

M.A/M.Sc. Examination 2018
Semester-IV
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. Define with suitable example compatible and incompatible mating. In a population of 300 individuals, 20 have 'A' blood group, 70 have 'B' blood group and 90 have 'O' blood group. Calculate the frequencies of 'A', 'B' and 'O' alleles in this population. 4+6=10
 2. What do you mean by in born error of metabolism? Briefly discuss the major categories of in born errors of metabolism. 3+7=10
 3. What do you mean by thalassemia? Discuss briefly about alpha and beta thalassemia. 2+4+4=10
 4. Write a note on structure, function and distribution of PGM. 10
 5. What is point mutation? Briefly discuss its causes and consequences. 2+8=10
 6. Write short notes on **any two** of the following : 5+5=10
 - a) Hemoglobin
 - b) Twin method
 - c) One gene one enzyme hypothesis
 - d) RFLP
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