

WEST BENGAL STATE UNIVERSITY

B.Sc. Honours 3rd Semester Examination, 2023-24

ZOOACOR05T-ZOOLOGY (CC5)



Full Marks: 40

Time Allotted: 2 Hours

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.

 $2 \times 8 = 16$ Answer any eight questions from the following: 1. (a) What are the main identifying features of Chordates? (b) What is papilla amphibiorum? What is its function? (c) What is vibrissae? (d) Name two glands present exclusively in mammals. (e) What is syrinx? (f) What is adaptive radiation? (g) Name one poisonous and one non-poisonous snake. (h) Where do you find suprabranchial organ and pneumatic sac? (i) What is pneumatic duct? (j) State two peculiar characters of Prototheria. (k) What do you understand by Sauropsida and Synapsida? (1) Differentiate between placoid and cycloid scales. $3 \times 3 = 9$ 2. Answer any three questions from the following: (a) What are the basic characteristics of phylum Chordata? (b) Elaborate the role of swim bladder as a buoyant organ. 1+2 (c) What is paedogenesis? How is it different from Neoteny? (d) What is continental drift theory? (e) Describe the mechanism of echolocation in cetaceans. (f) Write down the basic characters to identify a mammal. $5 \times 3 = 15$ 3. Answer any *three* questions from the following: (a) Define anadromous migration in fish. How do fishes overcome the challenge of 1+4 osmotic stress in course of this kind of migration? (b) What are the different types of fangs in snakes depending on their position? How 3+2 is venom discharged? (c) What are the major retrogressive changes in Ascidian tadpole during metamorphosis? (d) Name the class and order of the following animals: $1 \times 5 = 5$ Ascidia (ii) Sting ray (iii) Necturus (iv) Viper (v) Loris.

3035

(e) Describe the mechanism of flight in birds with the help of a suitable diagram.

(f) Elaborate the feeding mechanism of Branchiostoma.