



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

B.Sc. DEGREE EXAMINATION – ADVANCED ZOOLOGY AND BIOTECHNOLOGY

SECOND SEMESTER – APRIL 2022

16/17/18UZO2MC03 – FUNDAMENTALS OF BIOTECHNOLOGY

Date: 28-06-2022

Dept. No.

Max. : 100 Marks

Time: 09:00 AM - 12:00 NOON

PART – A

Answer All questions

(10x2=20 Marks)

Define

1. Plasmid.
2. Cell line.
3. Primary culture.
4. cDNA.
5. Transposons.
6. Ligase enzyme.
7. DNA probe.
8. Copyright.
9. Fermentation.
10. Exonuclease.

PART - B

Answer any FOUR Questions

(4 x 10 = 40 Marks)

11. Give an account on the types of culture media.
12. Explain the structure of pBR322 with illustration.
13. Write a note on the role of IPR in Biotechnology.
14. Explain briefly the mechanism and applications of cryopreservation.
15. Write a note on biosensors.
16. Explain the steps involved in cDNA preparation and the uses of DNA probes.

PART - C

Answer any TWO Questions

(2 x 20 = 40 Marks)

17. Write a detailed account on the types of enzymes used in rDNA technology.
18. Give a brief note on animal cell culture and its applications.
19. Explain the structure and types of bioreactors.
20. Write a note on Genetically Modified Organisms and its benefits.

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