 LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

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

FIRST SEMESTER – **APRIL 2012**

# ZO 1816 - ADVANCED DEVELOPMENTAL BIOLOGY

Date : 02-05-2012 Dept. No. Max. : 100 Marks

Time : 9:00 - 12:00

**Part A**

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

1. What is spermiogenesis?
2. Differentiate previtellogenesis from vitellogenesis.
3. Comment on nurse cells.
4. Explain fertilizin and antifertilizin reactions.
5. Define neotony.
6. What is fate map?
7. Comment on neural crest cells.
8. Explain foetal membranes.
9. Comment on chemo-differentiation.
10. What is involution?

**Part B**

**Answer any FOUR questions: (4×10=40 Marks)**

1. Write notes on the ultra structural organization of spermatozoa.
2. Explain natural parthenogenesis.
3. Describe Exogastrulation.
4. Give an account on ecto, endo and meso dermal derivatives.
5. Explain aging and the developmental potential.
6. Describe the extra embryonic membranes of chick.

**Part C**

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

1. Write an essay on oogenesis.
2. Give an account on test tube baby.
3. Describe Spemann’s primary and secondary organizers.
4. Explain prenatal diagnosis.

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