

STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI 600 086
(For candidates admitted during the academic year 2005 – 2006 & thereafter)

SUBJECT CODE: ZL/MC/DB64

B. Sc. DEGREE EXAMINATION APRIL 2009
BRANCH VI.A. ADVANCED ZOOLOGY & BIOTECHNOLOGY
SIXTH SEMESTER

COURSE : MAJOR –CORE
PAPER : DEVELOPMENTAL BIOLOGY

TIME : 3 HOURS

MAX. MARKS: 100

SECTION – A

ANSWER ALL QUESTIONS :

(10 X 3 = 30)

1. Explain the following
 - a. centrolecithal
 - b. fertilizin
 - c. yolk plug
2. Comment on the following
 - a. polyspermy
 - b. meroblastic cleavage
 - c. deciduate placenta
3. Expand the following
 - a. PL
 - b. LH
 - c. FSH
4. Draw neat diagram of an egg and label the parts.
5. Match the following
 - a. corpus luteum - epigenesis
 - b. Balfour's law - invagination
 - c. emboly - progesterone
 - d. pre formation - muscle
 - e. coeloblastula - holoblastic cleavage
 - f. myotomes - cleavage
6. Comment on ecdysone.
7. How do you differentiate the animal pole from vegetal pole.
8. Explain the chemotaxis.
9. Give an account of regeneration.
10. What is primitive streak?

SECTION – B

ANSWER ANY FIVE QUESTIONS :

(5 X 6 = 30)

11. Explain the process of metamorphosis in insects.
12. Describe the different types of eggs with suitable diagrams.
13. Discuss the function of extra embryonic membranes.
14. Explain briefly the stem cells and its importance in modern science.
15. Give an account of fat maps and its significance.
16. Discuss the test tube babies and role of surrogate mother.
17. Explain the nucleo cytoplasmic interactions.

SECTION – C

ANSWER ANY TWO QUESTIONS :

(2 X 20 = 40)

18. Write an essay on induced ovulation and its applications.
19. Discuss in detail the various types of placenta and its function.
20. Write an essay on Gastrulation in Amphioxus & frog.
21. What is parthenogenesis? Explain the different types in different animals.
