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

## B.Sc. DEGREE EXAMINATION – ADVANCED ZOOLOGY AND BIOTECHNOLOGY FIFTH SEMESTER – NOVEMBER 2017

## AZ 5519/AZ 5515/AZ 5508 – ANIMAL BIOTECHNOLOGY

| Date: 08-11-2017 Dept. No. Time: 09:00-12:00                           |                             | Max. : 100 Marks     |
|--|-----------------------------|----------------------|
| Answer All the questions   | Part A                      | $(10 \times 2 = 20)$ |
| 1. Culture media   |                             |                      |
| 2. Bioreactors   |                             |                      |
| 3. Liposomes   |                             |                      |
| 4. Biolistic   |                             |                      |
| 5. Transgenesis  |                             |                      |
| 6. Molecular marker  |                             |                      |
| <ul><li>7. RFLP, RAPD</li><li>8. Importance of live stocks</li></ul>   |                             |                      |
| <ul><li>8. Importance of live stocks</li><li>9. Gene therapy</li></ul> |                             |                      |
| 10. Biotechnology  |                             |                      |
| To. Biotecimiology   |                             |                      |
|  | Part B                      |                      |
| Answer any FOUR questions  |                             | $(4 \times 10 = 40)$ |
| 11. What are the requirements for the organ cultur                     | re?                         |                      |
| 12. Comment on the stem cell and their applicatio                      | ns                          |                      |
| 13. What is DNA microarray?  |                             |                      |
| 14. Discuss animals as bioreactor.                                     |                             |                      |
| 15. What is the transgene and transgenesis?                            |                             |                      |
| 16. Explain the production of monoclonal antibod                       | ies                         |                      |
| 17. Write short notes on gene therepy?                                 |                             |                      |
| 18. What are the recent trends in animal biotechnomial                 | ology?                      |                      |
|  | Part C                      |                      |
| Answer any TWO questions   |                             | $(2 \times 20 = 40)$ |
| 19. Explain in detail the methods of transfection.                     |                             |                      |
| 20. Write short notes on i) transgenic mammals                         | ii) transgenic fishes.      |                      |
| 21. Write an essay on human genome project.                            | ,                           |                      |
| 22. Comment on the socio ethical problem due to                        | animal genetic engineering. |                      |
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