

Total number of printed pages-8

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

2022

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.***

Contd.

OPTION-A

(Human Genetics)

Paper : ANT-HE-6026

1. Answer **any seven** questions of the following : $1 \times 7 = 7$

- (a) What is DNA sequencing ?
- (b) What are microsatellites ?
- (c) Who first used the term gene ?
- (d) What is VNTR ?
- (e) What is the site of protein synthesis ?
- (f) What is the first step of translation ?
- (g) Which mRNA nitrogenous base is partner to the DNA base adenine ?
- (h) Is haplotype a gene ?
- (i) What is primary constriction in a chromosome ?
- (j) What is complementary base pairing ?

2. Attempt **any four** questions of the following : $2 \times 4 = 8$

- (a) What is a codon ?
- (b) Define Human Genetics.
- (c) Which bases are purines and which forms the pyrimidines ?
- (d) What are single nucleotide polymorphism (SNPs) ?
- (e) What is mtDNA ? Write its significance.
- (f) What is genetic mapping ?
- (g) What is a strand of DNA made up of ?
- (h) What is non-Mendelian inheritance ?

3. Attempt **any three** questions of the following : $5 \times 3 = 15$

- (a) Classify the types of chromosomes on the basis of position of centromere.
- (b) What is meant by molecular evidence of evolution ?
- (c) Discuss about peopling of Indian subcontinent with the evidence from Y-chromosome.
- (d) What is a genetic code ? Write its properties.

- (e) What is karyotyping ? Write its application.
- (f) Define LOD score. Write its significance.
- (g) Write a short note on Down's syndrome.
- (h) Write a short note on molecular evolution and genetic diversity in Indian population.

4. Attempt **any three** from the following :
10×3=30

- (a) What is the difference between tRNA and mRNA ?
- (b) How mtDNA and Y-chromosome are considered to be good for detecting distant ancestry ?
- (c) Describe the semi-conservative way of DNA replication.
- (d) Define epigenetics. Can epigenetics be inherited? Elaborate the factors that affect epigenetics.
- (e) Describe pedigree analysis as a method of genetic study. Elaborate the importance of drawing a pedigree to study inheritance of any character.

- (f) What is chromosomal basis of genetic disorder ? Discuss different types of chromosomal basis of genetic disorder with example.
- (g) What is DNA replication ? Discuss the processes of DNA replication.
- (h) What is DNA polymorphism ? Discuss its different types.

OPTION-B

(Demographic Anthropology)

Paper : ANT-HE-6036

1. Answer the following questions in short :
(any seven) $1 \times 7 = 7$

- (a) In which year National Population Policy was introduced in India ?
- (b) Who authored the book "An essay on Principles of Population" ?
- (c) Who proposed the 'Demographic transition theory' ?
- (d) _____ refers to the probability of a child dying between birth and exactly 5 years of age, expressed 1000 live births.
(Fill in the blank)
- (e) What is the full form of NRHM ?
- (f) Which state of India is the most populated ?
- (g) World population day is observed on _____.
(Fill in the blank)
- (h) What is the full form of AYUSH ?
- (i) In which year National Health Policy was first introduced in India ?
- (j) According to Census Report, 2011 the population growth rate of India from 2001 to 2011 was _____ per cent.
(Fill in the blank)

2. Answer the following questions in brief :
(any four) $2 \times 4 = 8$

- (a) Distinguish between fertility and fecundity.
- (b) Define immigration and emigration.
- (c) What is maternal mortality rate ? How is it calculated ?
- (d) What is Janani Suraksha Yojana (JSY) ?
- (e) What is Family Planning Programme ? In which year National Programme for Family Planning was launched in India ?
- (f) Who was John Graunt? What was his famous work published in 1662 ?
- (g) Write *two* causes of population explosion in India.
- (h) What are the *four* phases of population growth in India ?

3. Write short notes on : **(any three)** $5 \times 3 = 15$

- (a) Civil Registration System
- (b) Demography
- (c) Biological theory of population
- (d) Population density in India
- (e) Impact of urbanisation on tribal populations in Assam
- (f) Causes of migration

- (g) National Family Health Survey (NFHS).
- (h) Sex ratio in India.

4. Answer **any three** of the following questions : 10×3=30

(a) Define Demographic Anthropology. Discuss the relationship of Demography, Population Studies and Anthropology. 2+8=10

(b) Discuss the population theory of Thomas R Malthus.

(c) What is differential fertility ? Write the factors of differential fertility in Indian societies. 1+9=10

(d) What are the major sources of demographic data ? Discuss population census as a source of demographic data in India. 2+8=10

(e) Write an essay on distribution of tribal and non-tribal population in India.

(f) What is population policy ? Write a note on National Population Policy of India. 2+8

(g) Discuss the theory of Demographic transition.

(h) Discuss the importance of population studies in Anthropology.