

Reg. No. : .....

Name : .....

**Second Semester B.Sc. Degree Examination, September 2022**

**First Degree Programme Under CBCSS**

**Zoology**

**Core Course II**

**ZO 1241 – ANIMAL DIVERSITY II**

**(2020 Admission Onwards)**

Time : 3 Hours

Max. Marks : 80

Draw diagrams wherever necessary.

- I. Answer **all** questions in one or two sentences. Each question carries **1** mark.
1. Write the dental formula of Proboscidea.
  2. What is paedogenesis?
  3. Which is the larva of *Petromyzon*?
  4. Write down the significance of blubber in aquatic mammals.
  5. Define neoteny. Give one example.
  6. What is Bidder's canal?
  7. Give the scientific names of any two flightless birds.
  8. Name any two obligate hibernators.

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9. What is an opisthocoelous vertebrae?
10. Briefly explain syrinx.

(10 × 1 = 10 Marks)

II. Answer **any eight** questions out of sixteen. (Each question carries **2** marks and answers should not exceed one paragraph)

11. Write on the arboreal adaptations of *Chameleon*.
12. What is a neurotoxic venom? Give an example.
13. Mention the reptilian characters of *Archaeopteryx*.
14. Write on antlers and horns.
15. What are the volant adaptations of Bat?
16. Enlist the salient features of Dipnoi.
17. Mention any two crocodilian features of *Sphenodon*.
18. Differentiate physostomous and physoclistous type of swim bladders.
19. Write a note on *Nasikabatrachus*.
20. Briefly explain the preparation of anti-venom serum.
21. Mention the importance of Ascidian tadpole.
22. Comment on the economic importance of Tuna.
23. Give an account on the feeding behaviour in *Amphioxus*.
24. What is the difference between remiges and rectrices?
25. Briefly explain heterocercal and homocercal tails.
26. How do egg laying mammals differ from other mammals?

(8 × 2 = 16 Marks)



III. Answer **any six** questions out of twelve. (Each question carries **4** marks; each answer should not exceed **120** words)

27. Explain mechanism of Pulmonary respiration in frog.
28. Enlist the features of Paleognathae with an example.
29. Give an account on parental care in amphibia.
30. Explain the different cranial nerves of frog.
31. Describe the salient features of Salpa.
32. Comment on any two aquatic mammals.
33. Write on the desert adaptations of Ostrich.
34. Explain the general organisation of Larvacea with an example.
35. Enumerate the salient features of Metatheria.
36. What is a zoonotic disease? Explain any two viral zoonoses.
37. Give the distinct features of class Chondrichthyes.
38. Discuss and compare the biology and morphology of *Naja* and *Vipera*.

**(6 × 4 = 24 Marks)**

IV. Answer **any two** out of six questions. (Each question carries **15** marks)

39. Write an essay on migration in birds.
40. Give a comparative account of the brain of amphibia and reptiles.
41. Describe the dentition in mammals.
42. Classify reptilia up to orders giving important characters and suitable examples.
43. Give an account on the accessory respiratory organs in fishes.
44. Describe the structure and working of heart of frog.

**(2 × 15 = 30 Marks)**