

Reg. No.	:
Name :	



III Semester M.Sc. Degree (CBSS – Reg./Suppl./Imp.) Examination, October 2020 (2014 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) Explain the process of axes and pattern formation in *Drosophila*.
 - Give an account of gametogenesis. Add a note on factors influencing gametogenesis. (1x12=12)
- II. Answer any two of the following:
 - 3) Describe the biochemistry of fertilization.
 - 4) Present an account of mesodermal induction.
 - 5) What is metamorphosis? Briefly explain hormonal and environmental regulation.
 - 6) Discuss the effects of foreign and nucleus in early development. (2x8=16)
- III. Answer any two of the following:
 - 7) Egg-sperm interaction.
 - 8) Homeotic genes.
 - 9) Egg polarity. (2×5=10)

P.T.O.



PART – B (Endocrinology)

- IV. Answer any one of the following:
 - 10) Describe the hormonal control of growth and reproduction in vertebrates.
 - 11) Give an account of neuro-endocrine system in invertebrate groups. (1×12=12)
- V. Answer any two of the following:
 - 12) Explain the role of hormones as messengers.
 - 13) Write notes on co-translational and post-translational modification of hormone structure.

(Developmental Biology)

14) Comment on the synthesis of prohormones.

 $(2 \times 5 = 10)$