

PSG COLLEGE OF ARTS & SCIENCE  
(AUTONOMOUS)

MSc DEGREE EXAMINATION DECEMBER 2022  
(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 Hassal's corpuscles are found in which organ of man?  
(i) Blood (ii) Liver  
(iii) Spleen (iv) Thymus
- 2 Which of the following amino acid residues depicts in CDR1 of light chain?  
(i) 20-22 (ii) 24-34  
(iii) 10-18 (iv) 40-60
- 3 Diagnosis of contact dermatitis could be done by  
(i) Patch test (ii) CFT  
(iii) Provocation test (iv) Cutaneous test
- 4 Which of the following in outer coat of HIV virus?  
(i) GP 120 (ii) GP 130  
(iii) GP 140 (iv) GP 150
- 5 Fetus belongs to which of the following transplant?  
(i) Xenograft (ii) Isograft  
(iii) Autograft (iv) Allograft

**SECTION - B (15 Marks)**

Answer ALL Questions

ALL Questions Carry EQUAL Marks

(5 x 3 = 15)

- 6 a Discuss how skin provide the first line of defense.  
OR  
b Describe the role of complement in humoral immunity.
- 7 a Explain differentiation and maturation of T cell.  
OR  
b State about antibody diversity.
- 8 a Enlist the function of the complement system.  
OR  
b What is autoimmunity? Explain any two autoimmune disorders.
- 9 a Discuss innate and adaptive immunity to viruses.  
OR  
b List out the types, sources and functions of interleukins.
- 10 a Compare and comment on Class I and Class II MHC molecules.  
OR  
b Brief about immunopotential and immunosuppression.

Cont...

**SECTION -C (30 Marks)**

Answer ALL questions

ALL questions carry EQUAL Marks

(5 x 6 = 30)

- 11 a Explain briefly about the T cell mediated immunity.  
- OR  
b Describe award of Nobel Prizes of different workers in immunology.
- 12 a Elaborate molecular biology of immunoglobulin synthesis..  
OR  
b Write an essay on Ag-Ab interactions.
- 13 a Briefly explain delayed type hypersensitivity.  
OR  
b Comment on any two primary immunodeficiency disorders.
- 14 a Discuss immunity to (i) Fungi (ii) Protozoa and (iii) Nematodes.  
OR  
b Give detailed account on types of vaccine with merits and demerits.
- 15 a Explain how could tumor escapes host immune mechanisms?  
OR  
b Describe the types of immunosuppressive therapy for organ transplantation.

Z-Z-Z

END