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Your Roll No.

B.Sc. (H) Part-I Semester II

Unique Paper Code : 215204

Paper : ANTH 206 Biostatistics & Data Analysis

Set-II

E

Time : 3 hours

Max. Marks : 75

Attempt any five questions.
All questions carry equal marks.

- Q.1. What is central tendency? Explain different measures of central tendency.
- Q.2. Differentiate between range, mean deviation, variance and standard deviation.
- Q.3. Describe the tests of significance in statistics. Apply chi-square on the data given in Table-1 and provide relevant inferences:

Table-1: Relation of socio-economic status and anti-social behaviour

Socio-economic Status	Anti-social behaviour			Total
	Yes	No	No-opinion	
Upper class	28	14	5	47
Lower class	19	28	6	53
Total	47	42	11	100

*Chi-square tabular value at 0.05 level of significance and required degrees of freedom is 5.99

- Q.4. What is Student's *t* test? Discuss its application in biostatistics. Apply *t* test to find out the significant difference in mean test scores between males and females. The mean test score for females is 27.1 (standard deviation =2.57, n=19), and the mean test score for males is 26.7 (standard deviation=3.63, n=20). (tabular value for *t* distribution at 0.05 level of significance and required degrees of freedom is 2.02)
- Q.5. What do you understand by Coefficient of Variation? Explain the use of skewness and kurtosis in understanding normal distribution.
- Q.6. What is the relevance of application of computers in human genetics?
- Q.7. Discuss different types of variables used in biological anthropology with relevant examples.
- Q.8. What do you understand by graphs? Discuss various types of graphical representations used for data analyses.
- Q.9. Write short notes on any *two* of the following:
- Sample
 - Correlation
 - Confidence interval
 - Frequency distribution