

ASSIGNMENT BOOKLET
Bachelor's Degree Programme (B.Sc.)

ECOLOGY

Valid from 1st January, 2023 to 31st December, 2023

**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'.



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(2023)

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 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, 2023 to December 31, 2023.** 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-02
Assignment Code: LSE-02/TMA/2023
Max. Marks: 100

1. a) Define the following: (1×4=4)
 - i) Community
 - ii) Xerophytes
 - iii) Primary production
 - iv) Biosphere
- b) Write short notes on: (2×3=6)
 - i) Ecological pyramids
 - ii) Tolerance range
 - iii) Importance of forests
2. a) Describe in brief abiotic and biotic components of ecosystem. (5×2=10)
- b) Describe the structural features of hydrophytes.
3. a) Explain the structure of soil profile with the help of a well labeled diagram. (5×2=10)
- b) Describe the major functions of soil biota.
4. Differentiate between: (2½×4=10)
 - i) Food chain and Food web
 - ii) Lentic and lotic ecosystems
 - iii) Primary and secondary succession
 - iv) Extinct and threatened species
5. Describe carbon cycle with the help of a well labelled diagram. (10)
6. a) What is desertification? What are the major reasons leading to desertification? (5×2=10)
- b) Describe the various steps involved in the process of succession of a water body.
7. a) What are keystone species? Explain their importance giving a suitable example. (5×2=10)
- b) Describe the major threats that affect wildlife.
8. Describe in brief: (2×5=10)
 - i) Red data book
 - ii) Fidelity
 - iii) Benefits of grasslands
 - iv) Deforestation
 - v) Eutrophication

9. Explain in detail why wildlife conservation is important? (10)
10. a) Describe the effects of air pollution on plants. (5×2=10)
- b) Describe energy flow in an ecosystem.