2018

ANTHROPOLOGY

(Major)

Paper : 6.1

(Physical Anthropology)

Full Marks : 60

Time : 3 hours

The figures in the margin indicate full marks for the questions

1. Fill in the blanks/Choose the correct answer : 1×7=7

(a) _____ is considered as the father of Physical Anthropology.

(b) Blood group polymorphism is based on the presence of _____ on the red blood cells.

(c) The single-base substitution in the DNA code is known as _____.

(d) The process which gives definite shape to different parts in prenatal stage is called _____.

(e) When both members of an allelic pair are able to express themselves fully in the phenotype, the inheritance is called

(i) dominant inheritance

(ii) intermediate dominance

(iii) codominant inheritance

(iv) None of the above

(f) Sex-limited traits are expressed in only one sex and the genes determining it are generally located on

(i) X chromosomes

(ii) Y chromosomes

(iii) autosomes

(iv) None of the above

(g) Which of the following is the skin colour of the Mongoloids?

(i) Leucoderm

(ii) Xanthoderm

(iii) Melanoderm

(iv) None of the above

2. Give very short answers to the following questions (any *four*) : 2×4=8

(a) Name the types of measurements used in the study of growth.

(b) What are the sex-controlled traits?

(c) Head form may be classified into different types on the basis of cranial index. Name the categories.

(d) What is the only source of new variation in human evolution?

(e) State Mendel's first law of inheritance.

3. Give short answers to the following questions (any *three*) : 5×3=15

(a) What is sex-linked inheritance? Describe the mode of inheritance of sex-linked traits. 1+4=5

(b) What are the extrinsic factors that influence postnatal growth?

(c) How would you differentiate between point mutation and chromosal mutation?

(d) State briefly the process of estimating heritability.

(e) Finger patterns are classified according to the presence of triradius. Give the classification of finger pattern types.

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

(a) What are the four basic evolutionary forces that bring about biological variation in populations? Describe any one with examples. 2+8=10

(b) Differentiate between the longitudinal and cross-sectional method of studying growth.

(c) What is Hardy-Weinberg law? Describe it with examples. 4+6=10

(d) Discuss the relative influence of heredity and environment on the head form of humans.

(e) Trace the developmental stages of human genetics.

(f) What are the different methods by which human heredity may be studied?

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