# LOYOLA COLLEGE (AUTONOMOUS), CHENNAI - 600 034

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

# SECOND SEMESTER - NOVEMBER 2016

# AZ 2506/AZ 1505/AZ 1502 - BASIC BIOTECHNOLOGY

Date: 14-11-2016	Dept. No.	Max. : 100 Marks
Time: 01:00-04:00		1

### PART - A

# **Answer ALL Questions**

 $(10 \times 2 = 20 \text{ marks})$ 

- 1. Define IPR.
- 2. Define cell line.
- 3. Comment on Organ culture.
- 4. What are Cosmids?
- 5. Define Plasmids.
- 6. What cDNA.
- 7. Define fermentation.
- 8. What are Biosensors?
- 9. Define GMO's.
- 10. What are Transgenic fishes?

#### PART - B

# Answer any FOUR questions.

 $(4 \times 10 = 40 \text{ marks})$ 

- 11. Explain cryopreservation.
- 12. What are transposons? State their importance.
- 13. What are restriction enzymes? Explain.
- 14. What is Molecular cloning?
- 15. Propose a bioreactor design.
- 16. Give an account on genetic manipulation.

#### PART - C

Answer any TWO questions.

 $(2 \times 20 = 40 \text{ marks})$ 

- 17. Give an account on application of animal tissue culture.
- 18. How do you construct of genomic library?
- 19. Elucidate applications of biotechnology in aquaculture.
- 20. Discuss the role of biotechnology in agriculture.

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