

PSG COLLEGE OF ARTS & SCIENCE (AUTONOMOUS)

BSc DEGREE EXAMINATION DECEMBER 2025
(Fifth Semester)

Branch - MICROBIOLOGY

IMMUNOLOGY AND IMMUNOTECHNOLOGY

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer **ALL** questions

ALL questions carry EQUAL marks

$$(10 \times 1 = 10)$$

Cont...

SECTION - B (35 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks $(5 \times 7 = 35)$

Module No.	Question No.	Question	K Level	CO
1	11.a.	List out the contribution of Dr. Edward Jenner and Robert Koch to the field of immunology. (OR)	K2	CO1
	11.b.	Examine the main role and purpose of antigen presenting cells.		
2	12.a.	Discuss role of C3 play in complement system . Mentions its functions. (OR)	K3	CO2
	12.b.	Identify the reaction mechanism of alternate pathway of complement reaction.		
3	13.a.	Analyse the types and importance of vaccination. (OR)	K4	CO3
	13.b.	Correlate the humoral and cell-mediated immune response?- Add notes on its importance.		
4	14.a.	Predict the types and immunological importance of immune electrophoresis. (OR)	K5	CO4
	14.b.	Evaluate traditional methods are typically used to identify different microbial pathogens.		
5	15.a.	Why is cell-mediated immunity responsible for graft rejection?- Explain in detail. (OR)	K6	CO5
	15.b.	Formulate different types of tissue transplants. Mention its advantages.		

SECTION -C (30 Marks)

Answer ANY THREE questions

ALL questions carry EQUAL Marks $(3 \times 10 = 30)$

Module No.	Question No.	Question	K Level	CO
1	16	Classify the types of immunological responses in immunology.	K4	CO1
2	17	Simplify the types and importance of antibodies.	K4	CO2
3	18	How are monoclonal antibodies produced and its applications?- Discuss.	K5	CO3
4	19	Measure the principle, working mechanism and importance of Western blotting.	K5	CO4
5	20	Compile the mechanism of human autoimmunity. Add notes on its significance.	K6	CO5