

M.A./M.Sc. Semester-IV Examination 2017
Anthropology
Paper : XXVI (Group-B)
(Biochemical Genetics)

Time : 3 Hours

Full Marks : 40

Questions are of value as indicated in the margin

Answer Question **No.6** and **any three** from the rest.

1. What is the molecular basis of MNS blood group? What are the frequencies of MNS blood group antigens in different ethnic groups? Discuss briefly the clinical significance of MNS antibodies. 3+2+5=10
 2. Briefly discuss the importance of twin study in human genetics? In a study conducted among 112 pairs of twins it was observed that out of 38 pairs of MZ twins 26 pairs concordant for Ulcer and out of 74 pairs of DZ twins 20 pairs were found to be concordant for ulcer. What conclusion can be drawn regarding the role of heredity and environment in determining the Ulcer from this findings. 6+4=10
 3. Discuss briefly the structure and function of hemoglobin. 10
 4. What is HLA? Briefly discuss the structure and function of HLA. 2+8=10
 5. Briefly discuss the structure of an immunoglobulin. Compare major characteristics of different human immunoglobulin. 7+3=10
 6. Write short notes on **any two** of the following : 5+5=10
 - (a) Compatible and incompatible mating
 - (b) Mt DNA
 - (c) VNTR
 - (d) Tf
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