Model Question Paper

M. Sc., Degree Examination

Human Genetics

Second Semester

Paper: 2.7: FUNDAMENTALS OF HUMAN GENETICS
(Optional Paper/Non Core Subject)

Time : 3 Hrs. Max. : 85

Answer ALL questions.
All questions carry equal marks.

1. Write an essay on Mendel's Laws of Inheritance with suitable examples.

Or

2. Explain Polygenic Inheritance with suitable examples.

3. Write an essay on Multiple Alleles and its inheritance.

Or

4. Explain the concept of Linkage and Crossing Over.

5. Give an account of Pedigree Analysis and its significance in family studies.

Or

6. Define and discuss the concept of Hardy-Weinberg Law with reference to simple Mendelian inheritance.

7. Describe the various methods of Genetic Counseling.

Or

8. Explain any two methods of Prenatal Diagnosis.

9. Write short notes on any FOUR of the following –

a. X-linked Inheritance
b. Sex influenced characters
c. Lethal genes
d. Mutations
e. Genotype and Phenotype
f. Inbreeding Co-efficient
g. Amniocentesis
h. ά – fetoprotein

Model Question Paper

M. Sc Degree Examination

Human Genetics

Third Semester

Paper: 3.7: ADVANCED HUMAN GENETICS
(Effective from the Admitted Batch of 2009-2010)

Time : 3 hours Max. Marks : 85

Answer ALL questions
All questions carry equal marks

1. Write about the history and development of Human cytogenetics.

Or

2. Give an account on morphological variability of human chromosomes.

3. Write about different human chromosome banding techniques.

Or

4. Give a brief account on origin of numerical chromosomal abnormalities.

5. Describe the genetic polymorphism of red cell acid phosphatase (ACP1).

Or

6. Describe the pharmacogenetics with G6PD enzyme.

7. Give an account on major histocompatability comples.

Or

8. Write an essay on genetic basis of structure and diversity of antibody.

9. write short note on any FOUR of the following;

   a. Chicago conference
   b. Karyo typing
   c. 5p-
   d. Downs syndrome
   e. Haptoglobin
   f. Sickle cell disease
   g. Phagocytes
   h. NK cells