

A-0866

Total Pages : 3

Roll No.

ENSE-654/EVS-606

**ECOPHYSIOLOGY AND
ECOTOXICOLOGY**

M.Sc. Environmental Science (MSCES)

Examination, June 2025

Time : 2:00 Hrs.

Max. Marks : 70

Note :- This paper is of Seventy (70) marks divided into two (02) Sections 'A' and 'B'. Attempt the questions contained in these sections according to the detailed instructions given therein. *Candidates should limit their answers to the questions on the given answer sheet. No additional (B) answer sheet will be issued.*

Section-A

Long Answer Type Questions 2×19=38

Note :- Section 'A' contains Five (05) Long-answer type questions of Nineteen (19) marks each. Learners are required to answer any *two* (02) questions only.

1. Describe the carbon fixation Cycle.
2. Define thermoregulation. Discuss about cold and high temperature stress in animals.
3. What is bioaccumulation? Describe interchange of toxicants in atmosphere, geosphere, hydrosphere and biosphere.
4. Define circadian rhythm. Discuss the relationships of different organs in human to environmental factors
5. Give a detailed note on environmental factors.

Section–B

Short Answer Type Questions 4×8=32

Note :- Section ‘B’ contains Eight (08) Short-answer type questions of Eight (08) marks each. Learners are required to answer any *four* (04) questions only.

1. Define mutualism. Give the suitable example of mutualism.
2. Write note on followings:
 - (a) CAM pathways
 - (b) Dormancy and Senescence
3. Discuss about the abnormalities related with high altitude exposure in humans.
4. Discuss the mechanism of action of allelochemicals.
5. Describe the process of bio-magnification.

6. What are ecotoxics? Discuss about types of ecotoxics.
7. Define carcinogens. Discuss about Dose-response relationship.
8. Give a note on Ecological risk assessment. Discuss about its importance in ecophysiological monitoring.
