

KERALA AGRICULTURAL UNIVERSITY

B.Sc. Hons (Ag) 2011 Admission
IInd Semester Final Examination, August 2012

Cat. No: Stat.1201
Title: Basic Statistics (1+1)

Marks: 80
Time: 3 hours

- I **State whether the following statements are TRUE or FALSE** (10x1=10)
- 1 The difference between the highest and lowest observations in a data set is called the inter quartile range
 - 2 The range of regression coefficient is -1 to +1
 - 3 For a symmetric distribution coefficient of skewness is zero
 - 4 When two dice are rolled the probability of getting the sum of the faces as 11 is one out of eighteen
 - 5 Level of significance is the probability of rejecting a true hypothesis
- Match the following**
- | | |
|----------------------------|-------------------------------|
| 6 Measure of dispersion | a Students't |
| 7 Statistic | b Frequency distribution |
| 8 Skewness | c Coefficient of variation |
| 9 Median | d Positional average |
| 10 Compressed data | e Shape of distribution |
| | f Correlation coefficient |
- II **Write short notes /answers on any TEN** (10X3=30)
- 1 Differentiate between census and sampling
 - 2 What do you mean by a measure of central tendency. Give examples
 - 3 Enumerate the different steps involved in forming a frequency table
 - 4 Describe the terms statistic and parameter in statistics
 - 5 What do you mean by a simple random sample?
 - 6 Write a short note on level of significance
 - 7 Differentiate between skewness and kurtosis
 - 8 Write down the multiplication theorem on probability
 - 9 Explain the term purposive sampling
 - 10 Enumerate the applications of F-test
 - 11 What do you mean by a systematic sample
 - 12 Bring out the significance of sampling distributions in analysing data

III Write short essays on ANY SIX of the following (6x5=30)

- 1 Explain the significance of correlation coefficient in determining the association between variables
- 2 What is a probability distribution? Explain . Give at least two examples
- 3 Give a brief account on cluster sampling. Illustrate a situation in agriculture where this method of sampling is used.
- 4 Enumerate the important characteristics of normal probability distribution.
- 5 Write a short essay on poisson distribution
- 6 List out the important characteristics of a good measure of dispersion.
- 7 Briefly explain the uses and limitations of Statistics.
- 8 Describe the different types of graphs used in presenting statistical data.

IV Write essay on ANY ONE (1x10=10)

- 1 Explain the significance of analysis of variance in analysing experimental data. Describe the steps involved in analysing a two-way classified data.
- 2 Write a detailed essay on the steps involved in testing a hypothesis, explaining the terms used.