

**2022**  
**M.Sc.**  
**Third Semester**  
CORE – 09  
**ANTHROPOLOGY**  
*Course Code: MANC 3.11*  
(Human Genetics & Variation)

*Total Mark: 70*  
*Time: 3 hours*

*Pass Mark: 28*

*Answer five questions from the following.*

1. Describe the concept of race in understanding human variation. 14
2. What is the difference between race and racism? Are they interrelated?  
Discuss briefly the different views of anthropologists on racism. 14  
 $5+4+5=14$
3. Explain in brief the importance of Mt DNA in the study of human ancestry. 14
4. Discuss briefly the adaptive significance of human variation to thermal environment. 14
5. Is Hardy Weinberg law applicable in human population? Explain. 14
6. Discuss in brief the usefulness of pedigree method in studying human population. 14
7. Explain briefly the occurrence of the following:  $7 \times 2 = 14$ 
  - (a) An Rh blood factor in man.
  - (b) An Rh<sup>+</sup> woman, one of whose parents was Rh<sup>-</sup>, marries an Rh<sup>-</sup> man. Are there any possibilities of having an Rh<sup>-</sup> children?
8. Write short notes on *any two*:  $7 \times 2 = 14$ 
  - (a) Discontinuous variation
  - (b) Gene flow
  - (c) Inbreeding and their genetic consequences
  - (d) Sex influenced characters
  - (e) Single nucleotide polymorphism (SNP)

