

A-579

Total Pages : 3

Roll No.

EVS-606

**ECOPHYSIOLOGY AND
ECOTOXICOLOGY**

M.Sc. Environmental Science (MSCES-21)

4th Semester Examination, 2024 (June)

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. Discuss in detail about the effects of high temperature on plants.

2. What are the alleochemicals ? Discuss their sources and mechanism of action in detail.
3. What is Ecophysiology ? Discuss the importance and scope of ecophysiology.
4. Discuss the physiological mechanism of the plants for acclimation to low temperature.
5. What is Respiration ? Explain in detail. Also differentiate between the aerobic and anaerobic respiration.

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. Discuss the effects of reactive oxygen species (ROS) during abiotic stress and strategies for plant tolerance.
2. Describe the direct and indirect interaction.
3. Describe in detail about the various effects of ecotoxicants.
4. Write a brief account on soil toxicology.
5. Discuss in detail about the various advantages of biotransformation.

6. Discuss in detail about the degradable and non-degradable substances.
7. What are the effects of ecotoxicants on an ecosystem ?
8. Write a brief note on the following :
 - (i) Glycine betaine
 - (ii) Photorespiration
