LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

U.G. DEGREE EXAMINATION – **ALLIED**

FOURTH SEMESTER – APRIL 2022

UAZ 4401 – ANIMAL BIOTECHNOLOGY AND BIOINFORMATICS

Max.: 100 Marks Date: 27-06-2022 Dept. No. Time: 09:00 AM - 12:00 NOON Part-A Answer ALL the questions (10 x 2=20)1. Define bioinformatics according to NIH 2. Write a note on molecular taxonomy 3. Comment on specialized database 4. Write a note on the pharmacokinetics 5. Mention the advantages of global alignment 6. What is the role of mesenchymal stem cells? 7. Differentiate fibroblastic cells from epithelial cells 8. Comment on biological databases 9. List down the types of human cell lines 10. Mention the purpose of gene replacement therapy Part-B Answer any FOUR questions (4 X 10 = 40)11. Form an essay on bioinformatics, and the role of bioinformaticians. 12. Elaborate on the process for obtaining primary cell culture 13. Discuss the merits and demerits of cloning

- 14. Give an account of pharmacogenomics and its advantages in the medical field
- 15. Write an essay on the basic local alignment search tool and its types
- 16. Bring out an account on the applications of animal biotechnology and its ethical values

Part-C

Answer any TWO questions

- 17. Form an essay on the recent trends in stem cells and their applications
- 18. Elaborate on artificial insemination in animals, and its ethical implications
- 19. Write an essay on the human genome project and its relevance today
- 20. Write an essay on the DNA barcoding of animals and its applications

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(2 X 20 = 40)