



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

B.Sc. DEGREE EXAMINATION – ADVANCED ZOOLOGY AND BIOTECHNOLOGY

FOURTH SEMESTER – APRIL 2017

AZ 4503- EMBRYOLOGY

Date: 21-04-2017
Time: 09:00-12:00

Dept. No.

Max. : 100 Marks

PART – A (10 x 2 = 20 marks)

Answer ALL questions. All questions carry equal marks.

Define / Explain the following:

1. Pre-formation theory
2. Gradient theory
3. Amphimixis
4. Mention the types of eggs based on quantity of yolk.
5. What are primary membranes. Give examples.
6. Fate maps
7. Metamorphosis
8. Parthenogenesis
9. Cell lineage
10. Microinjection

PART – B (4 x 10 = 40 marks)

Answer any FOUR questions. All questions carry equal marks.

11. Explain any five historical hypothesis on embryology.
12. Describe the various cleavage patterns and theories of cleavage.
13. Classify Placenta based on distribution of Villi.
14. Write the development of Starfish.
15. Explain the transgenic animals.
16. Describe the theory of organizers

PART – C (2 x 20 = 40 marks)

Answer any TWO questions. All questions carry equal marks.

17. Write an essay on Spermatogenesis.
18. Trace the development of brain in vertebrates.
19. Give an account on Regeneration.
20. Describe embryo transplantation techniques and test tube babies.
