

D.K.M. COLLEGE FOR WOMEN (AUTONOMOUS), VELLORE – 1**SEMESTER EXAMINATIONS****APRIL – 2019****15CZO4A****GENETICS AND BIOTECHNOLOGY****Time: 3 Hrs****Max. Marks: 75****SECTION – A (10 X 2 =20)****Answer ALL the questions.****Define /Explain the following**

1. Epistasis
2. Atavism
3. Kappa particles
4. Linkage
5. Cistron
6. Heterosis
7. Ligase
8. Linkers
9. cDNA
10. Gene cloning

SECTION – B (5 X 5 =25)**Answer any FIVE of the following questions.**

11. Explain the Law of Segregation.
12. Give an account on the Multiple alleles.
13. Write a note on Gynandromorphs.
14. Explain some of the abnormal Human Karyotype.
15. Give an account on Hardy- Weinberg Law.
16. Describe plasmid.
17. Give an account on restriction endonucleases.
18. Genomic Library – Explain.

SECTION – C (3 X 10 =30)**Answer ALL the questions.**

19. a) Explain the complementary factor with examples.
(Or)
b) Describe Morgan's experiment.
20. a) Explain Lac - Operon concept
(Or)
b) Write about the recombinant DNA technology in Human Welfare.
21. a) Write in brief about the applications of nanotechnology in medicine.
(Or)
b) Explain about Inbreeding, Out breeding and Heterosis.

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