

CARMEL COLLEGE OF ARTS, SCIENCE & COMMERCE FOR WOMEN,
SEMESTER END EXAMINATION, APRIL 2019

Semester: II of B.Sc Total Marks: 80 Date: 15/04/2019 Duration: 02 hrs
Subject: Zoology Paper: ZOCC 2- Diversity of Chordates and Genetics

*Instructions: 1) All Questions are Compulsory (with internal choices)
2) Figures to the right indicate full marks
3) Draw diagrams wherever necessary*

1. Answer **any FOUR** of the following: (4 x 4 = 16)

- a. What are the salient features of Chordates?
- b. Enumerate the general features of Protochordates.
- c. Classify Amphibians up to subclasses giving an example and a feature of each.
- d. Classify reptiles up to orders giving an example and a feature of each.
- e. Differentiate between Agnatha and Gnathostomata. (4 points)
- f. What are the migratory strategies adopted by Aves?

2. Answer **any FOUR** of the following: (4 x 4 = 16)

- i. Briefly explain the terms 'Centromere' and 'Kinetochore'
- ii. What are Sex-Limited Genes? State an example of the same.
- iii. Write a short note on Biological Mutagens.
- iv. Define Inbreeding. What causes inbreeding depression?
- v. State two practical applications of Inbreeding.
- vi. Give the clinical manifestations of Diabetes insipidus.

3. A. Explain in detail the different types of migration found in fishes. 6

OR

A. Enumerate the salient features of fishes. 6

B. Elaborate on the parental care demonstrated by Amphibians. 6

4. A. Write two features of any six orders of Aves and give scientific names of any six birds you know. 6

OR

- A. What are the power increasing adaptations found in Aves? 6

- B. Enumerate the salient features of any two orders of Mammals. 6

5. A. Describe the morphological features of Eukaryotic Chromosomes. 6

OR

- A. Elaborate the features of Giant Chromosomes. 6

- B. Give detailed account of the various Chemical Mutagens capable of causing Gene Mutation. 6

6. A. What is Dominant Epistasis? Explain with an example. 6

OR

- A. What is Multiple Allele Inheritance? State the characters of Multiple Alleles. 6

- B. Explain the different measures adopted in Positive Eugenics. 6