

2019

MSc

4th / Semester Examination

ANTHROPOLOGY

PAPER – ANT-401(B)

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.

Answer Qs No. 1 and Three questions from the rest .

1. Answer **FIVE** questions from the following :

5x2

(a) Define cytogenetics .

(b) What is heretability ?

(c) What are the factors responsible for mate choice ?

(d) Define assortative mating with an example .

(e) What do you mean by consanguinity ?

(f) Define reproductive isolation .

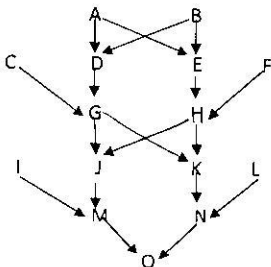
(g) Define polymorphism .

(h) What is genetic load ?

2. Write the inheritance pattern of a common autosomal dominant trait with a suitable pedigree . (10)

3. Discuss the importance of twin method in biological anthropology . (10)

4. What is inbreeding coefficient ? Calculate the inbreeding coefficient of 'O' from the following family tree. (3+7)



5. Mention the conditions required for a population in order to remain at Hardy-Weinberg Equilibrium. An allele 'M' for white Moth, is dominant over allele 'm', for black Moth . In a sample of 12000 Moths, 10500 are white and 1500 are black . Calculate the allele frequencies of 'M' and 'm' in this population, assuming that the population is in H-W equilibrium. (3+7)
6. Write briefly about the causes for change in gene frequencies . 10

(Internal Assessment – 10 marks)