

G-4/441/21

Roll No.

M.Sc. IV Semester Examination, 2021

ZOOLOGY

Paper I

(General and Comparative Vertebrate Endocrinology)

Time : 3 Hours]

[Max. Marks : 80

Note : *All questions are compulsory. Question Paper comprises of 3 sections. Section A is objective type/multiple choice questions with no internal choice. Section B is short answer type with internal choice. Section C is long answer type with internal choice.*

SECTION A

1×8=8

(Objective Type Questions)

Choose the correct answer :

1. Pituitary hormone triggering the male testis to generate sperm is hormone.
2. Hormone responsible for fight or flight response are
3. Chemical structure of Thyroxine hormone is
4. Hormone which is synthesized from histidine amino acid is

P.T.O.

[2]

5. Hormone receptors are chemically in nature.
6. Arrange the following step in correct sequence found during the mechanism of lipid insoluble hormone action :
 - (a) 2nd messenger formation
 - (b) Binding of the surface receptor
 - (c) Glycogenolysis
 - (d) Adenylate cyclase activation
7. The steroid responsible for the balance of water balance and electrolyte in our body is
8. During the follicular phase of the menstrual cycle, thinning of cervical mucous and thickening of endometrium is due to increased level of hormone.

SECTION B

6×4=24

(Short Answer Type Questions)

Note : *Attempt one question from each unit.*

Unit-I

1. What are Neurohormone ?

Or

Write the hormone secreted by kidney and their function.

G-4/441/21

[3]

Unit-II

2. Describe the steps of biosynthesis of progesterone hormone.

Or

Write chemical structure and synthesis of epinephrine hormone.

Unit-III

3. Write release and transport of peptide and steroid hormone.

Or

Antagonistic, agonistic and synergistic effect of hormone.

Unit-IV

4. Describe metamorphosis in Amphibia.

Or

What do you mean by puberty ?

SECTION C

12×4=48

(Long Answer Type Questions)

Note : Attempt one question from each unit.

Unit-I

1. Describe structure of pancreas, hormone secreted and their function.

G-4/441/21

P.T.O.

[4]

Or

Describe classification of hormones based on chemical structure.

Unit-II

2. Describe the process of biosynthesis, storage and release of Thyroxine hormone.

Or

Describe the process of biosynthesis of insulin hormone.

Unit-III

3. Describe the mechanism of hormone action of peptide hormone. cAMP as 2nd messenger.

Or

Describe the process of termination of hormone action.

Unit-IV

4. Write an essay on hormone and menstruation cycle.

Or

Write an essay on hormone and behaviour.

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G-4/441/21

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