

2023
B.A./B.Sc.
Third Semester
CORE – 7
ANTHROPOLOGY
Course Code: ANC 3.31
(Human Genetics)

Total Mark: 70
Time: 3 hours

Pass Mark: 28

Answer five questions, taking one from each unit.

UNIT-I

1. Discuss in brief, the inheritance pattern of complex trait in man, with special reference to the stature. 14
2. Define incomplete dominance. Explain the mechanism of incomplete dominance citing an example. 2+12=14

UNIT-II

3. Define chromosome. Describe the Denver's classification of human chromosome. 14
4. Differentiate between DNA and RNA. 14

UNIT-III

5. Describe the structural features and function of haemoglobin. 14
6. Make a note on Klinefelter's syndromes citing all the important features. 14

UNIT-IV

7. Define Hardy-Weinberg law. In a population that is Hardy-Weinberg equilibrium, 38% of the individuals are recessive homozygotes for a certain trait. In a population of 14,500, calculate the number of homozygous dominant individuals and heterozygous individuals. 14

8. Describe the significance of population genetics in studying human population citing some examples. 14

UNIT-V

9. Discuss the relevancy of genetic counselling in the modern era. 14
10. What is pedigree method? Briefly explain the application of pedigree method in studying human genetics. 14
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