

MASTERS IN ANTHROPOLOGY (MAAN)

Term-End Examination

June, 2019

00935

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

SECTION A

1. What is Human Genetics ? Briefly comment on different branches of Human Genetics. 20
2. What are different types of chromosomal aberrations in man ? Discuss. 20
3. What is Mitosis ? Briefly examine various stages of cell division with suitable diagrams. 20

4. What are Inborn Errors of Metabolism ? Briefly discuss on any two 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) ABO Blood Group System

(c) Polymerase Chain Reaction (PCR)

(d) Genetic Epidemiology

SECTION B

6. What is prenatal diagnosis ? Examine the different indicators and techniques of prenatal diagnosis. 20
7. What is ethics in genetic research ? Discuss Ethical, Legal and Social Issues (ELSI) in genetic research. 20
8. Define DNA polymorphism. Examine different forms of DNA polymorphism. 20
9. What is Human Genome Project (HGP) ? Examine any two applications of Human Genome Project. 20
10. Write short notes on any *two* of the following : 10+10=20
- (a) DNA Structure
 - (b) Hardy-Weinberg Law
 - (c) Sickle Cell Anaemia
 - (d) Colour Blindness
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