

This question paper contains 2 printed pages]

Roll No.

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S. No. of Question Paper : 5891

Unique Paper Code : 215303

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Name of the Paper : ANTH 308 (Human Genetics)

Name of the Course : B.Sc. (Hons) Part II

Semester : III

Duration : 3 Hours

Maximum Marks : 75

(Write your Roll No. on the top immediately on receipt of this question paper.)

Answer any *five* questions.

All questions carry equal marks.

1. Give a detailed account of karyotyping starting from blood collection.
2. What are structural chromosomal abnormalities ? Explain with any *two* suitable examples.
3. What do you understand by gene expression ? Explain it with suitable genetic disorders at molecular level.
4. Explain the autosomal dominant and recessive modes of inheritance with appropriate pedigrees and suitable examples.
5. Give a detailed account of electrophoresis.
6. Discuss the twin method and linkage analyses for identifying genetic basis of a trait.

P.T.O.

7. Give a brief account of genetic engineering focusing on the ethical issues involved.
8. What is mitochondrial inheritance ? Discuss its anthropological relevance.
9. Write short notes on any *two* of the following :
 - (a) Turner's syndrome
 - (b) Uniparental disomy
 - (c) Chromosomal banding
 - (d) Genetic screening.