

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 \_\_\_\_\_.



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- (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

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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 chromosomal 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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