



Progressive Education Society's
Modern College of Arts, Science & Commerce Ganeshkhind, Pune – 16
(Autonomous)
End Semester Examination: Nov./Dec. 2023
Faculty: Science and Technology

Program: B.Sc. Biotech (04)

Semester: III

SET: C

Program (Specific): Biotechnology

Course Type: Core

Class: S. Y. B.Sc.

Max. Marks: 35

Name of the Course: Environmental Biotechnology

Course Code: 23 BBT-305

Time: 2Hr

Instructions to the candidate:

- 1) There are 4 sections in the question paper. Write each section on separate page.*
- 2) All Sections are compulsory.*
- 3) Figures to the right indicate full marks.*
- 4) Draw a well labelled diagram wherever necessary.*

SECTION: A

Q1) Answer the following (Attempt any 5/6)

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1. Define Atmosphere.
2. What is biomonitoring?
3. Define Ecosystem.
4. What is Biostimulation?
5. Explain in brief Phytostabilization.
6. State any two environmental applications of HPLC.

SECTION: B

Q2) Answer the following (Attempt any 5/6)

10

1. What are consequences of climate change?
2. Describe in brief ecological footprints.
3. State outcome of Earth summit.
4. Describe characteristics of Marine ecosystem.
5. State advantages and limitations of phytoremediation processes.
6. Explain any two global threats to environment.

SECTION: C

Q3) Answer the following (Attempt any 2/4)

8

1. Write a note on applications of GC-MS in environmental studies.
2. Elaborate on Biosensors used in environmental monitoring.

3. Write short note on EIA.
4. Comment on bioprocesses used in enzyme production from waste.

SECTION: D

Q4) Answer the following (Attempt any 2/4)

12

1. Give an account on sources and effects of water pollution.
2. Describe in detail different approaches used in hazardous waste management.
3. Elaborate on use of microorganisms in bioremediation of pesticide.
4. What is Bioremediation? Discuss different types, advantages and disadvantages of Bioremediation process.