2023

ZOOLOGY

Paper : ZOOHC3056

(Diversity of Chordates)

Full Marks : 60

Pass Marks : 24

Time : 3 hours

The figures in the margin indicate full marks for the questions

1. Choose the correct answer of the following questions (any *five*) : 1×5=5

(a) India placed in the _____ region.

(i) Oriental

(ii) Neotropical

(iii) Australian

(iv) Palaearctic

(b) _____ is found in Australian region.

(i) Rhinoceros

(ii) Elephant

(iii) Zebra

(iv) Sphenodon

(c) Sebaceous gland is found in

(i) birds

(ii) amphibians

(iii) reptiles

(iv) mammals

(d) Myxine is an example of

(i) hemichordata

(ii) urochordata

(iii) cephalochordata

(iv) cyclostomes

(e) Wiberian ossicle is found in

(i) cartiligenous fish

(ii) bony fish

(iii) frog

(iv) insect

(f) Pineal gland is found functional in

(i) lizard

(ii) crocodile

(iii) sphenodon

(iv) archaeopteryx

(g) Salamander belongs to order

(i) caudata

(ii) squamata

(iii) anura

(iv) osteichthyes

(h) Keel sternum is characteristic of

(i) mammal

(ii) bird

(iii) frog

(iv) lizard

(i) Pneumatic bone is characteristic of

(i) running animals

(ii) burrowing animals

(iii) aerial animals

(iv) water animals

(j) Example of cartiligenous fish is

(i) dolphin

(ii) hilsha

(iii) shark

(iv) whale

2. Answer any *five* of the following questions : 2×5=10

(a) Mention any two characteristics of Hemichordata.

(b) Why is sphenodon called living fossil?

(c) Write the characteristics of poisonous snakes.

(d) Mention the names of zoogeographical realms and their regions.

(e) Write the names of endemic mammals found in Oriental region.

(f) Write the reptilian characters found in Prototheria.

(g) Write a short note on origin of Tetrapods.

3. Answer any *five* of the following questions : 5×5=25

(a) Write a note on retrogressive metamorphosis in Urochordata.

(b) Write the parental care in fishes.

(c) Write the differences between Chondrichthyes and Ostrichthyes.

(d) Write the general characteristics of class Reptilia (minimum 10 characters).

(e) Write a note on isolation of major mammalian groups of the world after continental drift theory.

(f) Write the general characteristics of class mammalian (minimum 10 characters).

(g) Write a note on migration of Birds.

(h) "Birds are evolved from the reptiles." Justify the statement.

(i) Write the general characteristics of Urochordata (minimum 10 characters).

4. Answer the following questions (any *two*) : 10×2=20

(a) Write the salient features of class amphibia. Write the characters of three living orders of amphibia and give example of them. Why are amphibians important in evolutionary point of view. 3+5+2=10

(b) What do you mean by plate tectonic? What are the results of plate tectonic? 3+7=10

(c) Write the origin of Chordata after Dipleurula concept. Write a note on advanced features of Vertebrates over Protochordates. 6+4=10

(d) Write principles and aerodynamics of flight. Which factors support birds for flight? 7+3=10

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