

2021
M.Sc.
Third Semester
CORE – 09
ANTHROPOLOGY
Course Code: MANC 3.11
(Human Genetics & Variation)

Total Mark: 70

Pass Mark: 28

Time: 3 hours

Answer any five questions.

1. Discuss in brief the historical perspective of studying human variation. 14
2. “Race is a fallacy”. Elaborate. 14
3. Describe the adaptive role of vitamin D in human population. 14
4. Point out the evidences of human evolution from Y chromosomal DNA haplogroups. 14
5. Distinguish between autosomal dominant and recessive inheritance with appropriate examples. 14
6. What do you understand by X-inactivation? Explain the mechanism of X-inactivation. Also cite some examples to support Lyon hypothesis. 14
7. About 9% of all the individuals in a population are Rh negative. What is the frequency of marriage in which erythroblastosis may occur in offspring? 14
8. Write note on any two: 7×2=14
 - (i) Mutation and genetic variation
 - (ii) High altitude adaptation

- (iii) Genetic variation between population
 - (iv) Sex controlled trait
 - (v) Polymorphism
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