

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

MSc DEGREE EXAMINATION DECEMBER 2023
(Third Semester)

Branch – APPLIED MICROBIOLOGY

IMMUNOTECHNOLOGY

Time: Three Hours

Maximum: 50 Marks

SECTION-A (5 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

(5 x 1 = 5)

- 1 Which of the following immunity is obtained during a lifetime?
(i) Acquired immunity (ii) Active immunity
(iii) Passive immunity (iv) Innate immunity
- 2 Globulins of blood plasma are responsible for
(i) Defence mechanisms (ii) Blood clotting
(iii) Oxygen transport (iv) Osmotic balance
- 3 Type I hypersensitivity involves.
(i) IgD (ii) IgM
(iii) IgE (iv) IgG
- 4 The major molecules for rejection of transplant is
(i) B Cells (ii) T Cells
(iii) MHC molecules (iv) Antibodies
- 5 Sandwich ELISA method is used for the detection of
(i) Antibody (ii) Antigen
(iii) Conjugated antibody (iv) Conjugated antigen

SECTION - B (15 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks

(5 x 3 = 15)

- 6 a What is meant by Innate Immunity? Discuss in brief.
OR
b Analyze the scope of Immunology in detail.
- 7 a Give an account on the process of Lymphocyte activation.
OR
b Write the various types of antigens.
- 8 a What is meant by Autoimmunity?
OR
b Give a neat sketch about the classical pathway of complements.
- 9 a What is meant by secondary Immunodeficiency?
OR
b Give an account on various tumor antigens.
- 10 a What is meant by agglutination?
OR
b Discuss about the process of Immunofluorescence.

Cont...

SECTION -C (30 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks

(5 x 6 = 30)

- 11 a Categorize the process of humoral and Cell mediated immunity.
OR
b Elucidate the structure and functions of secondary lymphoid organs.
- 12 a What are Immunoglobulins? Explain its types, structure and function.
OR
b Enumerate in detail about the origin, development and differentiation of B lymphocytes.
- 13 a Classify the various types of Hypersensitivity reactions, its symptoms, diagnosis and treatment.
OR
b Interpret in detail about the various immunodeficiency diseases.
- 14 a Elucidate the process of immunodiagnostics of cancer.
OR
b Discuss in detail about the concepts of Transplantation Immunology.
- 15 a Briefly elucidate the mechanism of Rocket and Counter Immuno electrophoresis and add a note on its application.
OR
b Give a neat sketch about the Immunization process and Immunization Schedule.

Z-Z-Z

END