

**LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034**



**B.Sc. DEGREE EXAMINATION – ADVANCED ZOOLOGY AND BIOTECHNOLOGY**

**SIXTH SEMESTER – APRIL 2023**

**AZ 6603 – ENVIRONMENTAL BIOTECHNOLOGY**

Date: 15-05-2023

Dept. No.

Max. : 100 Marks

Time: 09:00 AM - 12:00 NOON

**Part – A**

**Answer all the questions:**

**(10×2=20 Marks)**

1. Define biological film.
2. Distinguish nitrification from denitrification.
3. Comment on global environmental problems.
4. Comment on stabilization pond.
5. Give the composition of Biogas.
6. State the significance of biochip and applications.
7. Enumerate the air pollution control devices
8. What is greenhouse effect?
9. Mention the importance of phytoremediation.
10. Define Xenobiotics.

**Part – B**

**Answer any four questions**

**(4×10=40 Marks)**

11. Discuss the Ecological Impact of GMOs.
12. Process involved in phytoremediation with illustration- Discuss.
13. Explain the biogas production in India.
14. Write the process involved in drinking water treatment.
15. Describe the different types of bioleaching process.
16. Biomass can be converted in to energy- Explain.

**Part – C**

**Answer any two questions**

**(2×20=40 Marks)**

17. Explain the different types of bioreactors and its applications.
18. Renewable and Nonrenewable sources of energy- Explain.
19. Discuss the different techniques involved in the waste water treatment process.
20. *In situ* and *Ex situ* bioremediation process- Discuss.

#####