

**PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)**

**BSc DEGREE EXAMINATION DECEMBER 2024
(Fifth Semester)**

Branch – **MICROBIOLOGY**

IMMUNOLOGY AND IMMUNOTECHNOLOGY

Time: Three Hours

Maximum: 50 Marks

SECTION-A (5 Marks)

Answer **ALL** questions

ALL questions carry **EQUAL** marks (5 x 1 = 5)

- 1 White blood cells that destroyed infected and diseased cells known as
(i) Antibody (ii) Phagocytosis (iii) NK cells (iv) Hapten
- 2 The antibodies present in mucosal surfaces are -----
(i) IgE (ii) IgA (iii) IgM (iv) IgG
- 3 Immunity by receiving antibodies from an external source is known as -----
immunization
(i) passive (ii) active (iii) inactive (iv) impassive
- 4 A reaction between ----- antigens with their antibodies forms insoluble
complexes.
(i) unsolvable (ii) dissolvable (iii) insoluble (iv) soluble
- 5 Rheumatoid arthritis is an / a ----- immune disease
(i) auto (ii) allo (iii) immuno (iv) haemolytic

SECTION - B (15 Marks)

Answer **ALL** Questions

ALL Questions Carry **EQUAL** Marks (5 x 3 = 15)

- 6 a. Bring out the contributions of Edward Jenner to the field of immunology.
(or)
b. Briefly explain about any one secondary lymphoid organs.
- 7 a. List out the features of an antigen.
(or)
b. Illustrate the structural and functional properties of IgM antibodies.
- 8 a. Present the role of interleukins.
(or)
b. State the current immunization schedule in India.
- 9 a. How is Ouchterlony's double immunodiffusion important?
(or)
b. Describe complement fixation test in brief.

Cont...

- 10 a. Write a short note on autoimmunity.
(or)
b. Which is referred as the delayed- type of hypersensitivity reaction? Write briefly.

SECTION -C (30 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks

(5 x 6 = 30)

- 11 a. Give an account on primary lymphoid organs.
(or)
b. What are APCs and MHCs? How are they significant? Elaborate.
- 12 a Explain the structure, function and biological properties of IgA and IgG immunoglobulins.
(or)
b Write a summary on clonal selection theory.
- 13 a Distinguish between humoral and cell mediated immunity.
(or)
b Tabulate the differences between attenuated and inactivated vaccines.
- 14 a Describe immunoelectrophoretic.
(or)
b How is direct ELISA different from sandwich ELISA? Explain with suitable diagrams.
- 15 a Give a detailed note on anaphylactic hypersensitivity.
(or)
b What is tissue typing? How is it important?

Z-Z-Z END