

19. Write a brief note on classification, structure, properties and functions of lipids.
20. Define the term prostaglandins Explain the functions and pharmacological uses of prostaglandins.
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S.No. 7372

PN 15 ZO 6

(For candidates admitted from 2015–2016 onwards)

M.Sc. DEGREE EXAMINATION, NOVEMBER 2023

Zoology

ANIMAL PHYSIOLOGY AND BIOCHEMISTRY

Time : Three hours

Maximum : 100 marks

PART A — (10 × 2 = 20)

Answer ALL questions.

1. Osmoconformers.
2. Cardiac muscle.
3. Neurosecretion.
4. Exocrine glands.
5. Chemoreceptors.
6. Homeotherm.
7. Types of proteins.
8. Introns.

9. Creatine phosphate.
10. Respiratory chain.

PART B — (5 × 7 = 35)

Answer ALL questions, choosing either (a) or (b).

11. (a) Briefly define the role of hormones in osmoregulation. Explain the functions of ADH.

Or

- (b) Explain the structure of neuromuscular junction with a neat diagram.
12. (a) Describe the discovery and exploration of neurosecretory cells and explain the two neurosecretory vesicles.

Or

- (b) What are mammalian like endocrine system? Explain the term Renin angiotensin in endocrine system.
13. (a) Explain the ultrastructure of ear with a diagram.

Or

- (b) What are the physiological changes in diving? Explain in brief about what happens to the body when diving.

14. (a) Brief out the nomenclature and mechanism of enzyme action with diagram.

Or

- (b) Give an account on electron transport linked phosphorylation and the steps involved in this action.

15. (a) Explain the structure and functions of globular proteins with examples.

Or

- (b) What does carbohydrate do in the body? Explain the main sources of carbohydrates.

PART C — (3 × 15 = 45)

Answer any THREE questions.

16. Describe the structure, chemical composition and physiology of muscle contraction.
17. Briefly define the mechanism of endocrine secretion and functions with suitable diagram.
18. Explain migration in birds and fishes along the temperature regulation in poikilotherms