

B. Sc. DEGREE END SEMESTER EXAMINATION - MARCH 2019**SEMESTER – 6: ZOOLOGY (CORE COURSE)****COURSE: 15U6CRZOO10: GENETICS AND BIOTECHNOLOGY***(Common for Regular - 2016 Admission / Supplementary-Improvement 2015 admission)*

Time: Three Hours

Max. Marks: 60

PART AAnswer **all** questions of the following

1. Genome
2. Crossing over
3. Barr bodies
4. Mutagens
5. RFLP
6. Single Cell Protein
7. Give any two features of a vector in biotechnology
8. Patent

(1 x 8 = 8)

PART BAnswer **any Six** of the following

9. Differentiate between back cross and test cross
10. Define incomplete dominance
11. What is pleiotropy?
12. What is freemartin?
13. Write a note on Restriction endonucleases
14. List the important features of stem cells
15. Explain DNA hybridization technique?
16. Write a note on transgenic animals

(2 x 6 = 12)

PART CAnswer **any four** of the following

17. Give a brief account on Mendelian principles of inheritance
18. Explain the mechanism of sex determination in man.
19. Write a brief account on autosomal genetic disorders in man.
20. Explain bacterial and phage vectors used in biotechnology
21. What is DNA fingerprinting? Add a note on its application.
22. Explain the steps involved in the production of cDNA and genomic library

(5 x 4 = 20)

PART DAnswer **any Two** of the following

23. Write a detailed account on non allelic interactions
24. Explain bacterial gene recombination
25. Write an essay on PCR
26. Discuss the applications of Biotechnology in medicine.

(10 x 2 = 20)
