PSG COLLEGE OF ARTS & SCIENCE (AUTONOMOUS)

BSc DEGREE EXAMINATION MAY 2025

(Fourth Semester)

Branch - ZOOLOGY

MICROBIOLOGY & IMMUNOLOGY

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer ALL questions

ALL questions carry **EQUAL** marks $(10 \times 1 = 10)$

Module No.	Question No.	Question	K Level	СО
1	1	Who is the father of Microbiology?. a. Darwin b. Leeuwenhoek c. Lamark d. De Vries	K1	CO1
	2	is the culture medium which allows the growth of particular variety of bacteria. a. Differential medium b. Blood medium c. Transport medium d. Chocolate medium	K2	CO2
	3	Choose the cheapest method of dehydration. a. sun drying b. heating c. radiation d. pickling	Kl	COI
2	4	Relate the ropiness of bread with the following. a. Pseudomonas b. Bacillus subtilus c. B. liquiniform d. None of the above	K2	CO2
	5	Choose the symbiotic association between fungus and plant roots. a. Mycorrhiza b. Lichens c. Hyphae d. All the above	K1	CO1
3	6	Relate the <i>Bacillus thuringiensis</i> with the following. a. Insecticide b. Microbial pesticides c. Herbicide d. Fungicide	K2	CO2
4	7	Which one of the following is produced the immunity in Cell mediated immunity?. a. Erythrocytes b. Lymphocytes c. Basophil d. Esonophill	K1	CO1
	8	is the antibacterial substance, which is rich in Human milk. a. Heptens b. Lactoferritin c. Lactobacillus d. Interferons	K2	CO2
5	9	Which Immunoglobulin is related with hypersensitivity type I?. a. Ig.A b.Ig G c. Ig E d.Ig D	K1	CO1
	10	Relate the graft that takes place within the same individual. a. Autograft b. Xenograft c. Allograft d. Isograft	K2	CO2

Cont....

SECTION - B (35 Marks)

Answer ALL questions;

ALL questions carry EQUAL Marks

 $(5\times7=35)$

Module No.	Question No.	Question	K Level	СО
1	11.a.	Outline the scope of Microbiology.		
	(OR)		K3	CO3
	11.b.	Explain the structure of E.coli bacteria.		
	12.a.	Identify the applications of Probiotics.	K3	CO3
2		(OR)		
	12.b.	Identify the causative agents and symptoms of Salmonellosis.		
	13.a.	List out the role of VAM fungi in agriculture.		
3	(OR)		☐ K4	CO4
<i></i>	13.b.	Distinguish an aerobic and anaerobic process of waste water treatment.	IXT	504
	14.a.	Distinguish the innate immunity from the acquired immunity.	K4	CO4
4		(OR)		
	14.b.	List the different types of the cells immune system.		
	15.a.	Explain an active immunization.		
5		(OR)		CO5
	15.b.	Explain the Type III hypersensitivity.		

SECTION -C (30 Marks) Answer ANY THREE questions

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

Module No.	Question No.	Question	K Level	СО
1	16	Classify the different culture techniques.	K4	CO4
2	17	Analyze the biochemical changes takes place during food spoilage.	K4	CO4
3	18	Examine the role of Bio fertilizer.	K4	CO4
4	19	Spleen is the secondary lymphoid organ. Justify.	K5	CO5
5	20	Explain the structure and functions of Ig G.	K5	CO5

Z-Z-Z END