

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)

SECTION A — (5 × 3 = 15 marks)

Answer any FIVE questions.

Each question carries 3 marks.

Each answer should not exceed 1 page.

1. Water soluble vitamins.
2. Mechanics of Breathing.
3. Pulmonary Circulation.
4. Respiratory Pigments.
5. Hibernation.
6. Circadian Rhythms.
7. Bioluminesence.
8. Skeletal Muscle.

SECTION B — (4 × 15 = 60 marks)

Answer ALL questions.

Each question carries 15 marks.

Each answer should not exceed 6 pages.

9. Discuss in detail comparative physiology of digestion of proteins in vertebrates

Or

10. Explain the role of Gastrointestinal Hormones in regulation of digestion.

11. Elucidate the different Respiratory strategies that animals employ.

Or

12. Discuss in detail the Circulatory mechanism in various animals.

13. Discuss in detail about different types of Biological rhythms.

Or

14. Write a detailed note on, homoeothermic and Poikilothermic animals with examples.

15. Explain elaborately the effect of Muscle Architecture on Muscle Function.

Or

16. What is a receptor and give a note on physiology of photo and chemo-receptors?

