LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

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

FIRST SEMESTER – NOVEMBER 2010

# ZO 1816 - ADVANCED DEVELOPMENTAL BIOLOGY

Date : 09-11-10 Dept. No. Max. : 100 Marks

Time : 1:00 - 4:00

**Section – A**

**Answer *all* the questions. Each question carries two marks (10x2 = 20 marks)**

1. Differentiate theca interna and theca externa.
2. What is implantation?
3. Mention the main function of fertilization membrane.
4. Write the significance of gastrulation.
5. What are the functions of allantois?
6. Comment on healthy sperm motility.
7. Explain embryo transfer.
8. What is condra-deciduate placenta?
9. Define gynogenesis.
10. What are the factors causing neoteny?

**Section – B**

**Answer any *four* questions. Each question carries ten marks (4x10 = 40 marks)**

1. Write notes on the programme of development.
2. Explain Baer’s and Biogenetic law.
3. Give an account on the mobility of spermatozoan and egg activation.
4. Write notes on fate map.
5. Explain prenatal diagnosis.
6. Describe the structure and functions of placenta.

**Section – C**

**Answer any *two* questions. Each question carries twenty marks (2x20 = 40 marks)**

1. Write an essay on human cloning and ethical issues.
2. Give an account on changes during pregnancy and the process of parturition.
3. Explain aging and its developmental potential.
4. Write a detailed account on exogastrulation.

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