



KERALA AGRICULTURAL UNIVERSITY
B.Sc (Hons.) Agriculture 2012 & Previous Admissions (Old Scheme)
II Semester Re-Examination-July-2017

Stat.1201

Basic Statistics (1+1)

Marks: 80
Time: 3 hours

I Fill up the blanks/ State true or false, if false please correct it (10x1=10)

- 1 Data originally collected by an investigator is called ----- while, that obtained from a recorded source is called -----
- 2 Intersection of Ogives enables to calculate an approximate value for-----
- 3 In a frequency distribution, the class with the highest frequency is known as ----- class
- 4 Father of Modern Statistics is -----
- 5 ----- separates the acceptance region from the rejection region.
- 6 The sum of squares of deviation from arithmetic mean is a maximum
- 7 In a symmetric frequency distribution, mean < median < mode.
- 8 The harmonic mean of n numbers is the reciprocal of the arithmetic mean of the reciprocals of the numbers
- 9 A high value of Coefficient of variation implies high level of consistency
- 10 When the population is homogeneous, we go for stratified sampling.

II Write short notes on any TEN (10x3=30)

- 1 Positive and inverse correlation
- 2 Coefficient of variation and coefficient of determination
- 3 Mutually exclusive and independent events
- 4 Paired t-test
- 5 Standard normal distribution
- 6 Simple random sampling
- 7 Merits and demerits of sampling over census
- 8 Type I and Type II errors
- 9 One tailed and two tailed tests
- 10 Test of equality of variances
- 11 Yates correction for continuity
- 12 Rank Correlation

III Answer any SIX

(6x5=30)

- 1 Mention the different measures of central tendency, point out their merits and demerits
- 2 Illustrate Addition and Multiplication theorems in probability.
- 3 Write down the probability functions of Binomial, Poisson and Normal distributions, specifying the parameters.
- 4 Illustrate χ^2 test for testing the independence of attributes.
- 5 Explain the method of testing hypothesis about the equality of means, under the assumption that variances are equal.
- 6 Illustrate Cluster Sampling
- 7 Discuss the steps involved in Testing of Hypothesis.
- 8 Define dispersion. Explain important measures of dispersion with formulae.

IV Write essay on any ONE

(1x10=10)

- 1 Explain one- way analysis of variance.
- 2 What do you mean by large sample test? Give the procedure for one sample and two sample Z tests.
