

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION DECEMBER 2025
(Fifth Semester)

Branch – BIOCHEMISTRY

MAJOR ELECTIVE COURSE – I : PHYSIOLOGY AND ENDOCRINOLOGY

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	Where does the Digestion of protein is completed? a) Stomach b) Ileum c) Duodenum d) Duodenum and Ileum	K1	CO1
	2	How many types of blood groups are present? a) 1 b) 2 c) 3 d) 4	K2	CO1
2	3	Show the "Heart of heart" a) SA node b) AV node c) Bundle of HIS d) Purkinji fibers	K1	CO2
	4	What is the full form of PCT? a) Proximal Coronary Tube b) Proximal Convoluted Tubule c) Proximal Carotid Tube d) Part Covering Thymus	K2	CO2
3	5	System of the body which coordinates and controls its activity is known as _____ a) Organ system b) Muscular system c) Nervous tissue d) Nervous system	K1	CO3
	6	Classify that nerve cell does not divide because they do not have a) Nucleus b) Centrosome c) Golgi body d) Mitochondria	K2	CO3
4	7	Which of the following is NOT an endocrine gland? a) Hypothalamus b) Pituitary c) Parathyroid d) Pancreas	K1	CO4
	8	What is the precursor of steroid hormone? a) Protein b) Cholesterol c) Carbohydrate d) Lipid	K2	CO4
5	9	Which enzyme is otherwise known as insulinase? a) Proteases b) Glutathione-insulin transhydrogenase c) Trypsin like proteases d) Peptidases	K1	CO5
	10	Predict the hormone, which is released by the posterior pituitary. a) Oxytocin b) TSH c) ICSH d) Prolactin	K2	CO5

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.	Summarize the role of GI tract hormones in digestion of food.	K2	CO1
		(OR)		
2	11.b.	Infer the blood coagulation.	K3	CO2
	12.a.	Construct the structure of heart.		
3	12.b.	(OR)	K3	CO3
	13.a.	Identify the renal regulation of acid base balance.		
4	13.b.	Organize the structure of neuron.	K4	CO4
		(OR)		
5	14.a.	Develop the composition and functions of CSF.	K4	CO5
	14.b.	Analyse the classification of hormones based on chemical nature.		
		(OR)		
	15.a.	Examine the disorders parathyroid gland.		
	15.b.	Analyse the biosynthesis of melatonin and its functions.	K4	CO5
		(OR)		
		Examine the disorders of adrenal cortical hormones.		

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	Examine the components of respiratory systems and their functions.	K4	CO1
2	17	Analyse the mechanism of muscle contraction.	K4	CO2
3	18	Assess the structure of eye and visual cycle.	K5	CO3
4	19	Interpret the biosynthesis and biological functions of thyroid hormones.	K5	CO4
5	20	Elaborate the physiological role and disorder of Insulin.	K6	CO5