

MASTERS IN ANTHROPOLOGY (MAAN)

Term-End Examination

December, 2022

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 ? Briefly examine the different branches of Human Genetics. 20
2. Briefly discuss the Inborn Errors of Metabolism in Man, with suitable examples. 20
3. What is Meiosis Cell Division ? Describe the different stages of Meiosis Cell Division. 20

4. Briefly discuss the different types of Mating Patterns in Man. 20
5. Write short notes on any **two** of the following : 10+10=20
- (a) ABO Blood Group System
 - (b) Fluorescence In Situ Hybridization (FISH)
 - (c) X-linked Inheritance
 - (d) Phenylketonuria

SECTION B

6. What is Genetic Counselling ? Briefly discuss the various procedures involved in Genetic Counselling. 20
7. Briefly discuss the Ethical, Legal and Social Issues (ELSI) in Human Genetic research. 20
8. Briefly comment on any three tools of Bioinformatics research in human beings. 20
9. Describe the structure and features of DNA. 20
10. Write short notes on any *two* of the following : 10+10=20
- (a) Hardy Weinberg Equilibrium
 - (b) Human Genome Project
 - (c) Differentiate between Consanguinity and Inbreeding
 - (d) Genetic Polymorphism
-