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Sr. No. of Question Paper : 1635

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Roll No.....

Unique Paper Code : 215204

Name of the Paper : Paper : ANTH 206 – Biostatistics & Data Analysis

Name of the Course : B.Sc. ANTHROPOLOGY

Semester : II

Duration : 3 Hours

Maximum Marks : 75

Instructions for Candidates

1. Write your Roll No. on the top immediately on receipt of this question paper.
2. Answer any five questions.
3. All questions carry equal marks.

1. Giving suitable examples differentiate between qualitative and quantitative biological data.
2. Explain what is meant by the 'shape' of a frequency distribution. Sketch and explain: negatively skewed, symmetric, and positively skewed and a bimodal distribution.
3. Explain what a correlation coefficient is. Giving suitable examples, describe Pearson's correlation coefficient r , its distributional requirements, and interpret a given value of r .
4. The following terms relate to frequency tables. Define and explain each term :
 - (a) Class interval
 - (b) Class frequency
 - (c) Relative frequency percentage

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- (d) Cumulative frequency
- (e) Cumulative relative frequency
- (f) Cumulative percentage
5. Assume that the marks scored by a student in 10 subjects were 105, 17, 266, 183, 108, 76, 98, 222, 99 and 145. What are the arithmetic and geometric means for this data set ?
6. How are the mean, median, and mode interrelated ? What considerations lead to the choice of one of these measures of location over another ?
7. Why do statisticians need measures of variability ? State in your own words the definitions of the following measures of variability :
- (a) Range
- (b) Mean absolute deviation
- (c) Standard deviation
8. Data on MN Blood group distribution on two populations is as follows :

Blood type	Population A	Population B
M	60	40
MN	30	30
N	10	30

Find as to whether the two populations differ significantly or not from each other with respect to this blood group system. Tabulated value of chi-square at 1 degree of freedom at 5% probability level is 3.841.

9. Write short notes on any **two** of the following :
- (a) Nominal and ordinal variables
- (b) Regression
- (c) Tests of significance
- (d) Odds Ratio