

Total No. of Pages: **2**

5329

Register Number

Name of the Candidate:

B.Sc. DEGREE EXAMINATION, May 2015

(ZOOLOGY)

(THIRD YEAR)

(PART- III)

730: GENETICS

Time: Three hours

Maximum: 100 marks

SECTION-A

(10×2=20)

Answer any TEN questions

1. Lethality
2. Epistasis
3. Penetrance
4. Polygene
5. Centi Morgan
6. Single crossover
7. Y linked genes
8. Chromosomal sex determination
9. Gynadromorphs
10. Kappa particles
11. UV rays
12. Point mutation
13. Gene and genotype frequency
14. Euthenics
15. Pedigree

SECTION-B

(5×7=35)

Answer ALL questions

16. a) Define multiple allele. Explain with ABO blood groups in man.
(OR)
b) Write briefly on gene expression.
17. a) Discuss on kinds of linkage and linkage groups.
(OR)
b) Explain polygenic inheritance taking skin colour in man.

2

18. a) Explain sex linked inheritance in Man.
(OR)
b) Discuss on sex influenced and sex limited genes with examples.
19. a) Gene is a "Cistron"-Discuss.
(OR)
b) Explain extra chromosomal inheritance with Limnaea as example.
20. a) Write an account on Eugenics and euphenics.
(OR)
b) State and explain Hardy Weinberg law.

SECTION-C**(3×15=45)****Answer any THREE questions**

21. State and explain Mendel's Laws of inheritance with example.
22. Describe different kinds, mechanism and theories of crossing over.
23. Describe the mechanism of sex determination in man and Drosophila.
24. Explain chromosomal aberrations with reference to polyploidy.
25. Write the phenotype and characteristic features of Down, Klinefelter, Edward and Turner syndrome.
