 LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

 **M.Sc.** DEGREE EXAMINATION - **ZOOLOGY**

FIRST SEMESTER – APRIL 2011

# ZO 1816/1810 - ADVANCED DEVELOPMENTAL BIOLOGY

 Date : 15-04-2011 Dept. No. Max. : 100 Marks

 Time : 9:00 - 12:00

SECTION – A

Answer all the questions. Each question carries two marks (10 X 2 = 20 Marks)

1. How the corpus luteum is formed?
2. Differentiate syncitiotrophoblast and cytotrophoblast.
3. What is fertilization cone?
4. Define morphogenesis.
5. Write the functions of chorion.
6. Comment on fertile aid for men.
7. Explain third party reproduction.
8. What is zonary placenta?
9. Define arrhenotoky.
10. What is paedogenesis?

SECTION – B

Answer any FOUR questions. Each question carries ten marks.(4 X 10 = 40 Marks)

1. Explain gradient theory germplasm theory.
2. Describe the electron microscopic structure of the mature spermatozoan.
3. Write notes on Speeman’s primary organiser.
4. Explain morphogenetic movements of cells during gastrulation.
5. Give an account on the procedure involved in embryo transfer and explain the proper location for placement of the embryo.
6. Write an account on extra embryonic membranes of chik.

SECTION – C

Answer any TWO questions. Each question carries twenty marks (2 X 20 = 40 Marks)

1. Write an essay on structure, classification and physiology of placenta.
2. Give an account on ovulation, hormonal control, sperm transport and implantation of fertilized ovum.
3. Explain parthenogenesis and neoteny.
4. Write a detailed account on fertility of sperm and in vitro fertilization.