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

SUBJECT CODE: ZL/MC/VP64

B. Sc. DEGREE EXAMINATION APRIL 2012 BRANCH VI.A. - ADVANCED ZOOLOGY & BIOTECHNOLOGY SIXTH SEMESTER

COURSE: MAJOR – CORE

PAPER: VERTEBRATE PHYSIOLOGY

TIME : 3 HOURS MAX. MARKS: 100

SECTION - A

ANSWER ALL QUESTIONS:

 $(10 \times 3 = 30)$

- 1. What is ECG?
- 2. Draw and label a villus.
- 3. What is reflex action?
- 4. Mention the difference between ammonotelism and Ureotelism.
- 5. What are neuro transmitters?
- 6. Mention the functions of lymph.
- 7. Draw and label a nephron.
- 8. Define Basal Metabolic Rate (BMR).
- 9. What are receptors? Name any two of them.
- 10. What is meant by autonomic nervous system?

SECTION - B

ANSWER ANY FIVE OF THE QUESTIONS:

 $(5 \times 6 = 30)$

- 11. Give an account on absorption of digested food.
- 12. Describe the structure of a mammalian lung and briefly explain how it exchanges gases.
- 13. Explain hypo and hyper thyroidism.
- 14. Draw and label a neuro muscular junction.
- 15. What are the various osmoregulatory mechanisms observed in vertebrates?
- 16. Describe the functioning of a mammalian heart.
- 17. What are electric organs? Explain with an example.

SECTION - C

ANSWER ANY TWO QUESTIONS:

 $(2 \times 20 = 40)$

- 18. Describe the structure and function of a mammalian kidney.
- 19. Write in detail about the different types of muscles. Add short notes on their properties.
- 20. With a neat diagram explain the structure and function of a mammalian eye.
- 21. What is puberty? Explain in detail the process of menstruation.
