

**MASTERS IN ANTHROPOLOGY
(MAAN)**

**Term-End Examination
December, 2019**

MANE-001 : HUMAN GENETICS

Time : 3 Hours

Maximum Marks : 100

Note : Attempt five questions in all. Choose at least two questions from each Section. All questions carry equal marks. The word limit for 20 marks question is 500 words and for 10 marks question is 250 words.

Section—A

1. Define and briefly comment on various branches of Human Genetics. 20
2. What is Hardy-Weinberg equilibrium ? Briefly discuss various factors that influence change in gene frequencies. 20

3. Describe the structure and salient features of DNA double helix. 20
4. Briefly discuss different types of chromosomal aberrations in man. 20
5. Write short notes on any *two* of the following :
10 each
 - (a) Consanguinity
 - (b) Sickle cell haemoglobin
 - (c) Prenatal diagnosis
 - (d) Mt DNA

Section—B

6. Define Genetic Polymorphism. Briefly discuss the Balanced polymorphism. 20
7. Discuss briefly the Mendel's laws of inheritance with suitable examples. 20
8. What is Genetic Counselling ? Discuss the various steps involved in genetic counselling. 20
9. Write a brief account on various techniques of human molecular genetics. 20

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10. Write short notes on any *two* of the following :

10 each

- (a) ABO blood group system
- (b) Human genome project
- (c) Bioinformatics
- (d) Ethical, Legal and Social Issues (ELSI) in Genetics

MANE-001

1,200

(B-20)