

2013

M.Sc.

3rd Semester Examination

ANTHROPOLOGY

PAPER—ANT-302

Full Marks : 40

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 Q. No. 1 and three questions from the rest.

- 1. Answers any five from the following : 2×5**
- (a) Define demography.
 - (b) Mention the sources of demographic data.
 - (c) State the characteristic features of demographic population.
 - (d) What is a population pyramid ?
 - (e) Distinguish between population and sample.
 - (f) Define probability.
 - (g) What is simple random sampling ?
 - (h) Write the formula of addition rule of probability.

(Turn Over)

2. (a) Discuss briefly the relationship between Demography and Anthropology. 5
 (b) Work out the all possible random samples from the population of scores 2, 4, 6, 8 with $n = 2$. 5
3. (a) State the disadvantages of crude death rate and crude birth rate. What are their merits? 5
 (b) What is the mathematical probability of India to win a cricket match against Australia? Work out the solution with the help of probability formula. How would you calculate the statistical probability of India winning a match against Australia?
 $2\frac{1}{2} + 2\frac{1}{2}$
4. (a) Define fertility and mention the different measures of fertility.
 (b) Calculate the probability of randomly selecting an adult individual whose height is more than 72 inches from a population with an average height of $\mu = 68$ inches and a standard deviation of 6 inches. 5
5. (a) Discuss briefly the essential features of demographic transition theory. 5
 (b) Scores obtained by students in an examination form a normal distribution with $\mu = 500$ and $\sigma = 100$. What value separates the top 15% of the examination scores from the rest of the distribution? 10
6. (a) State the essential arguments of the theory of population proposed by T.R. Malthus. 5
 (b) The following sample of $n = 10$ scores was obtained from a normal population with $\sigma = 12$. The scores in the sample are : 78, 90, 54, 77, 71, 99, 85, 74, 93, 84. Use these data to test the hypothesis that the population mean is $\mu = 75$. Use $\alpha = 0.05$ for the test. 5