

ASSIGNMENT BOOKLET**Bachelor's Degree Programme (B.Sc.)****Elective Course
in
Animal Diversity-II****Valid from 1st January 2025 to 31st December 2025****It is compulsory to submit the Assignment before filling in the
Term-End Examination Form.****PLEASE NOTE**

- You can take electives ('56 to 64' credits) from a minimum of TWO and a maximum of FOUR science disciplines, viz. Physics, Chemistry, Life Sciences and Mathematics.
- You can opt for elective courses worth a **MINIMUM OF 8 CREDITS** and a **MAXIMUM OF 48 CREDITS** from any of these four disciplines.
- At least 25% of the total credits that you register for in the elective courses from Life Sciences, Chemistry and Physics disciplines must be from the laboratory courses. For example, if you opt for a total of 64 credits of electives in these 3 disciplines, at least 16 credits 'out of those 64 credits' should be from lab courses.
- You cannot appear in the Term-End Examination of any course without registering for the course. Otherwise, your result will not be declared and the responsibility will be yours.



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

(2025)

Dear Student,

We hope you are familiar with the system of evaluation to be followed for the Bachelor's Degree Programme. At this stage you may probably like to re-read the section on assignments for Elective Courses in the Programme Guide that we have 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 (TMA)** for this course.

Instructions for Formatting Your Assignments

Before attempting the assignment please read the following instructions carefully.

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

ENROLMENT NO.:

NAME :

ADDRESS :

.....

COURSE CODE :

COURSE TITLE :

ASSIGNMENT NO.:

STUDY CENTRE : DATE:

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) While solving problems, clearly indicate the question number along with the part being solved. Be precise.
- 6) **This assignment will remain valid for one year 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.
- 7) **You cannot fill the exam form for this course until you have submitted this assignment.**

We strongly feel that you should retain a copy of your assignment response to avoid any unforeseen situation and append, if possible, a photocopy of this booklet with your response.

We wish you good luck!

ASSIGNMENT
(Tutor Marked Assignment)

Course Code: LSE-10
Assignment Code: LSE-10/TMA/2025
Maximum Marks: 100

1. a) Mention at least four important affinities between Hemichordates and annelids. (5)
- b) Briefly explain the following terms: (1×5=5)
 - i) Synapsid skull
 - ii) Homodont teeth
 - iii) Marsupials
 - iv) Plantigrade locomotion
 - v) Horns
2. Describe with the help of suitable diagrams the integument of primitive fishes. (10)
3. With the help of suitable diagrams give a comparative account of brain of jawed vertebrates. (10)
4. Explain the embryonic development of the cardiovascular system in chordates. (10)
5. a) Write about migration in eels. (5)
- b) Give a comparative account of the pituitary gland of amphibian and birds. (5)
6. Discuss the genetic basis of animal behavior in chordates. (10)
7. Write short notes on: (5×4=20)
 - i) Respiration in cyclostomes
 - ii) Intromittent sexual organs of Amniotes
 - iii) Subclass Holocephali
 - iv) Mimicry used to evade predators
8. a) Describe the digestive system of amphibians. (5)
- b) Give a diagrammatic key for the identification of non-poisonous and poisonous snakes. (5)
9. Differentiate between the following: (2½×4=10)
 - i) Precocial and Altricial baby birds
 - ii) Taxes behaviour and Reflex behaviour
 - iii) Bone and Cartilage
 - iv) Procoelous vertebrae and Amphicoelous vertebrae