

**Post Graduate Teaching Department of Zoology**  
**An Autonomous Department of**  
**Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur**  
**Programme: M. Sc. Zoology Semester -II (CBCS)**  
**Theory Examination Summer-2023**

**Code and Name of Paper: PGZO2T2 Paper-2T2-Comparative Endocrinology**

**Time: 3hrs**

**Maximum Marks: 60**

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**Note**

- 1. All the questions are compulsory.**
- 2. All questions carry equal marks.**
- 3. Draw well labelled diagrams and charts wherever necessary.**

**Q.1** Give a detailed account on the structure and function of neuroendocrine system in Annelida.

**12**

OR

**Write notes on: -**

- (a) Hormones and functions in Helminths.
- (b) Hormones and function of Echinodermata.

**Q.2** Describe in detail cephalic neuroendocrine system and hormones in Crustacea.

**12**

OR

**Write notes on: -**

- (a) Structure of neuroendocrine system in insects.
- (b) Endocrine control of metamorphosis in insects.

**Q.3** Give a detail account on structure, hormones and functions of pituitary gland. Add a note on hypothalamic regulation of its secretion.

**12**

OR

**Write notes on: -**

- (a) Pineal organ.
- (b) Hypothalamo-hypophysial system.

**Q.4** Describe in detail structure, hormones and functions of endocrine pancreas.

**12**

OR

**Write notes on: -**

- (a) Feedback mechanisms.
- (b) Hormones in contraception.

**Q. 5 Write in brief on the followings: -**

**12**

- (a) Hormones in Mollusca.
- (b) Chromatophorotropins.
- (c) PTH.
- (d) Cortisol.