TOTAL PAGES: 2

22BCP418N

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

MSc DEGREE EXAMINATION DECEMBER 2025
(Fourth Semester)

Branch – **BIOCHEMISTRY**

IMMUNOLOGY

Time: Three Hours Maximum: 75 Marks

SECTION-A (10 Marks)
Answer **ALL** questions
ALL questions carry **EQUAL** marks (10 × 1 = 10)

Module No.	Question No.	Question	K Level	CO
1	1	Which of the following primarily mediates Humoral immunity? a) T cells b) B cells c) Macrophages d) Neutrophils	K1	CO1
	2	Infer the primary immunological defect in nude mice? a) Lack of mature B cells b) Lack of mature T cells c) Lack of macrophages d) Lack of stem cells	K2	CO1
2	3	Show the region where the endogenous antigens are degraded into peptide fragments a) cytoplasm b) nucleus c) lysosomes d) Cell wall	K1	CO2
	4	Outline the type of T cell recognizes antigens presented by MHC class II molecules? a) Cytotoxic T cells b) Helper T cells c) Reg T cells d) NK cells	K2	CO2
3	5	Which of the following are the immunologically active regions of an immunogen? a) isotype b) allotype c) idiotype d) epitope	K1	CO3
	6	Relate what Forward Scatter (FSC) primarily measure in flow cytometry? a) Cell internal complexity b) Cell viability c) Cell size d) Fluorescent intensity	K2	CO3
4	7	Find the state of unresponsiveness to an antigen? a) Clonal selection b) Ignorance c) Anergy d) Immune Regulation	K1	CO4
	8	Show the Scientist who developed the concept of vaccination a) Louis Pasteur b) Edward Jenner c) Carl Landsteiner d) Joseph Miester	K2	CO4
5	9	Which of the following glycoproteins on the protein coat of virus helps it in the attachment of the virus to CD4 receptors? a) GP120 b) GP41 c) GP121 d) GP182	K1	CO4
	10	Tell the graft when transplanted between non identical twins, is called as a) Allograft b) autograft c) alleleograft d) homograft	K2	CO4

Cont...

SECTION - B (35 Marks)

Answer **ALL** questions

ALL questions carry **EQUAL** Marks (5 × 7 = 35)

Module No.	Question No.	Question	K Level	CO
1	11.a.	Organize the mechanism involved in regulation of hematopoiesis.	K3	CO1
		(OR)		
	11.b.	Identify the importance and clinical uses of stem cells.		
2	12.a.	Develop an essay on types, Chemical and biological characteristics of Antigens.	K3	CO2
		(OR)		
	12.b.	Construct the method of Antigen processing and presentation.		
3	13.a.	Simplify Precipitation and agglutination.	K4	CO3
		(OR)		
	13.b.	Analyze the principle involved in Enzyme linked immune sorbent assay with its types.		
4	14.a.	Examine the immune reactions involved in Type II hypersensitivity reaction.	K4	CO4
		(OR)		
	14.b.	Dissect the process of active and passive immunization.		
5	15.a.	Interpret the mechanism of autoimmune diseases in humans.	K5	CO4
		(OR)		
	15.b.	Appraise the immune response involved in graft rejection.		

SECTION -C (30 Marks)

Answer **ANY THREE** questions

ALL questions carry **EQUAL** Marks (3 × 10 = 30)

Module No.	Question No.	Question	K Level	CO
1	16	Discover the development and differentiation of T cells.	K4	CO1
2	17	Categorize the different types of Immunoglobulin.	K4	CO2
3	18	Inspect the structure, function and properties of cytokines.	K4	CO3
4	19	Interpret the primary immunodeficiency diseases with examples.	K5	CO4
5	20	Evaluate the structure of HIV, mechanism involved in depletion of CD4 cells by HIV.	K5	CO4

Z-Z-Z END