

No. of Printed Pages : 3

MANE-001

MASTER IN ANTHROPOLOGY (MAAN)

Term-End Examination

June, 2023

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 question is **500** words and for 10 marks is **250** words.*

Section—A

1. Define Human Genetics. Briefly comment on various branches of Human Genetics. 20
2. What is inbreeding ? Elucidate different types of inbreeding in human populations. 20

P. T. O.

3. What is Chromosomal Aberration ? Elucidate different Chromosomal Aberrations in man with suitable examples. 20
4. Write an essay on techniques of human molecular genetics. 20
5. Write short notes on any *two* of the following : 10+10
- (a) Alkaptonuria
 - (b) Polymerase Chain Reaction (PCR)
 - (c) Abnormal Haemoglobin
 - (d) G6PD deficiency

Section—B

6. What is Genetic Epidemiology ? Discuss its importance in physical anthropological research. 20
7. Critically discuss various applications of Human Genome Project. 20

[3]

8. What is autosomal dominant and X-linked dominant modes of inheritance. Discuss with suitable examples. 20
9. Define genetic polymorphism. Briefly discuss on balanced polymorphism. 20
10. Write short notes on any *two* of the following : 10+10
- (a) Human Evolution as studied by mitochondrial DNA (mtDNA)
 - (b) Prenatal diagnosis
 - (c) Colourblindness
 - (d) Ethical issues in human genetic research