22BCU413N

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION MAY 2026
(Fourth Semester)

Branch - **BIOCHEMISTRY**

BASICS OF 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	In adults, what is the primary site of hematopoiesis? a) Bone marrow b) Liver c) Lungs d) Heart	K1	CO1
	2	Which of the following barriers does not come under innate immunity? a) Physical barrier b) Physiological barrier c) Complex barrier d) Cellular barrier	K2	CO1
2	3	Which of the following cells is capable of phagocytosis? a) Neutrophil b) Basophil c) Lymphocyte d) Eosinophil	K1	CO2
	4	Which of the following cytokines helps in terminating inflammatory responses? a) TGF-beta b) IL-2 c) IL-3 d) INF-alpha	K2	CO2
3	5	What is the antigen binding site on an antibody called? a) Paratope b) Epitope c) Allotype d) Ideotype	K1	CO3
	6	Aggregation of which molecules lead to agglutination? a) Antigens b) Antibodies and serum c) Antigens and antibodies d) Only antibodies	K2	CO3
4	7	Which of the following disease is NOT diagnosed by ELISA? a) Lyme disease b) Rotavirus c) Syphilis d) Flu	K1	CO4
	8	Which of the following pathways come under adaptive immunity? a) Classical pathway b) MB-Lectin pathway c) Alternative pathway d) Both Alternative and MB-Lectin pathways	K2	CO4
5	9	Which cells are transplanted to treat cancer like leukemia? a) Haematopoietic stem cells b) Red blood cells c) White blood cells d) Epithelial cells	K1	CO5
	10	Which of the following is NOT an autoimmune disease? a) Diabetes b) Rheumatoid Arthritis c) Multiple Sclerosis d) AIDS	K2	CO5

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.	Summarize the Innate and acquired immunity.	K2	CO1
		(OR)		
	11.b.	Infer the Immunogenicity and factors affecting immunogenicity.		
2	12.a.	Construct the Structure and functions of neutrophils, eosinophils and basophils.	K3	CO2
		(OR)		
	12.b.	Compare and construct the phagocytosis and inflammation.		
3	13.a.	Organize the principle and application of Precipitation.	K3	CO3
		(OR)		
	13.b.	Develop the notes on Delayed type hypersensitivity.		
4	14.a.	Analyze the Clonal selection theory.	K4	CO4
		(OR)		
	14.b.	Distinguish the principle and applications of immunoelectrophoresis.		
5	15.a.	List the Immunization Schedule and guidelines.	K4	CO5
		(OR)		
	15.b.	Distinguish the features of Systemic Lupus erythematous and Myasthenia gravis.		

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	Categorize the importance of the secondary lymphoid organs.	K4	CO1
2	17	Infer on the Cytokines and list their modes of action.	K4	CO2
3	18	Assess the structure, properties and biological functions of IgG.	K5	CO3
4	19	Interpret the Complement components and their role.	K5	CO4
5	20	Elaborate on the mechanism of graft rejection.	K6	CO5

Z-Z-Z END