

2022
M.Sc.
Fourth Semester
CORE – 11
ANTHROPOLOGY
Course Code: MANC 4.11
(Human Population Genetics)

Total Mark: 70

Pass Mark: 28

Time: 3 hours

Answer any five questions.

1. Discuss on the significance of population genetics in anthropology. 14
2. State Genetic equilibrium. Assume that a population is in equilibrium in which 36% of the population are homozygous for a certain recessive allele 'a'. What is the frequency of the recessive allele in this population?
2+12=14
3. Discuss with examples the factors disrupting the allele frequency in a population. 14
4. Explain on the effects of genetic polymorphism in population genetics citing examples. 14
5. Discuss on the prevalence and distribution of thalassemia in India. 14
6. Illustrate with examples the concept of fitness in population genetics. 14
7. Highlight on the consequences of consanguinity in human population. 14
8. Write short notes on any two of the following: 7×2=14
 - (a) G6PD deficiency and its distribution
 - (b) Concept of effective population size
 - (c) Relation of finger patterns and population variation
 - (d) Impact of miscegenation