

MASTERS IN ANTHROPOLOGY (MAAN)

Term-End Examination

June, 2021

MANE-001 : HUMAN GENETICS

Time : 3 hours

Maximum Marks : 100

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

SECTION A

1. What is Human Genetics ? Discuss the relevance of human genetics in physical anthropology. Examine briefly the different branches of human genetics. 20
2. Briefly discuss the different types of chromosomal aberrations in man, with suitable examples. 20

3. What are different types of Cell Divisions ?
Briefly explain any one of the cell divisions with
suitable diagrams. 20
4. Briefly discuss the Inborn Errors of Metabolism
in man with suitable examples. 20
5. Write short notes on any **two** of the
following : 10+10=20
- (a) Inbreeding
 - (b) FISH
 - (c) ABO Blood Group System
 - (d) Polymerase Chain Reaction (PCR)

SECTION B

6. Describe the structure of DNA with suitable diagram. 20
7. Define Genetic Polymorphism. Discuss its importance in human population genetics. 20
8. Discuss Ethical, Legal and Social Issues (ELSI) in genetic research. 20
9. Briefly comment on various applications of Human Genome Project. 20
10. Write short notes on any **two** of the following : 10+10=20
- (a) Abnormal Haemoglobins
 - (b) Colour Blindness
 - (c) Genetic Epidemiology
 - (d) Genetic Counselling
-