STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI 600 086

(For candidates admitted during the academic year 2004 – 2005)

SUBJECT CODE: ZL/MC/DB64

B. Sc. DEGREE EXAMINATION APRIL 2007 BRANCH VI. ZOOLOGY SIXTH SEMESTER

COURSE : MAJOR - CORE

PAPER : DEVELOPMENTAL BIOLOGY

TIME : 3 HOURS MAX. MARKS: 100

SECTION - A

ANSWER ALL QUESTIONS:

1. What is epigenesis?

- 2. Comment on sertoli cells.
- 3. What is artificial insemination?
- 4. What is chemotaxis?
- 5. How is primitive streak formed?
- 6. Comment on cryopreservation.
- 7. Comment on fate maps.
- 8. What is neurulation?
- 9. What is cloning?
- 10. Explain the function of placenta.

SECTION - B

ANSWER ANY FIVE QUESTIONS:

 $(5 \times 6 = 30)$

 $(10 \times 3 = 30)$

- 11. Give an account of induced ovulation and its application.
- 12. Explain the process of metamorphism in amphibians.
- 13. Discuss the different types of parthenogenesis and its importance.
- 14. Explain how yolk determines the cleavage.
- 15. Explain the development of ear in frog.
- 16. Give an account of extra-embryonic membranes and its function.
- 17. Discuss the ethical issues related to recent advances in Reproductive Technology.

SECTION - C

ANSWER ANY TWO QUESTIONS:

 $(2 \times 20 = 40)$

- 18. Write an essay on regeneration with a note on mechanism of regeneration.
- 19. Discuss in detail the plane, patterns and rate of cleavage.
- 20. Discuss in detail the nuclear transplantation interactions in Frog.
- 21. Write an essay on the different types of Placenta in mammals.
