

STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI 600 086
(For candidates admitted during the academic year 2008 – 2009 & thereafter)

SUBJECT CODE: ZL/MC/DP64

B. Sc. DEGREE EXAMINATION APRIL 2012
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. Acrosome b. Thelytoky c. Archenteron.
2. Comment on the following:
a. Cell lineage b. Grey Crescent c. Hensen's node
3. Expand the following:
a. LTH b. FSH c. IVF
4. Draw a neat diagram of the section of yolk plug stage and label the parts.
5. Match the following:
a. Morphallaxis - metamorphosis
b. Corpus Luteum - Egg of insects
c. Fertilizin - regeneration
d. Sertoli Cells - Egg membranes
e. Centrolecithal - Graffian follicle
f. Thyroxine - nourishment of sperms
6. Comment on polarity.
7. How do you differentiate invagination from involution?
8. Write a note on chorio-allantoic placenta.
9. Highlight the significance of fate map.
10. What is superficial cleavage?

SECTION – B

ANSWER ANY FIVE QUESTIONS :

(5 X 6 = 30)

11. What are the types of regeneration? Explain.
12. Give an account on induced ovulation and its applications.
13. Discuss the influence of yolk during cleavage.
14. Give an account on endodermal derivatives.
15. Write a short note on test tube babies.
16. Describe the structure of a mammalian sperm. Add a note on the different types of sperms.
17. Explain extra embryonic membrane and its functions.

SECTION – C

ANSWER ANY TWO QUESTIONS :

(2 X 20 = 40)

18. Write an essay on oogenesis.
19. What is metamorphosis? Explain with an example of amphibian.
20. Give an account on development of Brain.
21. Explain various types of placenta and its functions.
