

PSG COLLEGE OF ARTS & SCIENCE  
(AUTONOMOUS)

MSc DEGREE EXAMINATION DECEMBER 2025  
(Third Semester)

Branch - ZOOLOGY  
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	What is difference between endocrine and exocrine glands? (a) endocrine glands release hormones, exocrine glands release waste (b) endocrine glands are interconnected, exocrine glands are totally independent (c) endocrine glands are formed by epithelial tissue, exocrine glands are connective tissues primarily (d) endocrine glands are ductless, exocrine glands release secretions into ducts or at the surface of the body	K1	CO1
	2	Which one of the following is hormones of the anterior pituitary? (a) Human growth hormone (GH). (b) Follicle-stimulating hormone (FSH). (c) Parathyroid hormone (PTH). (d) Thyroid-stimulating hormone (TSH).	K2	CO1
2	3	Choose the one that is not related to hypothyroidism. (a) Diarrhoea (b) lethargy (c) Anorexia (d) Weight gain	K1	CO2
	4	Select the role of Glucagon. (a) accelerates protein synthesis within cells (b) accelerates conversion of glycogen into glucose (c) decreases conversion of glycogen into glucose (d) slows down glucose formation from lactic acid	K2	CO2
3	5	Which one of the following is not a function of insulin? (a) decreasing glycogenolysis (b) lipogenesis (c) gluconeogenesis (d) glycogenesis	K1	CO3
	6	Which one of the following gland secretion differs between males and females? (a) Adrenal (b) Parathyroid (c) Gonadal (d) Pancreas	K2	CO3
4	7	Most hormones of the endocrine system are regulated by a: (a) Negative feedback mechanism. (b) Positive feedback mechanism. (c) Hormone-receptor complex. (d) Hormone-gene complex.	K1	CO4
	8	Which gland controls basal metabolic rate (BMR)? (a) Thyroid (b) Parathyroid (c) Testes (d) Pancreas	K2	CO4

Cont...

5	9	Pituitary hormone triggering the male testes to generate sperm and in females, triggering follicular development on a monthly basis is (a) prolactin (b) growth hormone (c) follicle-stimulating hormone (d) luteinizing hormone	K1	CO5
	10	Which is the most abundant hormone produced by the anterior pituitary? (a) LH (b) TSH (c) ACTH (d) GH	K2	CO5

**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.	List out the endocrine glands in crustaceans. (OR)	K3	CO1
	11.b.	Comment on chemical messengers and its significance.		
2	12.a.	Describe the structural organization of Pituitary gland. (OR)	K3	CO2
	12.b.	Explain the metabolic effects of thyroid gland.		
3	13.a.	Describe the Pancreatic hormones and its functions. (OR)	K4	CO3
	13.b.	Explain the functions of cortical hormone.		
4	14.a.	Analyze the neuroendocrine system in insects. (OR)	K4	CO4
	14.b.	Discuss about endocrine control of moulting in Crustaceans.		
5	15.a.	Illustrate the structure of mammalian ovary. (OR)	K4	CO5
	15.b.	Discuss the hormonal control of metamorphosis in Amphibian.		

**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	Elaborate account on modern concepts and problems in endocrinology.	K4	CO1
2	17	Describe the structure and function of parathyroid gland.	K5	CO2
3	18	Explain the structural organizations of Adrenal gland and their function.	K4	CO3
4	19	Discuss the endocrine control of reproduction in Insects.	K5	CO4
5	20	Discuss the male and female sex accessory organs and their importance in vertebrate.	K5	CO5