 LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

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

FIRST SEMESTER – **NOVEMBER 2012**

# ZO 1822 - ADVANCED DEVELOPMENTAL BIOLOGY

Date : 09/11/2012 Dept. No. Max. : 100 Marks

Time : 1:00 - 4:00

**Part-A**

**Answer All the questions (10×2=20 Marks)**

1. Differentiate immigration from delamination.
2. What is heteroplastic transplantation.
3. Define the term totipotent.
4. What is amniocentesis?
5. Define embryogenesis.
6. Explain GIFT.
7. What is enzyme induction?
8. Differentiate eccentric from interstitial implantation.
9. List out the functions of allantois.
10. Comment on invitro fertilization.

**Part-B**

**Answer any FOUR questions (4×10=10 Marks)**

1. Write notes on autosomal recessive disorder.
2. Explain the detection of disorder from the amniotic cell.
3. Write down the functions of placenta.
4. Give a short account on amphibian metamorphosis.
5. Describe the ultra structure of spermatozoon and list out its functions.
6. Give an account on the extra embryonic membrane of bird.

**Part-C**

**Answer any TWO questions (2×20=40 Marks)**

1. Give an account on prenatal diagnosis.
2. Write an essay on the process of ovulation.
3. Explain the techniques of cryopreservation.
4. Describe the process of aging and the developmental potential.