

THIRD SEMESTER B.Sc. DEGREE EXAMINATION, NOVEMBER 2018

(CUCBCSS—UG)

Core Course

ZOL 3B 03—ANIMAL DIVERSITY : CHORDATA—I

Time : Three Hours

Maximum : 80 Marks

Part A**I. One word questions. Answer *all* questions. Each question carries 1 mark :**

- 1 Name an organism in which tunicin is found.
- 2 Wheel organ occurs in which organism.
- 3 Mention the generic name of hag fish.
- 4 Which fish is known as 'King of Herrings' ?
- 5 Mention the order to which Latimeria belongs.
- 6 Write the generic name of African lung fish.
- 7 Mention an amphibian with parotid glands.
- 8 To which order does the 'stem reptiles' belong ?
- 9 Which animal is known as gharial ?
- 10 Write the generic name of a 'blind worm'.

(10 × 1 = 10 marks)

Part B**II. Paragraph questions. Answer any *ten* questions. Each question carries 2 marks :**

- 11 Explain portal system of circulation.
- 12 Comment on alternation of generation with reference to Doliolum.
- 13 What is endostyle ?
- 14 Write on the fin system of Scoliodon.
- 15 Distinguish between Chondrichthyes and Osteichthyes.

- 16 Citing an example, explain autostylic jaw suspension.
- 17 Write on double circulation.
- 18 Write briefly on Axolotl larva.
- 19 Mention the arboreal adaptations of chamaeleon.
- 20 Mention the diagnostic features of the order Chelonia.
- 21 What are the mammalian features of Crocodilia ?
- 22 Write on the evolutionary significance of coelacanth.

(10 × 2 = 20 marks)

Part C

III. Short essay questions. Answer any *five* questions. Each question carries 6 marks :

- 23 Explain the fundamental characters of the phylum Chordata.
- 24 Explain the features and affinities of Branchiostoma.
- 25 Explain the metamorphosis of Ascidia.
- 26 Citing an example write on the salient features of the order Rhynchocephalia.
- 27 With labelled diagram explain the structure of the brain of frog.
- 28 Explain the internal structure of the heart of frog, with illustration.
- 29 Explain the general external morphology of mullet, with a labelled diagram.
- 30 What are the salient features of the order Dipnoi ? Write a note on the examples you have studied.

(5 × 6 = 30 marks)

Part D

IV. Essay questions. Answer any *two* questions. Each question carries 10 marks :

- 31 With labelled diagram explain the arterial system of Calotes.
- 32 Explain the respiratory organs and the mechanisms of respiration in frog.
- 33 With labelled diagram explain the digestive system of mullet.
- 34 What are the salient features of the class Amphibia ? Give the classification of Amphibia down to orders with one example each.

(2 × 10 = 20 marks)