



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

M.Sc. DEGREE EXAMINATION - ZOOLOGY

FIRST SEMESTER – NOVEMBER 2011

ZO 1816 - ADVANCED DEVELOPMENTAL BIOLOGY

Date : 09-11-2011

Dept. No.

Max. : 100 Marks

Time : 1:00 - 4:00

Section A

Answer **ALL** the questions

10x2=20 Marks

1. Differentiate prenatal from postnatal periods.
2. Comment on sperm transport.
3. What are DNA probes?
4. Differentiate schizogony from gamogony.
5. Define autoplasmic transplantation.
6. Differentiate primary from secondary chorionic villi.
7. What is Arrhenotoky?
8. Comment on early adulthood.
9. What is vitellogenesis? Name the different forms of yolk.
10. Explain egg retrieval.

Section B

Answer any **FOUR** questions

4x10=40 Marks

11. Write notes on fertilization and implantation of fertilized ovum.
12. Explain Spemann's primary embryonic induction.
13. Describe the various theories on Aging process.
14. Describe the ultra structure of spermatozoan with reference to its motility.
15. Explain the functional anatomy of female reproductive system and hormonal control.
16. Explain the following:
 - a) Ultrasonography
 - b) Amniocentesis
 - c) Chorionic villus sampling

Section C

Answer any **TWO** questions

2x20=40 Marks

17. Give an account on human cloning and its ethical issues.
18. Explain natural parthenogenesis.
19. Write an essay on *in vitro* fertilization.
20. Give an account of progressive changes during pregnancy.
