



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

M.Sc. DEGREE EXAMINATION – ZOOLOGY

FIRST SEMESTER – NOVEMBER 2017

17PZO1MC03 - ADVANCED DEVELOPMENTAL BIOLOGY

Date: 08-11-2017
Time: 01:00-04:00

Dept. No.

Max. : 100 Marks

Part-A

Answer ALL the questions

(10×2=20 Marks)

1. Differentiate the cell of theca interna and theca externa.
2. Comment on period of gestation.
3. What is fetoscopy?
4. Comment on embryo transfer.
5. Define retrogressive metamorphosis.
6. Enlist the functions of amnion.
7. Comment on liver stem cells.
8. Differentiate adaptive differentiation from terminal differentiation.
9. What is intracellular signaling?
10. Comment on embryo culture.

Part-B

Answer any FOUR questions

(4×10=40 Marks)

11. Write notes on the process of ovulation and the functional anatomy of female reproductive tract.
12. Describe placenta and explain its functions.
13. Give an account of cellular and microsurgical techniques.
14. Explain the theories pertaining to aging.
15. Discuss the experiments based on nuclear transplantation by Hans Spemann.
16. Give an account on the causes of sterility in male and female.

Part-C

Answer any TWO questions

(2×20=40 Marks)

17. Write an essay on progressive changes during pregnancy and parturition.
18. Give an account of *in vitro* fertilization in cattle.
19. Explain prenatal diagnosis.
20. Discuss epimorphic regeneration in Salamander limb.

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