

**BZYCT-131**

**ASSIGNMENT BOOKLET**

**Bachelor's Degree Programme**

**(BSCG)**

**ANIMAL DIVERSITY**

**Valid from 1<sup>st</sup> July, 2020 to 30<sup>th</sup> June, 2021**



**School of Sciences  
Indira Gandhi National Open University  
Maidan Garhi  
New Delhi-110068  
(2020-2021)**

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:** .....

.....

.....

**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 is **valid from 1<sup>st</sup> July, 2020 to 30<sup>th</sup> June, 2021.** If you have failed in this assignment or fail to submit it by June, 2020, then you need to get the assignment for the year 2021-22, and submit it as per the instructions given in the Programme Guide.
- 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/2020-2021  
Maximum Marks: 100

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

## Part-A

Maximum Marks: 50

1. Fill in the blanks with suitable words: (10)
  - a) Digestion is ..... in *Branchiostoma*.
  - b) Elasmobranchs have a ..... mouth.
  - c) The flagellated chamber of the canal system of sponges is lined by .....
  - d) The ..... of the filarial worm releases small microfilariae into blood and lymphatic system.
  - e) The special comb-like sense organs of scorpions are .....
  - f) The fused pair of maxillae of millipedes is called .....
  - g) ..... is the only living genus under the subclass Nautiloidea.
  - h) In cephalopods a pair of ..... hearts pump the blood through the gills.
  - i) Nephridia are ..... in hemichordates.
  - j) The bipinnaria larva of ..... is similar to tornaria larva.
2. Describe parental care in amphibians. (10)
3. What is parasitic adaptation? Explain the adaptations that have taken place in *Ascaris lumbricoides*. (10)
4. Write short notes on the following : (10)
  - a) Book lungs of Arachnida
  - b) Pectines of scorpions
5. What is meant by torsion? Explain the process in detail. (10)

## Part-B

Maximum Marks: 50

6. State whether the following statements are True (T) or False (F) (10)
  - i) Presence of cranium and paired appendages is a characteristic feature of Agnatha.
  - ii) Gonangium is a sexual way of reproduction.
  - iii) The excretory organs of crustaceans are called antennary or maxillary

glands depending on their position.

- iv) The two pairs of insect wings are articulated with pro and mesothorax.
  - v) The secretion of prothoracic glands regulates metamorphosis in insects.
  - vi) Class **Xiphosura** is regarded as living fossil.
  - vii) Development in bivalves includes trochophore and veliger larvae.
  - viii) The blood of cephalopods contains haemocyanin.
  - ix) In brittle stars tube feet aid in locomotion.
  - x) Aristotle's lantern is a complex chewing organ of sea urchin.
7. Describe canal system in Porifera. (10)
8. a) Write unique features of Phylum Ciliophora. (5)
- b) State the affinities of Hemichordates with Echinoderms. (5)
9. Describe the important adaptations found in birds that allow them to fly. (10)
10. a) Describe the most important adaptations in reptiles that allowed them to make a complete transition from water to land environment. (5)
- b) Differentiate between the following pairs: (5)
- i) Orders Perissodactyla and Artiodactyla
  - ii) Infra classes Eutheria and Metatheria