

C 40662

(Pages : 2)

Name.....

Reg. No.....

**SIXTH SEMESTER U.G. DEGREE EXAMINATION, MARCH 2023**

(CBCSS)

Zoology

ZOL 6B 14 (E) 01T—HUMAN GENETICS

(2019 Admission onwards)

Time : Two Hours

Maximum Marks : 60

**Section A**

I. Short Answer Questions. Each question carries 2 marks :

- 1 Write a note on Archaeogenetics.
- 2 Comment on Indian Genome Variation initiative.
- 3 Briefly explain FISH.
- 4 Comment on Ecogenetics.
- 5 What is marriage counselling ?
- 6 Write note on Genomic imprinting.
- 7 Comment on Consanguinity.
- 8 Explain the disorder congenital adrenal hyperplasia.
- 9 Explain the outcome of Stockholm conference.
- 10 Write note on CF gene and Cystic fibrosis.
- 11 What is biological twinning ?
- 12 Write notes on genetic sequencing.

(Ceiling : 20 marks)

**Section B**

II. Paragraph questions. Each question carries 5 marks :

- 13 Write note on maternal effect gene with suitable examples.
- 14 Briefly explain the autosomal dominant genes and their effect on human.
- 15 Explain the steps involved in the construction of human pedigree.
- 16 Write a note on multifactorial inheritance with examples.
- 17 Briefly explain various banding techniques.

**Turn over**

18 Write a note on X-linked disorders in human.

19 Briefly describe various types of non-disjunction of chromosomes.

(Maximum : 30 marks)

### Section C

III. Essay Questions. Answer any *one* question. The question carries 10 marks :

20 Write an essay on types of structural modification in chromosomes. Add notes on effects on phenotypes.

21 Give an account on various types of prenatal diagnostic techniques.

(1 × 10 = 10 marks)