



'সমানো মন্ত্র: সমিতি: সমানী'

UNIVERSITY OF NORTH BENGAL

B.Sc. Honours 4th Semester Examination, 2022

CC8- ZOOLOGY

COMPARATIVE ANATOMY OF VERTEBRATES

Time Allotted: 2 Hours

Full Marks: 40

The figures in the margin indicate full marks.

1. Answer any **five** questions from the following: 1×5 = 5
 - (a) What is meibomian gland and where it is located?
 - (b) What do you mean by opisthonephric kidney?
 - (c) What do you mean by Carnassial teeth?
 - (d) Name four chambers of ruminant stomach.
 - (e) Define amphicoelous vertebra with example.
 - (f) Which aortic arch becomes the systemic arch in birds?
 - (g) What is aspiration?
 - (h) Oviduct in vertebrates is modified _____.
 - (i) Urinary duct, (ii) Inguinal Canal, (iii) Wolffian duct, (iv) Mullerian duct

2. Answer any **three** questions from the following: 5×3 = 15
 - (a) Write a note on double respiration in bird with suitable diagram.
 - (b) Write short note on different types of sensory receptors in mammals.
 - (c) State the evolutionary significance of aortic arches in tetrapods.
 - (d) Compare the forebrain of reptiles and mammals with suitable diagram.
 - (e) Write a short note on mesonephros type of kidney.

3. Answer any **two** questions from the following: 10×2 = 20
 - (a) Write a comparative anatomy of stomach in vertebrates with example.
 - (b) Describe the structure and function of different derivatives of integument in mammals.
 - (c) Give a comparative account of heart structures in different classes of vertebrates with proper illustrations.
 - (d) What is accessory respiratory organ? Give an account of accessory respiratory organs of fish. Add a note on gas bladder in fish. 1+6+3

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