# LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

**M.Sc.** DEGREE EXAMINATION – **ZOOLOGY** 

THIRD SEMESTER - APRIL 2014

### ZO 3815 - BIO CHEMISTRY & ANIMAL PHYSIOLOGY

Dept. No.

Date : 05/04/2014 Time : 01:00-04:00

## Part-A

## Answer All the questions

- 1. Differentiate stenohaline from euryhaline.
- 2. What are Gap junction?
- 3. What is V max?
- 4. Comment on photophores'.
- 5. What is apneustic center?
- 6. Comment on lipidosis.
- 7. What are Zwitterions?
- 8. Comment on chloride shift.
- 9. Differentiate poikilotherms from homoeotherms.
- 10. What are chylomicrons?

#### Part-B

## (4×10=40 Marks)

## 11. What is $\beta$ oxidation? Explain.

Answer any FOUR questions

- 12. Explain the process of bio synthesis of fatty acids.
- 13. Describe intermediary metabolism.
- 14. Describe the physiology of osmo-regulation in different animals.
- 15. Explain carbohydrate catabolism.
- 16. Briefly write the neural and chemical regulation of respiration.

#### Part-C

## Answer any TWO questions

- 17. Write an essay on the biochemistry and physiology of bioluminescence.
- 18. Explain muscle physiology and neural control of muscle contraction.
- 19. Bring out Michaelis Menton equation and its importance.
- 20. Give an account on Chronobiology and its relevance on general physiology.

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Max.: 100 Marks

(10×2=20 Marks)

(2×20=40 Marks)