## 2018

## ANTHROPOLOGY

( Major )

Paper: 3.1

## ( Physical Anthropology )

Full Marks: 60

Time: 3 hours

The figures in the margin indicate full marks for the questions

1.	Fill	in the blanks:
	(a)	The pyrimidine present in ribonucleic acid (RNA) is
	<i>(b)</i>	is the longest and strongest bone of the human body.
	(c)	A sequence of three successive base pairs along a DNA strand coding for an amino acid is known as
	(d)	Metatarsal bones are parts of the human
	(e)	Heterozygous affected parents will transmit the trait to their children in the ratio of

7

- The chromosome number is reduced to half in the process of \_\_\_\_ cell division.
- The sex chromosomes of a normal human female are \_\_\_\_.
- 2. Answer the following in brief:

 $2 \times 4 = 8$ 

- (a) Name the three European scientists who rediscovered Mendel's laws.
- (b) How many sets of teeth do humans have? Name the four types of teeth that occur in adults.
- (c) What is a frequency polygon?
- (d) Name the bones of the pelvic region. Which is the longest bone of the region?
- 3. Answer in brief any three of the following questions: 5×3=15
  - (a) What are the different ways in which human head form may be classified?
  - (b) Describe the different types of finger dermatoglyphic patterns.
  - (c) Describe the structure of the human vertebral column.

- Briefly discuss the misconception of race and psychology.
- (e) Write on the stages of the mitotic cell division.
- 4. Answer any three of the following questions: 10×3=30
  - Discuss the changes that took place in the skeleton in humans with the assumption of erect posture.
  - Explain Mendel's laws of inheritance with the help of the Punnett square.
  - Elaborate on the classification of Indian people as given by H. H. Risley (1915).
  - What is the geographic distribution of the Mongoloid racial group? Describe their characteristic physical features.
  - Elaborate on the racial elements in (e) Assam.
  - Describe the structure of a cell and the (f)processes of cell division.