



**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: 5×3 = 15
- (a) Name the class and respective order of the following animals:  
(i) *Mabuya* sp. (ii) *Myxine* sp. (iii) *Pteropus* sp. (iv) *Caecilia* sp.  
(v) *Tenualosa* sp.
- (b) Classify class Amphibia up to living orders with suitable examples.
- (c) Delineate the mechanism of biting in an elapidae snake. Comment on the nature of snake venom. 3+2
- (d) State the important characteristic features of class Aves. Add a note on powered flight or flapping. 3+2
- (e) Discuss the role of Thyroid hormone in amphibian metamorphosis. State the salient features of class Osteichthyes.  $2\frac{1}{2} + 2\frac{1}{2}$

**N.B. :** *Students have to complete submission of their Answer Scripts through E-mail / Whatsapp to their own respective colleges on the same day / date of examination within 1 hour after end 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.*

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