

B. Sc. DEGREE END SEMESTER EXAMINATION - MARCH 2020**SEMESTER –6: ZOOLOGY (CORE COURSE)****COURSE: 15U6CRZOO10: GENETICS AND BIOTECHNOLOGY***(Common for Regular 2017 Admission & Supplementary 2016 /2015 Admissions)*

Time: Three Hours

Max. Marks: 60

PART A***Define all the following***

1. Epistasis
2. Barr bodies
3. Stem cells
4. Karyotype
5. Bioremediation
6. Plasmids
7. IPR
8. Transgenesis

(1 x 8 = 8)

PART B***Answer any Six of the following***

9. Distinguish between gene mutation and chromosomal mutation
10. What are modifying genes?
11. Comment on sex influenced traits
12. What is called electroporation?
13. What is polygenic inheritance?
14. Comment on Amniocentesis
15. Write a note on cDNA library
16. What is called gene therapy?

(2 x 6 = 12)

PART C***Answer any Four of the following***

17. Explain X- linked inheritance with a suitable example
18. Explain autosomal anomalies in man
19. Write a note on transposable elements in bacteria
20. Write a note on animal cell culture
21. Give an account on Southern blotting
22. Explain complementary gene interaction citing an example

(5 x 4 = 20)

PART D***Answer any Two of the following***

23. Write an essay on extra nuclear inheritance
24. Explain the technique and applications of PCR
25. Describe the applications of biotechnology in medicine
26. Explain the process of bacterial transformation and conjugation

(10 x 2 = 20)
