KERALA AGRICULTURAL UNIVERSITY

B.Sc (Hons.) Ag. Degree Programme 2015 Admission
II[nd] Semester Final Examination-July 2016

Cat. No: Stat 1201 **Marks: 50.00**
Title: Basic Statistics (1+1) **Time: 2 hrs**

I Fill up the blanks/True or False **(10 x 1 =10)**

1. Coefficient of variation is a relative measure. (True/False)
2. Variance can be negative (True/False)
3. Correlation coefficient lies between -1 and +1 (True/False)
4. The upper limit of probability is _____ (Infinity/Unity)
5. Mean is equal to mode in a _____ Distribution (Binomial/Poisson)
6. Median divides the data arranged in ascending order into _____equal parts.
7. According to Sturges' rule , the number of classes (k) is given by: k = _____
8. Sum of absolute deviations is minimum when taken from _____.
9. In case of open end classes, an appropriate measure of dispersion to be used is _____
10. Probability of Type I error is called _____.

II Write short notes ANY FIVE **(5 x 2 =10)**

1. Distinguish between parameter and statistic.
2. Write short note on power of a test.
3. Write four properties of normal distribution.
4. Give the multiplication theorem of probability.
5. Distinguish between primary data and secondary data.
6. Write short note on coefficient of variation.
7. Distinguish between population and sample

III. Explain ANY FIVE of the following **(5 x 4 =20)**

1. Explain the concept of skewness. Draw the sketch of skewed frequency distributions and show the positions of mean, median and mode.
2. Define Karl Pearson's coefficient of correlation. Enumerate the properties of correlation coefficient.
3. Explain stratified random sampling.
4. Distinguish between (1) Diagrams and graphs.
   (2) Inclusive type and exclusive type classes. 3) Continuous and discrete variables.
5. Describe the procedure for test of significance for a single mean for large samples.
6. Explain the procedure for determining median for a frequency distribution.
7. Explain paired t test.

IV. Write essay on ANY ONE **(1 x 10=10)**

1. What are the properties to be satisfied by a good measure of central tendency? Explain the different measures of central tendency and give the situations under which each can be used.
2. Write an essay on regression analysis. Give any five differences between correlation and regression analysis.

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