



K17P 1295

Reg. No. :

Name :

**Third Semester M.Sc. Degree (Reg./Suppl./Imp.) Examination, November 2017
(2014 Admn. Onwards)**

ZOOLOGY

ZOO 3C11 : Developmental Biology and Endocrinology

Time : 3 Hours

Max. Marks : 60

**PART – A
(Developmental Biology)**

I. Answer **any one** of the following :

- 1) Give an account of embryonic induction. Add a note on primary organizer.
- 2) Explain the biochemistry and physiology of fertilization. **(1×12=12)**

II. Answer **any two** of the following :

- 3) Briefly discuss the axes and pattern formation in *Drosophila*.
- 4) Describe gastrulation and related metabolic events in cells.
- 5) Discuss gene targeting experiments.
- 6) Explain gameteogenesis. Add a note on factors influencing gametogenesis. **(2×8=16)**

III. Answer **any two** of the following :

- 7) Stem cells.
- 8) Genomic equivalence
- 9) Polyspermy. **(2×5=10)**

**PART – B
(Endocrinology)**

IV. Answer **any one** of the following :

- 10) Give an account of hormonal control of reproduction and moulting in insects.
- 11) Write an essay on neuro-endocrine integration in vertebrates. **(1×12=12)**

V. Answer **any two** of the following :

- 12) Hormone receptors.
- 13) Prohormones.
- 14) Messenger concept. **(2×5=10)**