

25103 (OR)

M.Sc. DEGREE EXAMINATION, APRIL/2015.

SECOND SEMESTER

Zoology

Paper III — ANIMAL PHYSIOLOGY

Time : Three hours

Maximum : 75 marks

(No additional sheet will be supplied)

PART A — (5 × 3 = 15 marks)

Answer any FIVE questions.

Each question carries 3 marks

Each answer should not exceed 1 page.

1. Digestion of proteins.
2. Vitamin C.
3. Neurogenic hearts.
4. Importance of TCA cycle.
5. Hibernation.
6. Poikilotherms.
7. Chemoreceptors.
8. Bioluminescence.

PART B — (4 × 15 = 60 marks)

Answer ALL questions.

Each question carries 15 marks

Each answer should not exceed 6 pages.

9. Discuss the role of gastrointestinal hormones in digestion and its regulation.

Or

10. What is feeding? Explain the different modes of feeding mechanisms in organisms. Add a note on its regulation.
11. Describe the mechanism of transport of gases during respiration in animals.

Or

12. Discuss the evolutionary significance of nitrogen excretion patterns in animals.

13. Write a detailed essay on thermoregulation in different animals.

Or

14. Explain the different types of biological rhythms exhibited by animals. Add a note on their significance.

15. Discuss the relevance of muscular contraction theories.

Or

16. What are chromatophores? Describe their function and regulation in animals.

