

M.A./M.Sc. Examination, 2015

Semester-II

Anthropology

Paper – X

(Physical/Biological Anthropology)

Time: 3 Hours

Full Marks: 40

Questions are of value as indicated in the margin.

Answer Question No. 6 and **any three** from the rest.

1. Define mutation. Discuss with suitable example different types of point mutation. 2+8=16
 2. Discuss in brief the structure of nuclear DNA and mention its basic differences with mtDNA. 10
 3. Define Hardy-Weinberg law. What are the factors that influence allele frequencies or derivations from Hardy-Weinberg equilibrium? What are the application of Hardy-Weinberg law? From a group of 150 Anthropology students who tested themselves for PTC tasting ability, 100 were taster and 50 were non-taster. From these results calculate the frequencies of allele T and t in the studied population. 2+2+2+4=10
 4. Briefly discuss the forces of evolution. 10
 5. Discuss in brief human physiological responses to heat and high altitude. 5+5=10
 6. Write short notes on **any two** of the following: 5+5=10
 - (a) Genetic Code.
 - (b) Convergence and divergence evolution.
 - (c) Austro-Asiatic speakers are the oldest inhabitants of India – Explain.
 - (d) RNA.
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