

THIRD SEMESTER B.Sc. DEGREE EXAMINATION, NOVEMBER 2017

(CUCBCSS—UG)

Zoology

ZOL 3B 03—ANIMAL DIVERSITY : CHORDATA—I

Time : Three Hours

Maximum : 80 Marks

Part A*Answer all ten questions.**Each question carries 1 mark.*

- 1 The animal that possess notochord throughout life is :
 - (a) Fish.
 - (b) Snake.
 - (c) Bird.
 - (d) Amphioxus.
- 2 Retrogressive metamorphosis is found in :
 - (a) Balanoglossus.
 - (b) Branchiostoma.
 - (c) Herdmania.
 - (d) All of the above.
- 3 Vertebral column is derived from :
 - (a) Dorsal nerve chord.
 - (b) Notochord.
 - (c) Ventral nerve chord.
 - (d) Outgrowth of cranium.
- 4 Cartilaginous fish do not contain :
 - (a) Gill cover or operculum.
 - (b) Fins.
 - (c) Mouth.
 - (d) Scales.
- 5 Paired fins of fishes are :
 - (a) Dorsal and ventral.
 - (b) Caudal and ventral.
 - (c) Pectoral and pelvic.
 - (d) Pectoral and caudal.

Name or fill up the following :

- 6 Neoteny is found in the larva of _____.
- 7 Herpatologists are biologists who focus on _____.
- 8 Reptiles have _____ type of kidney.
- 9 Rhacophorus belongs to the order _____.
- 10 In adult amphibians nitrogen wastes are excreted as _____.

(10 × 1 = 10 marks)

Part B

Give short answers to any ten of the following questions.

Each question carries 2 marks.

- 11 What features of amphibians make them dependent on water to survive ?
- 12 Name the subclasses of class reptilia.
- 13 What is Plastron ?
- 14 What is Jacobson's organ ?
- 15 Write short notes on *Uraeotyphlus*.
- 16 Write short notes on *Rastrelliger*.
- 17 Give four basic chordate characteristics.
- 18 Write the salient features of class Larvacea. Give one example.
- 19 Write the key features of Agnatha.
- 20 Name the ventricles of frog brain.
- 21 Write short notes Alligator.
- 22 Write short notes on *Daboia*.

(10 × 2 = 20 marks)

Part C

*Answer any six of the following questions in about a paragraph each.
Each carries 5 marks.*

- 23 Give salient features of Sub-phylum Urochordata and classify up to class. With one example each.
- 24 Give an account on morphology of amphioxus.
- 25 Write the features of class Chondrichthyes and classify up to order.
- 26 Give an account on urinogenital system of mullet.
- 27 Give an account on digestive glands of frog.
- 28 Write the major features of the order Apoda and give adaptive features of *Ichthyophis*.
- 29 Explain the identification key for poisonous snakes.
- 30 Write the salient features of sub class Anapsida and classify up to orders with one example for each.

(6 × 5 = 30 marks)

Part D

*Write an essay on any two of the following questions.
Each carries 10 marks.*

- 31 Write the salient features of class Amphibia and classify up to order, giving specific features and two examples each.
- 32 Give a detailed account on the organization of ascidia and explain its metamorphosis.
- 33 Describe the nervous system and sense organs of mullet.
- 34 Give an account on the circulatory system of *Calotes*.

(2 × 10 = 20 marks)