

[This question paper contains 2 printed pages.]

Your Roll No.....

Sr. No. of Question Paper : 4584

J

Unique Paper Code : 2154001005

Name of the Paper : (GE): Genetic Research in
Anthropology

Name of the Course : **Theory Examination May-
June 2025 B.Sc. (H) Part-II**

Semester : IV

Duration : 3 Hours

Maximum Marks : 90

Instructions for Candidates

1. Write your Roll. No. on the top immediately on receipt of this question paper.
2. Attempt **any five** questions.
3. **All questions** carry equal marks.

1. What are multifactorial diseases? Discuss the genetic liability of any complex disease.

P.T.O.

2. Write an essay on genetic markers.
3. Describe the principle and properties of Hardy-Weinberg equilibrium.
4. What is genetic polymorphism? Discuss various types of polymorphisms used in genetic studies.
5. Discuss the ethical issues involved in genetic counselling and screening.
6. Discuss the history of conducting research in anthropological genetics.
7. Discuss RFLP and allele-specific PCR used genetic research.
8. Discuss the cross-sectional study design used in clinical genetics.
9. Write short notes on **any two** of the following:
 - (a) Sib-pair analysis
 - (b) ABO blood groups
 - (c) Genotyping
 - (d) Epigenetics