M.Sc. DEGREE EXAMINATION, NOVEMBER 2016.

THIRD SEMESTER

Zoology

Paper III — ENDOCRINOLOGY

Time: Three hours

Maximum: 75 marks

(No additional sheet will be supplied)

PART A — $(5 \times 3 = 15 \text{ marks})$

Answer any FIVE questions.

Each question carries 3 marks.

Each answer should not exceed 1 page.

- 1. Pancreatic Hormones.
- 2. Pheromones.
- 3. Pregnancy and Lactation.
- 4. Hormone receptor.
- 5. Hormone in Crustaceans.
- 6. Female Sexual Cycle Hormones.
- 7. Growth Hormones.
- 8. Hormones as Pharmaceuticals.

PART B — $(4 \times 15 = 60 \text{ marks})$

Answer ALL questions.

Each question carries 15 marks.

Each answer should not exceed 6 pages.

9. Define Hormone. Write about the Classification and chemical nature of Hormones with suitable examples.

Or

10. Explain the mechanism of Hormone actions associated with Peptide and Steriod Hormones with suitable illustrations.

11. Describe the anatomical feature of thyroid and Pituitary glands. Add a note on the Hormone functions in the control of mammalian metabolism.

Or

- 12. Discuss about the Hormones of Testis and explain the mechanism of regulation of Spermatogenesis.
- 13. Explain the Pathways associated with Biosynthesis and secretion of Hormones from their respective glands.

Or

- 14. Explain the Signal Transduction mechanism of G-Protein family with suitable examples.
- 15. Discuss about the role of Hormones in the maintenance of metabolic Homeostasis in animals.

Or

16. Discuss about the mechanism of Hormonal control of Carbohydrate metabolism with Suitable illustrations.

