

STELLA MARIS COLLEGE (AUTONOMOUS) - CHENNAI 600 086
(For candidates admitted during the academic year 2011– 2012 & thereafter)

SUBJECT CODE: 11ZL/MC/VP64

B. Sc. DEGREE EXAMINATION APRIL 2015
BRANCH VIA. - 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. Explain the deficiencies caused by vitamin D.
2. Differentiate between Osmoregulators and Osmoconformers.
3. State any three functions of saliva.
4. Write the difference between aerobic and anaerobic respiration.
5. Explain bioluminescence with an example.
6. State the functions of lymph.
7. Define: a) Ammonotelism b) Uricotelism c) Ureotelism
8. What is blood pressure? Name the instrument used to measure it.
9. Differentiate between reflex action and conditioned reflex with a suitable example.
10. State any three causes of aging.

SECTION – B

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

11. Enumerate on the water soluble vitamins.
12. Explain the working principles of ECG and EEG.
13. Explain the oxygen dissociation curve.
14. Explain the mechanism of osmoregulation in vertebrates.
15. Comment on the ultra structure of the striated muscles.
16. Briefly describe the structure and function of Photo receptors in mammals.
17. Draw and describe the female reproductive system.

SECTION – C

ANSWER ANY TWO QUESTIONS:

(2 X 20 = 40)

18. Draw and describe the structure of a human heart and add a note on the physiology of circulation.
19. Explain the process of nerve impulse conduction. And add a note on its properties.
20. Describe the structure of a human kidney and explain the process of urine formation.
21. Write an essay on the endocrine system of human being.
