

00583

MASTERS IN ANTHROPOLOGY

Term-End Examination

December, 2014

MANE-001 : HUMAN GENETICS

Time : 3 hours

Maximum Marks : 100

Note : *Answer **any five** questions. Choose at least **two** questions from each section. All questions carry **equal** marks. The word limit for **20** marks is **500** words and for **10** marks is **250** words.*

SECTION-A

1. Give a brief account of various branches of human genetics and their scope. 20
2. What is Hardy Weinberg Equilibrium and what are its implications in human genetics ? 20
3. What are different chromosomal aberrations in man ? Give examples. 20
4. Write an essay on protein diversity in human populations. 20
5. Give a brief account of history, goals and applications of human genome project. 20

SECTION - B

6. Write briefly on : **10+10**
(a) Mendel's laws of inheritance.
(b) What is genetics of the ABO blood group system ?
7. Explain the following : **10+10**
(a) Mating patterns in humans.
(b) Differentiate between consanguinity and inbreeding.
8. Discuss the following : **10+10**
(a) Karyotype analysis.
(b) Fluorescence in Situ Hybridization (FISH).
9. Write notes on the following : **10+10**
(a) Specific ethical issues in human genetics.
(b) DNA methylation.
10. Describe the following : **10+10**
(a) DNA polymorphism and disease association.
(b) HapMap.
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