



WEST BENGAL STATE UNIVERSITY  
B.Sc. Honours 3rd Semester Examination, 2020, held in 2021



**ZOOACOR05T-ZOOLOGY (CC5)**

**CHORDATES**

Time Allotted: 2 Hours

Full Marks: 40

*The figures in the margin indicate full marks.  
Candidates should answer in their own words and adhere to the word limit as practicable.  
All symbols are of usual significance.*

1. Answer any **eight** questions from the following: 2×8 = 16
- (a) What is adaptive radiation or divergent evolution?
  - (b) Distinguish between cursorial and fossorial adaptation.
  - (c) State two characteristic features of *Petromyzon* sp.
  - (d) Cite two examples (scientific name) of the animals belonging to order Apoda.
  - (e) What is contour feather?
  - (f) What is opisthoglyphous fang?
  - (g) What is "pit of Hatschek"?
  - (h) Distinguish between endostyle and urostyle.
  - (i) What is ctenoid scale and where can it be found?
  - (j) What type of accessory respiratory organ does *Anabas* sp. Possess?
  - (k) Which countries do belong to the Neotropical realm?
  - (l) State two features of synapsid skull.
2. Answer any **three** questions from the following: 3×3 = 9
- (a) Distinguish between physostomous and physoclistous swim bladder with suitable diagram.
  - (b) How do bats echolocate?
  - (c) What are the different adaptive groups radiated from terrestrial mammals?
  - (d) Furnish an account on reptilian, avian and mammalian species found in Ethiopian realm, at least one.
  - (e) What are the progressive and retrogressive changes occur in the tadpole larva of *Ascidia* sp?

3. Answer any three questions from the following:
- (a) Name the class and respective order of the following animal:  
(i) *Amphioxus* sp. (ii) *Merion* sp. (iii) *Physopus* sp. (iv) *Limulus* sp.  
(v) *Trinoidon* sp.
  - (b) Classify class Amphibia up to its order with suitable examples.
  - (c) Delineate the mechanism of biting in an ophidian snake. Comment on the nature of snake venom.
  - (d) State the important characteristic features of class Aves. Add a note on its mode of flight or flapping.
  - (e) Discuss the role of Thyroid hormone in amphibian metamorphosis. Give the salient features of class Osteichthyes.

**N.B.:** Students have to complete submission of their Answer Scripts through E-mail. What applies their own respective colleges on the same day. Date of examination. Also E-mail alert card of exam. University. College authorities will not be held responsible for wrong submission at in proper address. Students are strongly advised not to submit multiple copies of the same answer script.