

LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034



B.Sc. DEGREE EXAMINATION – ADVANCED ZOOLOGY AND BIOTECHNOLOGY

FIFTH SEMESTER – NOVEMBER 2022

UAZ 5503 – ANIMAL BIOTECHNOLOGY

Date: 28-11-2022

Dept. No.

Max. : 100 Marks

Time: 09:00 AM - 12:00 NOON

PART – A

(10 x 2 = 20 Marks)

Answer **ALL** questions.

1. What are stem cells?
2. Comment on Bioreactors.
3. What is HeLa cell line?
4. Comment on CRISPR gene editing.
5. Give a note on liposomes.
6. Write a note on molecular farming.
7. What is PBR322?
8. What do you mean by organ culture?
9. Write a note on RFLP.
10. Define gene knock out.

PART – B

(4 x 10 = 40 Marks)

ANSWER **FOUR** OF THE FOLLOWING.

11. Give a detail account on technological uses of animal cell culture.
12. Explain in detail transgenic animals.
13. Give a detail account on gene transfer methods.
14. Describe human insulin production by gene cloning in bacteria.
15. Write an account on Sanger's DNA Sequencing method.
16. Explain in detail the Human gene therapy and its applications.

PART - C

(2 x 20 = 40 Marks)

ANSWER **TWO** OF THE FOLLOWING.

17. Describe in detail on DNA finger printing and its application.
18. Describe in detail Hybridoma technology and applications of monoclonal antibodies.
19. Write a detail account on socioethical problems arising out of biotechnology and genetic engineering.
20. Describe in detail Human genome project.

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