

PE – 270

**(552) M.Sc. ZOOLOGY (Second Semester)
Examination June 2022 Compulsory/Optiona
Group - Paper -I**

GENERAL & COMPARATIVE ENDOCRINOLOGY OF VERTEBRATES

Time : Three Hours]

[Maximum Marks : 80

[Minimum Pass Marks :

नोट : दोनों खण्डों से निर्देशानुसार उत्तर दीजिए। प्रश्नों के अंक उनके दाहिनी ओर अंकित हैं।

Note : Answer from both the Sections as directed. The figures in the right-hand margin indicate marks.

Section-A

Q 1. Answer the following type question :-

1x10=10

- (i) Which of the following is a cell surface receptor?
(a) Enzyme-linked receptors (b) G protein-linked receptors.
(c) Ion-channel linked receptors (d) All of the above.
- (ii) Which of the following is the transporter responsible for the transport of iodine into the thyroid cells against the concentration gradient?
(a) Na⁺ I-symport (b) K⁺I- symport (c) I-/Cl⁻ antiport (d) None of the above.
- (iii) Name the hormone which takes part in the release of FSH and LH from the anterior pituitary.
(a) Growth hormone (b) GnRH (c) Somatostatin (d) TRH
- (iv) Hormones that are secreted pulsatile manner include:
(a) Insulin (b) TRH (c) GnRH & GH (d) all of the above
- (v) Fatty acid metabolism is regulated by.
(a) Insulin (b) Glucagon (c) Motilin (d) Insulin and Glucagon.
- (vi) Who discovered oxytocin?
- (vii) What is life saving and life protecting hormone?
- (viii) Erythropoietin is secreted by.....
- (ix)is precursor of all steroid hormone.
- (x) Which enzyme converts Androgen into oestrogen.

Q 2. Answer the following type question :-

2x5 = 10

- (i) Who first discover hormone?
- (ii) What is the function of RAAS?
- (iii) Write about disorder of adrenal cortical hormone.
- (iv) What is the function of ADH hormone.
- (v) Define paracrine secretion.

Section - B

Answer the following long answer type question :-

15x4 = 60

UNIT - I

Q 3. Give an account of classification of hormone on the basis of chemical structure.

Or

Explain histological structure of Pituitary gland and give the name of hormones secreted by its various parts.

UNIT - II

Q 4. Describe the biosynthesis of steroid hormone.

Or

Describe plasma membrane hormone receptors.

UNIT - III

Q 5. What is the role of endorphin and enkephalin in pain modulation?

Or

Discuss the function, control and disorder of thyroid hormone.

UNIT - IV

Q 6. Describe the role of hormone in carbohydrate metabolism.

Or

Explain the role of hormone in growth and development.