

PSG COLLEGE OF ARTS & SCIENCE  
(AUTONOMOUS)

BSc DEGREE EXAMINATION MAY 2023  
(Sixth Semester)

Branch – ZOOLOGY

IMMUNOLOGY

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer ALL questions

ALL questions carry EQUAL marks (10 x 1 = 10)

1. Lymphocytes causing the graft rejection are found mainly in \_\_\_\_\_.  
(i) Spleen (ii) Lymph nodes  
(iii) Blood (iv) All the above
2. Macrophages in the brain are \_\_\_\_\_.  
(i) Histiocytes (ii) Kupffer cells  
(iii) Microglia (iv) Mononuclear phagocytes
3. Antigenic determinant sites were discovered by \_\_\_\_\_.  
(i) E.A. Kabat (ii) Landsteiner  
(iii) Lindermann (iv) R. Porter
4. The surface of a large antigen on which the antibody will bind is \_\_\_\_\_.  
(i) Active site (ii) antigenic site  
(iii) Epitope (iv) Hapten
5. The histocompatibility between B-cells and T-cells is mainly associated with \_\_\_\_\_.  
(i) Class II loci (ii) Class I loci  
(iii) Class III loci (iv) All the above
6. Delayed type hypersensitivity is associated with which one of the following?  
(i) TD and TH cells (ii) TC cells  
(iii) TH and TS cells (iv) TR cells
7. Anaphylaxis is a \_\_\_\_\_.  
(i) Type I reaction (ii) Type II reaction  
(iii) Type III reaction (iv) Type IV reaction
8. All are included in the expanded programme of immunization except \_\_\_\_\_.  
(i) Cholera (ii) Mumps  
(iii) Rubella (iv) BCG
9. Feather-tip ELISA is useful to detect \_\_\_\_\_.  
(i) Antibodies (ii) Antigens  
(iii) Marek's disease in chicken (iv) Proteins in the feathers
10. The most recent method for screening large synthetic antibody libraries is \_\_\_\_\_.  
(i) ELISA (ii) Phage display  
(iii) Biodisplay (iv) RIA

Cont...

**SECTION - B (35 Marks)**

Answer ALL Questions

ALL Questions Carry EQUAL Marks (5 x 7 = 35)

11. a. Compare the primary and secondary Lymphoid organs.  
OR  
b. Illustrate the structure and functions of macrophages.
12. a. Describe about the essential factors for antigenicity.  
OR  
b. Explore the mechanism of Humoral Immune Response.
13. a. Classify the types of Hypersensitivity.  
OR  
b. Discuss the prevention and treatment of tumour.
14. a. Describe the types of graft mechanism.  
OR  
b. Give a brief note on immunoprophylaxis.
15. a. What are the steps involved in gel electrophoresis?  
OR  
b. Explain the principle and application of ELISA.

**SECTION - C (30 Marks)**

Answer any THREE Questions

ALL Questions Carry EQUAL Marks (3 x 10 = 30)

16. Discuss the types of immunity and its factors.
17. What is Ag-Ab Reaction and elucidate the antigen-antibody reaction?
18. Write an account on Rheumatoid Arthritis.
19. Give a detailed account on immunodeficiency diseases.
20. Explain the theories of Antibody Biosynthesis.

Z-Z-Z

END