

1059

M.Sc. (Biotechnology) Second Semester  
MBIO-205: Environmental Biotechnology

Time allowed: 3 Hours

Max. Marks: 80

**NOTE:** Attempt five questions in all, including Question No. 1 which is compulsory and selecting one question from each Unit.

x-x-x

I. Attempt the following:-

- Define RPM and SPM.
- What are Tricking Filters?
- Give names of anaerobes involved in wastewater treatment.
- Define Bioindicators and Biosensors.
- What is the difference between BOD and COD?
- What are Biopesticides? Give examples.

UNIT - III

What are the Ecological consideration of Xenobiotics? Discuss.  
Discuss major biodegradation pathways of Pesticides.  
Write about the...

(16)

(8,8)

VI. a) What are the Ecological consideration of Xenobiotics? Discuss.

b) Discuss major biodegradation pathways of Pesticides.

(6,10)

VII. a) Write about the principles and methods of Integrated Pest Management.

b) What is Contaminated soil? List methods for soil Bioremediation.

(8,8)

P.T.O.

(2)

**UNIT - IV**

- VIII. a) Discuss sources, types and composition of Municipal Solid Waste.  
b) Write a note on Recycling and transformation of Solid Waste. (10,6)
- IX. a) What are Biosensors and Bioindicators? How are these applied in pollution detection?  
b) Write a note on Environment Impact Assessment. (10,6)

x-x-x