

**MASTER OF SCIENCE (BIOTECHNOLOGY) (CBCS-2018 COURSE)**  
**M.Sc.(Biotechnology) Sem - III : WINTER : 2021**  
**SUBJECT: ENVIRONMENTAL BIOTECHNOLOGY**

**Day :**Monday  
**Date :**27-12-2021

**W-19756-2021**

**Time :** 10:00 AM-01:00 PM  
**Max.Marks** 60

**N. B. :**

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Answers to both the sections should be written in **SAME** answer book.

**SECTION – I**

- Q. 1** Attempt **ANY FIVE** of the following: **(10)**
- a) Differentiate potable and non-potable water.
  - b) Mention the significance of non-biological components of environments.
  - c) Write any four sources of soil pollution.
  - d) Write the effects of noise pollution in human health.
  - e) Write about aerobic treatment for wastewater.
  - f) What are the sources of air pollution?
  - g) Define Xenobiotics and their ecological role.
- Q. 2** Attempt **ANY TWO** of the following: **(10)**
- a) Discuss sewage water treatment systems.
  - b) Discuss in brief effect of environmental pollution on health and food.
  - c) Write an account of biotechnological approaches for reducing environmental impact of pesticides.
- Q. 3** Write short notes on **ANY TWO** of the following: **(10)**
- a) Aerated lagoon
  - b) Stabilization pond
  - c) Trickling filter

**SECTION – II**

- Q. 4** Attempt **ANY FIVE** of the following: **(10)**
- a) What is biostimulation?
  - b) What is bio-degradable waste?
  - c) Write the characteristics of industrial effluents.
  - d) What is reverse osmosis? Explain in short
  - e) Write the advances of anaerobic treatment.
  - f) Write the significance of vermicompost.
  - g) What is the greenhouse effect?
- Q. 5** Attempt **ANY TWO** of the following: **(10)**
- a) What is hazardous waste? Discuss their impact on human health.
  - b) Define acid rain. Write about the causes and effect of acid rain.
  - c) Describe the genetically modified organisms for improving the environment.
- Q. 6** Write short notes on **ANY TWO** of the following: **(10)**
- a) Carbon credit its significance
  - b) Methods of composting of solid wastes
  - c) Give causes and effects of ozone depletion.

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