

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)
BSc DEGREE EXAMINATION DECEMBER 2023
(Fifth Semester)

Branch – MICROBIOLOGY

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 cell produces Ab?
(i) B-Cell (ii) T-Cell (iii) Macrophage (iv) Null Cell
2. Which antibody molecule can cross placenta?
(i) IgA (ii) IgG (iii) IgD (iv) IgE
3. What is the vaccine used to prevent tetanus?
(i) TAB (ii) BCG (iii) TT (iv) MMR
4. Which cell acts as antigen presenting cell?
(i) Macrophage (ii) Null cell (iii) Basophil (iv) Eosinophil
5. Who discovered Phagocytosis process?
(i) Robert Koch (ii) F. M. Burnet
(iii) Elie Metchnikoff (iv) Louis Pasteur

SECTION - B (15 Marks)

Answer ALL Questions

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

6. a What is Acquired Immunity? Explain its types.
(OR)
b Describe the structure and function of Thymus.
7. a What is Ag? Explain its characteristics.
(OR)
b Explain the properties of IgM.
8. a Describe the mechanism of HI.
(OR)
b Classify different types of vaccine and write about whole organism vaccines.
9. a Describe the Principle and mechanism of Radial immune diffusion.
(OR)
b What is the principle of immunofluorescence technique?
10. a What is autoimmunity? Explain its mechanism.
(OR)
b Describe the mechanism of graft rejection.

Cont...

SECTION -C (30 Marks)

Answer **ALL** questions

ALL questions carry **EQUAL** Marks

(5 x 6 = 30)

11. a Explain the structure and function of spleen.
(OR)
b Classify immune cells and explain their role in the development of Immunity.
12. a Explain the structure of Ab with a neat sketch.
(OR)
b Describe classical Pathway of Complement System.
13. a What is Monoclonal Ab? How will you produce it by using hybridoma technology?
(OR)
b. Describe the mechanism of cell Mediated Immunity.
14. a. What is Anaphylaxis? Explain its mechanism.
(OR)
b. What are the types of Transplantation? Explain the principle of micro-Cytotoxicity test.
15. a. What is the principle of ELISA? Explain it with a neat sketch.
(OR)
b. Explain the Principle and Procedure of
i. RIA ii. Complement fixation test.

Z-Z-Z

END