

**MASTER'S DEGREE IN
ANTHROPOLOGY (MAAN)
Term-End Examination
June, 2025**

MANE-001 : HUMAN GENETICS

Time : 3 Hours

Maximum Marks : 100

Note : Attempt *five* questions in all, selecting 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 it is **250** words.

Section—A

1. What is Human Genetics ? Briefly describe various branches of Human Genetics. 20

2. Briefly comment on different types of chromosomal aberrations in human being.
20
3. What do you understand by consanguinity ? Discuss different types of consanguineous marriages in human population. 20
4. Define Hardy-Weinberg equilibrium and briefly discuss various evolution factors influencing it. 20
5. Write short notes on any *two* of the following :
10+10
 - (a) Mt DNA
 - (b) ABO blood group system
 - (c) Genetic epidemiology
 - (d) Phenylketonuria

Section—B

6. Briefly comment on the history and applications of Human Genome Project. 20
7. Define DNA polymorphism and briefly examine its different forms in human being.
20

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8. Discuss Ethical, Legal and Social Issues (ELSI) in human genetic research. 20
9. Describe indicative situations and techniques involved in prenatal diagnosis. 20
10. Write short notes on any *two* of the following : 10+10
- (a) DNA structure
 - (b) Polymerase Chain Reaction (PCR)
 - (c) Gene Therapy
 - (d) Sickle Cell Anaemia

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