

**LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034****M.Sc. DEGREE EXAMINATION – ZOOLOGY****SECOND SEMESTER – APRIL 2023****PZO2ME02 – ENDOCRINOLOGY AND NEUROSCIENCE**

Date: 10-05-2023

Dept. No. 

Max. : 100 Marks

Time: 01:00 PM - 04:00 PM

**SECTION A – K1 (CO1)****Answer ALL the questions****(5 x 1 = 5)****1. Answer the following**

- a) Adrenocorticotrophic hormone
- b) Polycystic ovary syndrome
- c) Exocrine
- d) Ecdysteroids
- e) Synapses

**SECTION A – K2 (CO1)****Answer ALL the questions****(5 x 1 = 5)****2. Definitions**

- a) Steroid hormone
- b) Moulting
- c) Glial cells
- d) Nodes of Ranvier
- e) Swarm robots

**SECTION B – K3 (CO2)****Answer any THREE of the following****(3 x 10 = 30)**

- 3. Give the structure of the ovary and its function.
- 4. “Hormones is self-stimulatory in nature” – substantiate.
- 5. Comment on the role of cyclic AMP.
- 6. Illustrate the mechanism of receptor mediated cell signaling.
- 7. Give the structure and functions of neuron.

**SECTION C – K4 (CO3)****Answer any TWO of the following****(2 x 12.5 = 25)**

- 8. Elucidate the electric synaptic transmission.
- 9. Analyze the cell signaling plays a vital role in maintaining homeostasis in insects.
- 10. Distinguish the endocrine control of moulting and metamorphosis.
- 11. Elucidate the modern classification of hormones.

**SECTION D – K5 (CO4)****Answer any ONE of the following****(1 x 15 = 15)**

- 12. Write down the importance of hormones stimulated response in target cells.
- 13. Explain the mechanism of action potential induction.

**SECTION E – K6 (CO5)****Answer any ONE of the following****(1 x 20 = 20)**

- 14. Summarize the hormones secreted by pituitary glands.
- 15. Explain in detail the endocrine disorders in man.

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