

2022

M.Sc.

2nd Semester Examination

ANTHROPOLOGY

PAPER—202

HUMAN GENETICS AND HUMAN VARIATION

Full Marks : 50

Time : 2 Hours

*The figures in the right-hand margin indicate full marks.*

*Candidates are required to give their answers in their own words as far as practicable.*

*Illustrate the answers wherever necessary.*

**Group - A**

Answer any four questions. 4×2

1. Describe the events taking place during interphase. 2

(Turn Over)

2. What is Go phase of cell cycle? 2
3. Differentiate between primary and secondary race. 2
4. Highlight some of the major characteristics used in racial classification. 2
5. Define Siamese twins. 2
6. Give two examples of numerical chromosomal aberrations with their chromosomal constituents. 2

### Group - B

Answer any *four* questions. 4×4

7. What are the basic difference between meiosis and mitosis? 4
8. Describe the Mendel's laws of inheritance with suitable examples. 4

9. Describe Indian racial classification as given by either S. S. Sarkar or B. S. Guha. 4
10. Outline the main points of the AAPA Statement on Race. 4
11. Write the karyotype of a normal female following Denver's system. 4
12. Write a short note on transcription. 4

**Group - C**

Answer any *two* questions. 2×8

13. Discuss briefly the stages of mitosis cell division. 8
14. What are the criteria of autosomal recessive inheritance with suitable examples? 8
15. What is quantitative trait? Human head shape may be used as a criterion of measuring population diversity - Illustrate the statement with suitable examples. 2+6

16. "Hybridization is an important factor for race formation" - Discuss with suitable examples. 8

*[Internal Assessment - 10 Marks]*

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