2022 M.Sc. Second Semester CORE – 05 ANTHROPOLOGY Course Code: MANC 2.11 (Formal Genetics)

Total Mark: 70 Time: 3 hours Pass Mark: 28

Answer any five questions from the following:

- Define human genetics. Briefly discuss the scope and branches of human genetics.
 2+12=14
- Give an account of Watson & Cricks double stranded model of DNA molecule. Do the two strands of DNA helix carry the same genetic information? Explain.
- How would you differentiate between lethal and sub-lethal genes?
 Substantiate with proper examples.
 7+7=14
- 4. What do you understand by chromosomal polymorphism? Explain with suitable examples. 2+12=14
- What do you understand by chromosomal aberrations? Explain in brief the different types of chromosomal aberrations and their effects on human genome.
 2+12=14
- 6. Give a brief account on the development of cytogenetics. What is the core area of interest in human cytogenetics? 7+7=14
- 7. Define translocation. What are the consequences of translocation on a human gene? Substantiate with proper example. 2+6+6=14
- 8. Write short notes on *any two* of the following: 7×2=14
 (a) Autoradiography

- (b) Association between blood and malaria
- (c) Phenylketonuria
- (d) Turner's syndrome
- (e) Mosaicism