

M.Sc. 3rd Semester Examination, 2014

ANTHROPOLOGY

PAPER— ANT - 302

Full Marks : 50

Time : 2 hours

Answer Q. No. 1 and three from the rest

The figures in the right-hand margin indicate marks

Candidates are required to give their answers in their own words as far as practicable

Illustrate the answers wherever necessary

1. Answer any *five* questions from the following : 2×5
 - (a) Mention two non-demographic variables which influence fertility.
 - (b) State two objectives of Demographic Anthropology.
 - (c) If a balanced coin is tossed two times, what

(Turn Over)

is the probability that you will get heads both times ? Show the probability by tabulating the outcomes.

- (d) Define fecundity and fertility.
 - (e) What is standard error ?
 - (f) What is 'child woman' ratio ?
 - (g) What is Type I error in statistics ?
2. (a) Describe a population pyramid with the help of a suitable diagram. 5
- (b) Write a short note on normal distribution. 5
3. (a) Enumerate the demand factors of fertility and briefly explain each factor. 5
- (b) Roy Rappaport reported that in his sample of 381 Tsembaga Marings of New guinea 91 were working on Lands on which they had no legal claim. What is the probability that any particular Tsembaga is working on his own land ? 5

4. (a) Define census and state its characteristic features. 4

(b) Suppose that the average birth weight for the population is $\mu = 2.9$ kg with $\sigma = 0.65$. A researcher would like to know if birth weights of infants are significantly different for mothers who smoked cigarettes during pregnancy. A random sample of women who smoked is selected and the birth weight of their infants is recorded. The data in Kilograms are as follows :

2.3, 2.0, 2.2, 2.8, 3.2, 2.2, 2.5, 2.4, 2.4, 2.1,
2.3, 2.6, 2.0, 2.3

What would the researcher conclude? Test the hypothesis at .01 level of significance. 6

5. (a) Explain how demography can help anthropologists to conduct biocultural studies. Give suitable examples. 6

(b) Compute the Pearson correlation for the following data : 4

(4)

<u>X</u>	<u>Y</u>
2	9
1	10
3	6
0	8
4	2

6. (a) Distinguish between birth order and parity with the help of hypothetical examples. 4
- (b) The data for observed frequencies of colour vision status according to sex is given below from a hypothetical population.

Observed Frequencies of colour vision status

	Normal	Red-Green	Other
Male	320	70	10
Female	580	10	10

Conduct a suitable statistical test at $\alpha = 0.05$. to test whether colours blindness has any relation with sex or not. Report the results of the statistical test. 6