A

(20622)

(Printed Pages 4)

Roll No. ....

B.Sc. (Bio-Tech.)- III Yr.

NS-3477

B.Sc. (Bio-Technology)

Examination, June-2022

ENVIRONMENTAL BIO-TECHNOLOGY

(B-305)

(B.Sc. Biotech.)

Time : Three Hours]   *[Maximum Marks : 75*

Note : This paper is divided into three Sections-A, B and C. Section-A contains Very Short Answer Questions, Section-B contains Short Answer Questions and Section-C contains Descriptive Answer Questions. Attempt all the sections as per instructions.

P.T.O.

Section-A

(Very Short Answer Type Questions)

1. What is bioaugmentation?

2. Define immobilization of enzymes.

3. Define biofertilizers with suitable examples.

4. How methanogens help in producing biogas?

5. Write a note on phytoremediation.

Section-B

(Short Answer Type Questions)

6. Explain the working of biological reactor, and different types of reactors used is waste water management.

7. Explain the In-situ and Ex-situ bioremediation with their merits and limitations.

NS-3477/2

8. How biogas digester work? How efficient is biogass as an energy resource.

9. Explain the process of photolysis of water by microbes in hydrogen production.

10. Explain the Haber process, its synthesis and factors affecting.

Section-C

(Long Answer Type Questions)

11. Explain the following:

   (a) General mechanism of action of microbial biocontrol agents.

   (b) Process of nodulation with suitable diagram https://www.ccsustudy.com

12. Write a note on the following:

   (a) Xenobiotic compounds and its classification.

   (b) Biofuel

   (c) Composting

13. Explain trickling filter and activated sludge process for water treatment.

14. Discuss the following:

   (a) Biodegradation of chlorinated hydrocarbons.

   (b) Role of biotechnology in biodegradation.