

STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI 600 086
(For candidates admitted during the academic year 2004-05)

SUBJECT CODE : ZL/MC/PH64

B. Sc. DEGREE EXAMINATION APRIL 2007
BRANCH VI. - ZOOLOGY
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 Proteins.
2. What is Anaerobiosis?
3. Mention some adaptations in animals living in high altitudes
4. Differentiate between Osmoconformers and Osmoregulators.
5. Illustrate a Henle's Loop.
6. Enlist the different types of muscles.
7. Draw an Electrocardiograph.
8. What is reflex action?
9. Enumerate some electric organs of vertebrates.
10. Indicate the endocrine glands responsible for growth.

SECTION – B

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

11. With the help of a flowchart, explain Glycolysis.
12. Explain Oxygen dissociation curve.
13. Highlight the Osmoregulatory mechanisms operating in some vertebrates.
14. Comment on Ammonotelism and Uricotelism.
15. Write notes on Neurotransmitters.
16. How does bioluminescence help the nocturnal organism.
17. Draw pancreas and explain its functional significance.

SECTION – C

ANSWER ANY TWO QUESTIONS:

(2 X 20 = 40)

18. Classify fats and discuss beta – oxidation of Fatty acids.
19. Write an essay on the Pituitary gland & Adrenal gland.
20. Explain the theories and physiology of Muscle contraction.
21. Draw the structure of the photoreceptor of a mammal and discuss the mechanism of vision.
