H-4/32/22 Roll No. .....

IV Semester Examination, 2022

M.Sc.

ZOOLOGY

Paper I

(General and Comparative 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)

Fill in the Blanks :

1. ANF is secreted from ..... .

2. Nature of ADF is ..... .

3. Aldosterone is ..... hormone.

4. The major component of thyroxin is ..... .

5. The receptors are ..... in nature.

6. GH and glucocorticoids are ..... hormone.

P.T.O.

7. ..... hormone is required in let in process.

8. ..... hormone is essential for metamorphosis.

SECTION B **6×4=24**

(Short Answer Type Questions)

Note : Attempt only *one* question from each unit.

Unit-I

1. Write about the hormones secreted from alimentary canal.

Or

What role does placenta play ? Write with suitable illustrations.

Unit-II

2. What are pre and pro hormone ? Give suitable examples.

Or

Write the structure and biosynthesis of estrogen.

Unit-III

3. How does the receptor of thyroxin work ? Show only schematic illustration with proper labelling.

Or

How does adenylate cyclase activate ? Write with suitable illustration.

Unit-IV

4. How does female sexual maturity attained ? What are the milestone ?

[Describe the Role of hormones.]

Or

Write the hormones involved in pregnancy.

SECTION C **12×4=48**

(Long Answer Type Questions)

Note : Attempt any *one* question from each unit.

Unit-I

1. Describe hypothalamic-adenohypophyseal-gonodial axis.

Or

Describe the islets of Langerhans with suitable illustration.

Unit-II

2. Write the biosynthesis of mineralocorticoid using ray diagram.

Or

Write the biosynthesis of androgen using ray diagram.

Unit-III

3. What hormones are involved in the regulation of carbohydrates metabolism ?

Or

Describe the activation of protein hormones with suitable illustration.

Unit-IV

4. Describe the role of hormones in osmoregulation.

Or

Describe the role of hormones in parturition with suitable illustration.

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