

**LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034**

M.Sc. DEGREE EXAMINATION – ZOOLOGY

FIRST SEMESTER – NOVEMBER 2009

**ZO 1816 / 1810 - ADVANCED DEVELOPMENTAL BIOLOGY**

Date & Time: 11/11/2009 / 1:00 - 4:00 Dept. No.

Max. : 100 Marks

**PART – A**

*Answer ALL the questions*

**(10 x 2 = 20 Marks)**

1. What is corpus luteum?
2. Define phylogeny.
3. What is an organizer?
4. What are the catabolic activities during gastrulation?
5. Explain vitellogen.
6. Explain GIFT.
7. What is flat cake?
8. Comment on egg symmetry.
9. What is total neoteny?
10. Comment on cyclic parthenogenesis.

**PART – B**

*Answer any FOUR*

**(4 x 10 = 40 Marks)**

11. Write an account on the process of parturition and period of gestation.
12. Explain exogastrulation.
13. Give an account on programme of development.
14. Write an account on the germ layer concept and germplasm theory.
15. Give an account on parthenogenesis.
16. Explain the primary organ rudiments.

**PART – C**

*Answer any TWO*

**(2 x 20 = 40 Marks)**

17. Write an essay on the foetal and maternal relationship, placenta and its functions.
18. Explain the ultrastructure of spermatozoa with relationship to its motility.
19. Give an account of *in vitro* fertilization and test tube babies.
20. Give an account on prenatal diagnosis.

\*\*\*\*\*