

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

MSc DEGREE EXAMINATION DECEMBER 2023
(Third Semester)

Branch – ZOOLOGY

ENDOCRINOLOGY

Time: Three Hours

Maximum: 50 Marks

SECTION-A (5 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

(5 x 1 = 5)

- 1 This is not an endocrine gland
(i) Adrenal (ii) Pituitary
(iii) Lacrimal (iv) Thyroid
- 2 Insufficient Levels of Thyroid Hormone in Adults Cause _____
(i) Myxedema (ii) Tetany
(iii) Goiter (iv) Cretinism
- 3 Diabetes Mellitus Is a Hormonal Condition in Which?
(i) Ketone bodies increases in urine (ii) Ketone bodies decreases in urine
(iii) Urine becomes more dilute (iv) None of the above
- 4 Corpora cardiaca produce
(i) Juvenile Hormone (ii) Prothoracicotropic Hormone
(iii) Ecdysone (iv) All of these
- 5 Which of these is a Male Sex Hormone?
(i) Aldosterone (ii) Androgens
(iii) Pheromones (iv) Insulin

SECTION - B (15 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks

(5 x 3 = 15)

- 6 a Prepare a note on the scope of Endocrinology.
OR
b Classify the hormones based on chemical structure, mechanism of action and biological effects.
- 7 a Explain the role of the pituitary gland in regulating the growth and development.
OR
b Justify the metabolic effects of thyroid hormone on different tissues.
- 8 a Examine the structure of pancreas with neat sketch.
OR
b Summarize the physiological roles of the different hormones produced by the adrenal cortex.
- 9 a Explain how the neuroendocrine system interacts with the nervous system to regulate insect behavior.
OR
b Describe the role of endocrine system in regulating crustacean molting.
- 10 a Illustrate the structure of mammalian ovary.
OR
b Explain the hormonal changes that occur in the phases of menstrual cycle.

Cont...

SECTION -C (30 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks

(5 x 6 = 30)

- 11 a Evaluate the experimental methods used in hormonal research.
OR
b Explain the endocrine system of insects with suitable diagram.
- 12 a Elucidate the hypothalamic control of the anterior pituitary gland, including the different releasing and inhibiting hormones.
OR
b Examine the structure of a parathyroid gland.
- 13 a Develop a note on pancreatic hormones and their functions.
OR
b Assess the effects of medullary hormones on the body.
- 14 a Analyze the concept of neurosecretion in invertebrates.
OR
b Interpret the endocrine control of moulting in insects.
- 15 a Enumerate the main hormones involved in pregnancy and explain the role of progesterone in pregnancy.
OR
b Evaluate the hormonal control of metamorphosis in anuran amphibian.

Z-Z-Z

END