K23P 1438

Reg. No. : .....

Name : .....

III Semester M.Sc. Degree (C.B.S.S. – Reg./Supple./Imp.)
Examination, October 2023
(2020 Admission Onwards)
ZOOLOGY
ZOO3C11 : Developmental Biology and Endocrinology

Time : 3 Hours Max. Marks : 60

PART – A
(Developmental Biology)

I. Answer **any one** of the following. **(1×12=12)**

1) Give an account on steps involved in fertilization. Comment on prevention of polyspermy.

2) Write an essay on anterior-posterior axis and dorso-ventral axis formation in Drosophila.

II. Answer **any two** of the following. **(2×8=16)**

3) What is Nieuwkoop center ? Explain the mechanism of Nieuwkoop center formation.

4) Explain the events occurring during gastrulation.

5) Write notes on imprinting with examples.

6) Comment on vulva formation in C. elegans.

III. Answer **any two** of the following: **(2×5=10)**

7) Embryonic induction.

8) Spermiotelosis.

9) Induced Pluripotent Stem Cells.

P.T.O.

PART – B
(Endocrinology)

IV. Answer **any one** of the following. **(1×12=12)**

10) Briefly explain hormonal control of reproduction and moulting in insects.

11) Explain biosynthesis of steroid hormones and peptide hormones.

V. Answer **any two** of the following. **(2×5=10)**

12) Comment on different types of hormone receptors and nature of hormone action.

13) Write notes on Post-translational modifications of hormone structure.

14) Explain relation between hormone secretion and development.
