

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

MSc DEGREE EXAMINATION MAY 2024
(Fourth Semester)

Branch – BIOCHEMISTRY

IMMUNOLOGY

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 cells is involved in cell-mediated immunity?
(a) Leukaemia (b) T cells
(c) Mast cells (d) Thrombocytes
- 2 Which of the following statements is true about the IgM of humans?
(a) IgM can cross the placenta
(b) IgM can protect the mucosal surface
(c) IgM is produced by high-affinity plasma cells
(d) IgM is primarily restricted in the circulation
- 3 The ability of an organism to resist infections by the pathogens is called _____.
(a) Infection (b) Hypersensitivity
(c) Immunity (d) Allergy
- 4 Name the cytokines which released in response to virus infection.
(a) Interferons (b) Monokines
(c) Lymphokines (d) Interleukins
- 5 Which of the following immunity is called the first line of defence?
(a) Innate Immunity (b) Active immunity
(c) Passive immunity (d) Acquired immunity

SECTION - B (15 Marks)

Answer ALL Questions

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

- 6 a. List out clinical uses of stem cells.
OR
b. Describe the inbred strains of SCID mice.
- 7 a. Elucidate the various types of immunoglobulin.
OR
b. Give an account on mitogens.
- 8 a. Discuss about the immunity in viral infections.
OR
b. Explain the structure and properties of cytokines.

Cont...

- 9 a. Write a note on multivalent subunit vaccine.
OR
b. Discuss the concept of passive immunization.
- 10 a. Describe the structure and vaccine of AIDS.
OR
b. Give a note on cancer chemotherapy.

SECTION - C (30 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks

(5 x 6 = 30)

- 11 a. Discuss the haematopoietic growth factors.
OR
b. Describe the development and differentiation of B and T cell.
- 12 a. Elaborately discuss MHC classes and its types.
OR
b. Discuss the types and biological characteristics of antigen.
- 13 a. Describe the principle, procedure and instrumentation of ELISA.
OR
b. Explain the principle and procedure of fluorescence immunoelectron microscopy.
- 14 a. Describe the primary and secondary immuno deficiency disorders.
OR
b. Elucidate the different types of hypersensitivity reaction.
- 15 a. Enumerate the mechanism of graft rejection.
OR
b. Discuss the autoimmune disease in human.

Z-Z-Z END