

U.G. 6th Semester Examination - 2022

ZOOLOGY

[HONOURS]

Discipline Specific Elective (DSE)

Course Code : ZOOL-H-DSE-T-05

(Endocrinology)

Full Marks : 40

Time : 2½ Hours

The figures in the right-hand margin indicate marks.

Candidates are required to give their answers in their own words as far as practicable.

1. Answer any **five** questions: 2×5=10
 - a) Mention the causes and symptoms of Grave's disease. 1+1
 - b) Give example of peptide hormone and steroid hormone.
 - c) What is Cushing's syndrome?
 - d) Compare autocrine and paracrine secretion.
 - e) Name the important hormones that are responsible for maintaining homeostasis in the human body.
 - f) What is the significance of hypothalamo-hypophyseal portal system?

g) Write the full form of SON and PVN of hypothalamic nuclei.

h) What is estrous cycle?

2. Write short notes on any **two** of the following:

5×2=10

- a) Second-messenger concept of hormone action
- b) Islets of Langerhans
- c) Antidiuretic effect of vasopressin
- d) Feedback mechanism

3. Answer any **two** questions of the following:

10×2=20

a) Discuss the endocrine control of Hypothalamo – Hypophyseal – Gonadal Axis in female. Briefly describe the following disorders of endocrine functions of pancreas.

- i) Insulin-dependent diabetes mellitus
- ii) Non-insulin dependent diabetes mellitus

6+(2+2)=10

b) Describe the structure and functions of adenohypophysis. State the location and functions of the following:

- i) Chromaffin cell
- ii) Sertoli cell (4+2)+(2+2)=10

c) Draw and describe the changes in the endometrium during menstrual cycle. State the functions of oxytocin hormone. (3+3)+4=10

d) What is sandwich ELISA? Briefly describe the process of regulation of testosterone secretion. State the disorders of adrenocortical functions.

3+3+4=10
