

**BZYCT-131**

**ASSIGNMENT BOOKLET**

**Bachelor's Degree Programme**

**(BSCG)**

**ANIMAL DIVERSITY**

**Valid from 1<sup>st</sup> January, 2025 to 31<sup>st</sup> December, 2025**



**School of Sciences  
Indira Gandhi National Open University  
Maidan Garhi, New Delhi-110068**

**(2025)**

Dear Student,

Please read the section on assignments in the Programme Guide for Core Courses that we sent you after your enrolment. A weightage of 30 per cent, as you are aware, has been earmarked for continuous evaluation, **which would consist of one tutor-marked assignment** for this course. The assignment is in this booklet, and it consists of three parts, Part A, B and C. The total marks of all the parts are 100, of which 35% are needed to pass it.

### Instructions for Formatting Your Assignments

Before attempting the assignment please read the following instructions carefully:

- 1) On top of the first page of your answer sheet, please write the details exactly in the following format:

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**ROLL NO.:** .....

**NAME:** .....

**ADDRESS:** .....

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**COURSE CODE:** .....

**COURSE TITLE:** .....

**ASSIGNMENT NO.:** .....

**STUDY CENTRE:** ..... **DATE:** .....

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**PLEASE FOLLOW THE ABOVE FORMAT STRICTLY TO FACILITATE EVALUATION AND TO AVOID DELAY.**

- 2) Use only foolscap size writing paper (but not of very thin variety) for writing your answers.
- 3) Leave 4 cm margin on the left, top and bottom of your answer sheet.
- 4) Your answers should be precise.
- 5) Complete each of Part A, Part B and Part C of this assignment separately, and **submit them together.**
- 6) The assignment answer sheets are to be submitted to your Study Centre as per the schedule made by the study centre. **Answer sheets received after the due date shall not be accepted.**

**We strongly suggest that you retain a copy of your answer sheets.**

- 7) **This assignment will remain valid from January 1, 2025 to December 31, 2025.** However, you are advised to submit it within **12 weeks** of receiving this booklet to accomplish its purpose as a teaching-tool. Answer sheets received after the due date shall not be accepted.
- 8) **You cannot fill the exam form for this course** till you have submitted this assignment.

We wish you good luck.

# ASSIGNMENT

## (Tutor Marked Assignment)

Course Code: BZYCT-131  
Assignment Code: BZYCT-131/TMA/2025  
Maximum Marks: 100

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**Note: Attempt all questions. The marks for each question are indicated against it.**

1. Make a table of the major Super groups that include the protozoan groups listed under them giving at least one important characteristic that distinguishes each group. (10)
2. a) Describe canal system in Porifera. (5)  
b) Describe the characteristic features of Cnidarians. (5)
3. a) Briefly describe the organisation of Malacostraca. Give a few examples of decapod malacostracans. (5)  
b) What is a diplosegment? List the characters of class Diplopoda. (5)
4. a) What is torsion? Briefly discuss the process of torsion in gastropods. (5)  
b) List the various classes of phylum Echinodermata giving one example for each class. (5)
5. a) Describe the common morphological features of hagfishes and lampreys. How do they differ from each other? (6)  
b) Define the following terms: (4)
  - i) stenohaline
  - ii) euryhaline
  - iii) hypoosmotic regulator
  - iv) rectal glands in sharks
6. a) List *three* groups of adaptations that explain how each contributed to the success of vertebrates. (5)  
b) Explain the mechanism of circulation in amphibians. (5)
7. What are the three main reptile lines that evolved from the amniotes during the Mesozoic era and from which lineage did the present day reptiles evolve? How would you distinguish among the anapsid, diapsid and synapsid types of skull? (10)
8. The special adaptations of birds all contribute to two factors essential for flight namely, more power and less weight. Explain how each of the following contributes to one or the other or both: (10)
  - (i) Endothermy
  - (ii) Respiratory system
  - (iii) Skeletal system
  - (iv) Excretory system.
9. Discuss the modes of development of mammals. (10)
10. Describe the progressive evolution of mammals from their synapsid ancestors. (10)