



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

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

**SECOND SEMESTER – APRIL 2023**

**AZ 2506 – BASIC BIOTECHNOLOGY**

Date: 10-05-2023

Dept. No.

Max. : 100 Marks

Time: 09:00 AM - 12:00 NOON

**Part-A**

**Answer all the questions**

**(10×2=20 Marks)**

1. What is a cell line?
2. Define bioreactors.
3. What is meant by organ culture?
4. Give the application of ligases.
5. Define plasmids.
6. What is cDNA?
7. How is a primary culture of cells prepared?
8. Mention any two biosafety guidelines.
9. What are cosmids?
10. Comment on GM foods.

**Part-B**

**Answer any FOUR questions**

**(4×10=40 Marks)**

11. Enlist any ten applications of recombinant DNA technology.
12. Write a note on transgenic fish.
13. Describe the process of molecular cloning.
14. How are restriction enzymes classified?
15. Give an account on nitrogen fixation.
16. Explain the design and applications of biosensors.

**Part-C**

**Answer any TWO questions**

**(2×20=40 Marks)**

17. Give an account on cryopreservation.
18. Write an essay on intellectual property rights and its application.
19. Describe in detail the process of fermentation.
20. Discuss the uses of biotechnology in agriculture.

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