

Unit IV

8. Explain the physiological adaptation to different environment. 14
9. Explain about the Neurotransmitters :
- (a) Acetylcholine 7
- (b) Catecholamines. 7



No. of Printed Pages : 04

Roll No.

35263

M.Sc. (NEP-2020)

EXAMINATION, 2025

(Second Semester)

ZOOLOGY

M24-ZOO-202

Comparative Physiology

Time : 3 Hours]

[Maximum Marks : 70

Before answering the question-paper, candidates must ensure that they have been supplied with correct and complete question-paper. No complaint, in this regard will be entertained after the examination.

Note : Attempt *Five* questions in all, selecting *one* question from each Unit. Q. No. 1 is compulsory. All questions carry equal marks.

1. (i) What is counter current mechanism ?
- (ii) Define osmoregulation with example in different animal group.
- (iii) What do you mean by Thermoregulation ?
- (iv) Explain Vitellogenesis.
- (v) Difference between Stress and Strain.
- (vi) Explain cardiac cycle.
- (vii) What do you mean by single and double circulation of Blood ? 7×2=14

Unit I

2. Give a detailed account of comparative physiology of digestion and absorption in different animal group. 14
3. (a) Explain the Respiratory pigment through different phylogenetic group. 7
- (b) Pattern of Nitrogen Excretion among different animal group. 7

Unit II

4. Explain physiological adaptation acclimatization and acclimation in response to high, low, ambient temperature. 14
5. Explain the following terms :
 - (a) Homeothermic animals 4
 - (b) Poikilotherms 5
 - (c) Hibernation and Aestivation. 5

Unit III

6. Give a detailed account of comparative ovarian physiology and differentiation in vertebrates. 14
7. Explain the following :
 - (a) Structure and function and classification of Neurons and Glial cells 7
 - (b) Autonomic Nervous System. 7