



**LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034**

**M.Sc. DEGREE EXAMINATION – ZOOLOGY**

FIRST SEMESTER – APRIL 2018

**17PZO1MC03- ADVANCED DEVELOPMENTAL BIOLOGY**

Date: 28-04-2018  
Time: 09:00-12:00

Dept. No.

Max. : 100 Marks

**PART- A**

*Answer ALL the questions.*

**(10×2 = 20 marks)**

1. Comment on the period of gestation
2. What is after birth tissue?
3. Define fetoscopy
4. What is cryoprotectant?
5. Define morphogenesis
6. Comment on Corpora allata
7. What is embryo sexing?
8. Define totipotency.
9. Differentiate adaptive and terminal differentiation.
10. What is phenocopy?

**PART- B**

*Answer any FOUR questions.*

**(4×10 = 40 marks)**

11. Write notes on ovulation
12. Give an account on the functions of placenta
13. Describe the ultrastructure of spermatozoon and its function.
14. Explain embryo splitting.
15. Discuss Hans Spemann's experiment on nuclear transplantation.
16. Explain progressive changes during pregnancy.

**PART- C**

*Answer any TWO questions.*

**(2×20 = 40 marks)**

17. Write an essay on prenatal diagnosis of abnormalities.
18. Give an account on aging biology
19. Explain Epimorphic regeneration in salamander.
20. Discuss signal transduction.