

# LOYOLA COLLEGE (AUTONOMOUS), CHENNAI - 600 034

### M.Sc. DEGREE EXAMINATION - ZOOLOGY

#### FIRST SEMESTER - APRIL 2016

### **ZO 1822 - ADVANCED DEVELOPMENTAL BIOLOGY**

Date: 02-05-2016	Dept. No.	Max.	: 100 Marks
Time: 01:00-04:00	l		

## Part-A

## Answer ALL the questions

 $(10\times2=20 \text{ Marks})$ 

- 1. What is sperm sexing?
- 2. Differentiate juxtacrine signals from endocrine signals.
- 3. Define the term potency.
- 4. What is transgenesis?
- 5. Comment on the period of gestation.
- 6. What is corpus luteum?
- 7. Comment on fetoscopy.
- 8. Define spermiogenesis.
- 9. Comment on foetal sex.
- 10. Explain multifactorial inheritance disorders.

## Part-B

### Answer any FOUR questions

 $(4\times10=40 \text{ Marks})$ 

- 11. Write notes on ovulation and hormonal control.
- 12. Give an account on the function of placenta.
- 13. Explain morphogenesis.
- 14. Discuss metamoiphosis in Amphibians.
- 15. Describe the ultra structure of spermatozoan and mention its functions.
- 16. Give an account on embryo splitting.

### Part-C

### **Answer any TWO questions**

(2×20=40 Marks)

- 17. Give an account on progressive changes during pregnancy and parturition
- 18. Using lac operon explain operon concept.
- 19. Explain ageing and developmental potential
- 20. Explain prenatal diagnosis.

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