

**LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034**

M.Sc. DEGREE EXAMINATION – ZOOLOGY

THIRD SEMESTER – NOVEMBER 2009

**ZO 3810 / 3807 - INTEGRATED PHYSIOLOGY**

Date & Time: 05/11/2009 / 9:00 - 12:00 Dept. No.

Max. : 100 Marks

**PART – A**

Answer **ALL** the questions

**(10 x 2 = 20 Marks)**

1. Comment on the vitamin that functions as antioxidant.
2. Differentiate acclimation from acclimatization.
3. What is Bohr effect?
4. Comment on ADH
5. What are environmental estrogens?
6. Comment on oxygen debts.
7. What is the significance of chromatophores?
8. Comment on Bioluminescence.
9. What is Diapause?
10. Differentiate circadian rhythm from circannual rhythm.

**PART – B**

Answer any **FOUR**

**(4 x 10 = 40 Marks)**

11. Deep sea organisms overcome high pressure-Explain.
12. Explain synaptic transmission.
13. Describe the physiology of muscle contraction.
14. Write notes on pigment effector cells.
15. Summarize the physiology of vision.
16. Explain the physiology of ageing.

**PART – C**

Answer any **TWO**

**(2 x 20 = 40 Marks)**

17. Describe the composition of blood and physiology of coagulation.
18. Explain in detail osmoregulation in vertebrates and their hormonal control.
19. Explain the function of pituitary secretions and related disorders in man.
20. Write an essay on chronobiology.

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