

STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI 600 086
(For candidates admitted during the academic year 2005-06 & thereafter)

SUBJECT CODE: ZL/MC/PH64

B. Sc. DEGREE EXAMINATION APRIL 2010
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 X 3 = 30)

1. Define the term chloride shift.
2. What is deamination?
3. What is Juxta glomerular apparatus?
4. Define bio luminescence.
5. What is meant by saltatory conduction?
6. Distinguish between euryhaline and stenohaline.
7. Comment on the enzymes involved in protein digestion.
8. Differentiate ECG & EEG.
9. What is meant by rigor mortis?
10. What is myxedema?

SECTION – B

ANSWER ANY FIVE OF THE QUESTIONS: (5 X 6 = 30)

11. Give the role of placenta in vertebrate reproduction.
12. List down the steps involved in Krebs's ornithine cycle.
13. Describe the osmoregulatory mechanism in marine fishes.
14. Write short notes on cardiac pace makers.
15. Narrate the chemical events involved in the Beta oxidation.
16. With a neat labeled diagram describe the neuromuscular junction.
17. List down the diving adaptations seen in air breathing aquatic animals.

SECTION – C

ANSWER ANY TWO QUESTIONS:

(2 X 20 = 40)

18. Explain in detail the physiology of muscle contraction and add a note on theories.
19. What are respiratory pigments? Explain their role in the transport of gases.
20. Give an account of the mechanism of urine formation and add a note on the hormones that regulate it.
21. Give an account on the structure, function and regulation of adenohypophysis.
