

SECOND SEMESTER M.Sc. DEGREE EXAMINATION, APRIL 2025

(Regular/Improvement/Supplementary)

ZOOLOGY

FZOL2C06: DEVELOPMENTAL BIOLOGY & ENDOCRINOLOGY

Time: 3 Hours

Maximum Weightage: 30

Part A: Answer *any four* questions. Each carries 2 weightage.*Write notes on:*

1. Second messenger.
2. Hox code hypothesis.
3. Autonomous specification.
4. Distinguish between heterotropy and heterochrony.
5. Cadherins.
6. Hormones produced by the kidney.
7. Pheromones.

(4 × 2 = 8 weightage)**Part B: Answer *any four* questions. Each carries 3 weightage.***Write short essays on:*

8. Physiological role and mechanism of action of Endorphins.
9. Primary sex determination in mammals.
10. Types of regeneration.
11. Role of ovarian hormones.
12. Gastrulation and formation of germ layers in amphibians.
13. Myogenesis.
14. Hormonal factors in lactation.

(4 × 3 = 12 weightage)**Part C: Answer *any two* questions. Each carries 5 weightage.**

15. Explain Teratogenesis.
16. Give a detailed account on Spermatogenesis and Oogenesis in mammals.
17. Describe anterior posterior patterning in *Drosophila*.
18. Write an account on structure, function and control of hormone secretion in Thyroid gland.

(2 × 5 = 10 weightage)