2018

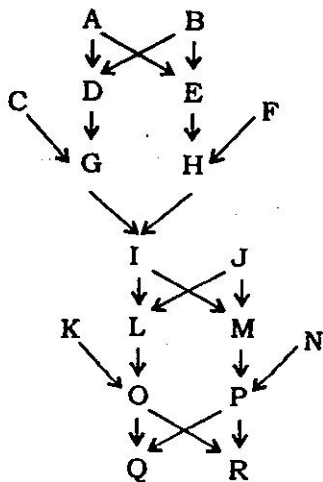## M.Sc. 4th Semester Examination

ANTHROPOLOGY

PAPER—ANT-401(Bio)

Subject Code—20

Full Marks : 50

Time : 2 Hours

The figures in the 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 Q. No. *1* and *three* questions from the rest.

1. Answer any *five* questions :   5×2

   (a) Define gene pool.

   (b) What is isolation by distance ?

   (c) Define random mating.

   (d) What is phenotype ?

   (e) Define hybridization.

   (f) What is inbreeding coefficients ?

   (g) What is gene flow ?

   (h) State Hardy-Weinberg law.

2. Define polymorphism. Briefly discuss different types of polymorphism. 2+8

3. Write the effect of preferential mating in human variation. "Human population mate randomly" — discuss. 5+5

4. Write the etiology and symptoms of klinefelter's syndrome. 10

5. Find inbreeding coefficient of "Q" from below : 10

6. In a population that is in HW equilibrium, 35% of the individuals are recessive homozygotes for a certain trait. In a population of 14,000, calculate the number of homozygous dominant individuals and heterozygous individuals. 10

[Internal Assessment — 10 Marks]