



SECOND YEAR (BIOTECHNOLOGY)
BIO2324: ENVIRONMENTAL BIOTECHNOLOGY
(Semester III)

Program: B.Sc.

Program Specific: B.Sc. Biotechnology (04)

Course Type: Minor

Paper:

Credits: 2

Time: 2 Hours

Max. Marks: 30

SET: A

Instructions to the candidate:

- 1) All questions are compulsory.
- 2) Figures to the right indicate full marks.
- 3) Draw a well labelled diagram wherever necessary.

SECTION: A

Q1) Answer the following

[5 X 1= 5]

1. Define Biome.
2. What is Eutrophication of lakes?
3. Define Carbon footprint.
4. Explain the concept of Bioaccumulation.
5. What is Biochar?

SECTION: B

Q2) Answer the following (Attempt any 5/7)

[5 X 2 =10]

1. State any four non-renewable energy sources with examples.
2. Enlist the bioprocessing methods used to convert wastes into biofuel.
3. Describe different types of Remote sensing.
4. Give any four examples of microorganisms used in dye degradation.
5. State the environmental factors responsible for Goiter.
6. What is the importance of Red Data Book?
7. Give any four applications of HPLC in environmental analysis.

SECTION: C

Q3) Answer the following/Write short notes on following (Attempt any 2/4) [2 X 5 = 10]

1. Write a note on causes of climate change and its effects.
2. Explain Stockholm convention and its importance in environmental conservation.
3. Describe various approaches for solid waste management and the consequences of improper disposal of solid wastes.
4. Write a note on biosensors in environmental monitoring.

SECTION: D

Q4) Answer the following (Attempt any 1/2) [1 X 5 = 5]

1. Describe in detail any one spectrophotometric technique used in environmental analysis.
2. Give a detail account of the types of bioremediation.
