Total number of printed pages-7

3 (Sem-6/CBCS) ANT HE 2/3

2023

ANTHROPOLOGY

(Honours Elective)

Answer the Questions from any one Option.

OPTION-A

(Human Genetics)

Paper: ANT-HE-6026

OPTION-B

(Demographic Anthropology)

Paper: ANT-HE-6036

Full Marks: 60

Time: Three hours

The figures in the margin indicate full marks for the questions.

OPTION-A

(Human Genetics)

Paper: ANT-HE-6026

- 1. Answer the following questions: $1 \times 7 = 7$
 - (a) What is DNA polymorphism?
 - (b) Write the full form of PCR.
 - (c) What is karyotype?
 - (d) What is SNPs?
 - (e) How many strands make up a DNA double helix?
 - (f) What is holandric gene?
 - (g) What is aneuploidy?
- 2. Answer the following questions in brief:

 $2 \times 4 = 8$

- (a) Define epigenetics.
- (b) Write the chromosomal constitution of Klinefelter's and Turner's syndrome.

- (c) Distinguish between genotype and phenotype.
- (d) What do you mean by genome?
- 3. Write short notes on **any three** of the following: 5×3=15
 - (a) DNA replication
 - (b) Haplotypes and haplogroups
 - (c) Genetic maping
 - (d) Non-Mendelian inheritance
 - (e) Role of tRNA
- 4. Answer any three of the following:

10×3=30

- (a) Discuss the role of Y chromosome and mtDNA model in modern Homo sapiens origin.
- (b) What is Pedigree? Write down the importance of Pedigree in Human genetics.

- (c) Discuss about causes and features of Down's syndrome.
- (d) Differentiate between transient and balanced genetic polymorphism.

 Illustrate your answer with suitable examples from human populations.
- (e) Briefly discuss the salient features of Watson and Crick model of DNA.
- (f) Discuss briefly about the molecular evolution and genomic diversity in Indian population.

OPTION-B

(Demographic Anthropology)

Paper: ANT-HE-6036

- 1. Answer the following questions in short: $1 \times 7 = 7$
 - (a) Who is considered as the father of Demography?
 - (b) In which year the National Population Policy was introduced in India?
 - (c) Which is the most populated state in India?
 - (d) What is fertility?
 - (e) What do you mean by birth rate?
 - (f) What is infant mortality rate?
 - (g) What is the full form of W.H.O?
- 2. Answer the following questions in brief: 2×4=8
 - (a) What is crude birth rate? How is it calculated?
 - (b) Who was John Graunt? Name one book authored by him.

- (c) What are five stages of demographic transitive theory?
- (d) Mention two needs of population policy in India.
- 3. Write short notes on: (any three) 5×3=15
 - (a) Causes of migration
 - (b) Population census
 - (c) Sample survey
 - (d) Impact of population growth in India
 - (e) Family planning in India
- 4. Answer any three of the following questions: 10×3=30
 - (a) Define demography and discuss the importance of demographic study in Anthropology.
 - (b) Mention the factors affecting fertility in a developing country like India.
 - (c) What is mortality? Discuss the causes of decline of mortality rate in India.
 - (d) Discuss the population theory of Thomas Malthus.

- (e) Discuss in detail the Biological theory of Herbert Spencer.
- (f) What is urbanization? Discuss the impact of urbanization on the migration of tribal group.