

3 Yr. Degree/4 Yr. Honours 2nd Semester Examination, 2025 (CCFUP)

Subject : Zoology

Course : ZOOL2011 (MAJOR)

(Chordates)

Time: 2 Hours

Full Marks: 40

The figures in the margin indicate full marks.

*Candidates are required to give their answers in their own words
as far as practicable.*

1. Answer any five of the following: 2x5=10

- (a) Differentiate between anapsid and diapsid skull.
- (b) Differentiate between syrinx and larynx.
- (c) Mention the scientific name of two reptiles one with transverse cloacal aperture while another with longitudinal cloacal aperture.
- (d) Mention the scientific names of two wild mammals found in Oriental realm.
- (e) Where is 'Melon' located? Mention its function.
- (f) Differentiate between Zugstimmung and Zugunruhe.
- (g) What is Clasper? Cite one example.
- (h) What is soaring flight? Give an example.

2. Answer any two of the following: 5x2=10

- (a) Differentiate between Ratitae and Carinatae. What is Celestial navigation in birds? 3+2
- (b) 'Sebaceous glands exhibit a greater degree of modification in different mammals'—Justify the statement with proper illustration. 1+4
- (c) How does physostomous type of swim bladder differ from physoclistous? Suggest at least four different reasons for the existence of accessory respiratory organ in fish. 1+4
- (d) Where do you find viviparity among amphibians? Elaborate the event of parental care in anuran amphibians in relation to carrying eggs over the body. 1+4

3. Answer *any two* of the following: $10 \times 2 = 20$
- (a) What do you mean by streptostylic jaw suspension? Describe the mechanism of biting in snake having movable fang and hood with a clear sketch. 2+(6+2)
- (b) Write down six important features of Class Mammalia. Justify the inclusion of *Ornithorhynchus* under the Subclass Prototheria. Comment on Carnassial teeth. 3+5+2
- (c) Why is *Branchiostoma* known as ciliary feeder? Elaborate the feeding apparatus and mechanism of feeding with a neat diagram. 2+(6+2)
- (d) List up any three epidermal exoskeletal derivatives in birds with their occurrence. With a clear diagram explain the structure of a typical quill feather. What is uropygial gland? Mention its function. 3+5+1+1
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