) [1 × 8

(a) _____ immunity provides the first line of defence against pathogens.

(b) T-cell maturation occurs in _____.

(c) _____ is a hereditary tendency to devlope allergic reaction to substances like food or pollen.

(d) An agent capable of inducing an immune response is called as _____.

(e) The study of antigen-antibody reaction in-vitro is called _____.

(f) _____ is used to denote strength between antibodies and multivalent antigen.

(g) _____ antibody constitutes major percentage of total serum immunoglobulins

(h) The resistance acquired during life of an individual is known as _____ immunity.

GROUP – B

2. Answer any eight of the following questions within two to three sentences each. [1½ × 8

(a) What is diapedesis ?

(b) What are natural killer cells ?

(c) Define hypersensitivity ?

(d) What is immunogenicity ?

(e) What is immune dysfunction ?

(f) Role of IgE.

(g) Functions of cytotoxic T-cells

(h) Secondary immune response (Humoral immunity)

(i) Neutrophils

(j) Chemokines

GROUP C

3. Write notes on any eight of the following : [16×2]

(a) Adjuvants

(b) Anatomical barrier

(c) AIDS

(d) Haptens

(e) Advances in vaccine production

(f) Inflammation

(g) TAP proteins

(h) B-Cell epitope

(i) Primary lymphoid organs

(j) Complement system

GROUP – D

Answer all questions within 500 words each.

4. What is immunity ? Give an account of passive and active immunity. [6

OR

Describe about molecules and organs that are involved in innate immunity.

5. Discuss antigen-antibody interactions. [6

OR

Give the structure and functions of different classes of immuno-globulins.

6. Describe the structure and functions of MHC molecules. [6

OR

Describe the classical pathway of complement activation.

7. Briefly describe types of hypersensitivity. [6

OR

Give an account on various types of vaccines with suitable examples.