

**PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)**

**MSc DEGREE EXAMINATION MAY 2025
(Second Semester)**

Branch - **ZOOLOGY**

ANIMAL PHYSIOLOGY AND BIOCHEMISTRY

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	The normal diastolic blood pressure in a normal healthy adult human is (a) 80 mm Hg (b) 60 mm Hg (c) 90 mm Hg (d) 110 mm Hg	K1	CO1
	2	Severe loss of blood due to trauma is called (a) Exsanguination (b) Haemolysis (c) Concussion (d) None of the above	K2	CO1
2	3	This substance cannot pass through semipermeable walls of glomerulus (a) Globin (b) Albumin (c) Blood cells (d) All of the above	K1	CO1
	4	This pressure facilitates filtration while urine is being formed (a) filtrate hydrostatic pressure (b) osmotic blood pressure (c) capillary hydrostatic pressure (d) all of these	K2	CO1
3	5	Which of the following is one of the parts of the hindbrain? (a) hypothalamus (b) cerebellum (c) corpus callosum (d) spinal cord	K1	CO1
	6	A cranial nerve with the highest number of branches (a) Facial nerve (b) Trigeminal nerve (c) Vagus nerve (d) Both (b) and (c)	K2	CO1
4	7	Which of the following Biomolecules simply refers to as "Staff of life"? (a) Lipids (b) Proteins (c) Vitamins (d) Carbohydrates	K1	CO1
	8	Which of the following proteins was first sequenced by Frederick Sanger? (a) Myosin (b) Insulin (c) Myoglobin (d) Haemoglobin	K2	CO1
5	9	What is the count of genes that determine the synthesis of one enzyme? (a) One (b) Four (c) Eight (d) Sixteen	K1	CO1
	10	The coenzyme is: (a) Often a metal (b) always a protein (c) often a vitamin (d) always an inorganic compound	K2	CO1

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.	Write notes on nature and properties of blood.	K3	CO2
		(OR)		
	11.b.	Write notes on homeotherms.		
2	12.a.	Describe about the biological clock.	K4	CO2
		(OR)		
	12.b.	Write notes on nephron.		
3	13.a.	Explain about the neurotransmitters.	K4	CO2
		(OR)		
	13.b.	Write notes on chemical contraction of muscle.		
4	14.a.	Describe about the properties of carbohydrates.	K3	CO2
		(OR)		
	14.b.	List out the biological functions of proteins.		
5	15.a.	Describe about the enzymes.	K4	CO2
		(OR)		
	15.b.	Write notes on iso enzymes.		

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	Write an essay on physiology of blood clotting.	K4	CO4
2	17	Give an account on biological rhythms.	K4	CO4
3	18	Write an essay on Physiology of hearing.	K5	CO4
4	19	Give an account on classification of proteins.	K6	CO4
5	20	Explain about the mechanism of enzyme action.	K4	CO4

Z-Z-Z END