

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

MSc DEGREE EXAMINATION DECEMBER 2023
(Third Semester)

Branch – ZOOLOGY

INTRODUCTION TO IMMUNOLOGY

Time: Three Hours

Maximum: 50 Marks

SECTION-A (5 Marks)

Answer ALL questions

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

- 1 The ability of an organism to resist infections by the pathogens is called _____.
(i) Infection (ii) Hypersensitivity
(iii) Immunity (iv) Allergy
- 2 Name the cytokines which released in response to virus infection?
(i) Interferons (ii) Monokines
(iii) Lymphokines (iv) Interleukins
- 3 Which of the following antibody gives a primary immune reaction?
(i) IgG (ii) IgM
(iii) IgA (iv) IgE
- 4 Agglutination reaction is more sensitive than precipitation for the detection of
(i) Antigens (ii) Antibodies
(iii) Complement (iv) Antigen-Antibody Complexes
- 5 Which of the following does not act as a protecting barrier for the body surface?
(i) Skin (ii) Gastric acid
(iii) Mucus (iv) Salivary amylase

SECTION - B (15 Marks)

Answer ALL Questions

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

- 6 a Discuss the mononuclear phagocytes.
OR
b Explain about phagocytic cells and its role in immune system.
- 7 a Distinguish the allotype and idio type.
OR
b Explain about polyclonal antibodies.
- 8 a Enumerate the role of MHC class I molecules in cell mediated immunity.
OR
b Comment on antigen presenting cells.

Cont...

- 9 a Discuss on the agglutination test.
OR
b Enumerate the procedure of complement fixation test.
- 10 a List out the B-cell receptors.
OR
b Relate the stages of graft rejection process.

SECTION -C (30 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks

(5 x 6 = 30)

- 11 a Enumerate the role of T cells in cell mediated immunity its types.
OR
b Describe the cellular constituents of the lymphoreticular system.
- 12 a Give a detailed account of the structure of IgM.
OR
b Summarize the disorders of immunoglobulin synthesis.
- 13 a Analyze the processing of antigen-antibody interaction.
OR
b Describe role of MHC molecules in immune responsiveness and disease susceptibility.
- 14 a Criticize the interaction of corona virus with covid vaccines.
OR
b Elucidate the any TWO immune assays using radio labeled reagents.
- 15 a Explain in detail how classical complement pathway is activated and regulated.
OR
b Explain the hypersensitivity reaction with suitable examples.

Z-Z-Z

END