

00005

MASTERS IN ANTHROPOLOGY (MAAN)

Term-End Examination

June, 2018

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

SECTION - A

1. Define Human Genetics. Briefly comment on the different branches of Human Genetics. 20
2. What is Mitosis ? Briefly discuss various stages of cell division with suitable diagrams. 20
3. What are different types of chromosomal aberrations in Man ? Discuss. 20
4. What is Hardy - Weinberg Law ? Briefly discuss the different factors that influence change in gene frequencies. 20
5. Write short notes on any two of the following : 10+10
 - (a) Consanguineous marriages
 - (b) Polymorphism
 - (c) ABO blood group system
 - (d) Phenylketonuria

SECTION - B

6. What is Human Genome Project ? Briefly comment on the applications of Human Genome Project. 20
 7. What is Inborn Errors of Metabolism ? What are different Inborn Errors of Metabolism in Man ? Describe any two with examples. 20
 8. What is DNA polymorphism ? Examine briefly different forms of DNA polymorphism in Man. 20
 9. What is prenatal diagnosis ? Examine different indications and techniques of prenatal diagnosis. 20
 10. Write short notes on **any two** of the following : 10+10
 - (a) PCR
 - (b) Genetic Epidemiology
 - (c) Ethical, Legal and Social Issues (ELSI) in Genetic research
 - (d) FISH
-