

**BZYCT-131**

**ASSIGNMENT BOOKLET**

**Bachelor's Degree Programme**

**(BSCG)**

**ANIMAL DIVERSITY**

**Valid from 1<sup>st</sup> January, 2024 to 31<sup>st</sup> December, 2024**



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

**(2024)**

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, 2024 to December 31, 2024.** 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

## ANIMAL DIVERSITY

Course Code: BZYCT-131  
Assignment Code: BZYCT-131/TMA/2024  
Maximum Marks: 100

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

1. a) Make a flow chart to show how animals can be classified according to their level of organisation, symmetry, germ layers and developmental patterns. (5)
- b) Define bilateral symmetry. What are the advantages that bilaterally symmetrical animals have over radially symmetrical animals? (5)
2. a) Describe the characteristic features of Cnidarians. (5)
- b) What do you mean by polymorphism? Explain the functions of various polymorphic forms of Hydrozoa. (5)
3. What is parasitic adaptation? Explain the adaptations that have taken place in *Ascaris lumbricoides*. (10)
4. Write short notes on the following with suitable diagrams: (10)
  - i) Book lungs of Arachnida
  - ii) Pectines of scorpions
5. a) What are the characteristics of echinoderms that are unique to them and not found in other phyla? (5)
- b) Describe the water vascular system of a seastar. (5)
6. Give one word/short answer for the following: (10)
  - i) Give one prominent difference between sharks and rays.
  - ii) What kind of tail characterises elasmobranchs?
  - iii) In what way are sharks well adapted for predatory life habit?
  - iv) What is the function of the lateral line system in elasmobranchs?
  - v) How is the Chimera different from sharks and rays?
7. i) Describe parental care in amphibians. (5)
- ii) Distinguish between anurans and urodeles. (5)
8. 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)
9. 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) Skeleton system
  - (iv) Excretory system.
10. a) List and give *one* function of the *four* glands of the skin. (5)
- b) Differentiate between horns and antlers and give an example each of an animal with horn and an antler. (5)