

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 2016
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 staple diet.
2. Write a note on Graffian follicle.
3. Comment on cutaneous respiration.
4. What are Purkinje fibers?
5. Differentiate homeotherms from poikilotherms.
6. Mention the importance of lymph.
7. Define synapse.
8. Mention the importance of sphincter muscles.
9. Differentiate spermatogenesis from spermeogenesis.
10. Expand the following
(a) GSH (b) ECG (c) BMR

SECTION – B

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

11. Write an account on water and fat soluble vitamins.
12. Briefly explain the physiology of digestion in the stomach.
13. Give an account on the chambers of human heart.
14. Write an account on adaptations to high altitudes.
15. Illustrate and explain the formation of urine in human.
16. Explain the ultrastructure of striated and non-striated muscle.
17. Write an account on electric organs of vertebrates.

SECTION – C**ANSWER ANY TWO QUESTIONS:****(2 X 20 = 40)**

18. Enumerate points on the following

- a. Menstrual cycle
- b. Control of food intake
- c. Chloride shift
- d. Anaerobiosis

19. Form an essay on osmoregulatory mechanism in vertebrates.

20. Illustrate the structure of neuron and add a note on nerve impulse and conduction.

21. Explain in detail the structure and physiology of male and female reproductive system of mammal.
