



KERALA AGRICULTURAL UNIVERSITY  
B.Tech.(Food. Engg.) 2016 Admission  
V Semester Final Examination-January 2019

Basc.3110

Statistics (1+1)

Marks: 50  
Time: 2 hours

**I Choose the correct answer (10x1=10)**

- 1 Which of the following is a measure of central value?  
a Median                      b Mean                      c Mode                      d Quartile deviation
- 2 Type I error is also known as  
a Level of significance    b Power of the test    c One tailed test    d Two tailed test
- 3 Which measure of dispersion ensures lowest degree of reliability?  
a Range                      b Mean deviation    c Quartile deviation    d Standard deviation
- 4 A family of parametric distribution in which mean is greater than variance is:  
a Binomial                      b Gamma                      c Normal                      d Poisson
- 5 One way ANOVA is the example of  
a RBD                      b CRD                      c LSD                      d FRBD

**State True or False**

- 6 If the observations are infinite we can go for Lottery method.
- 7 In F-statistic  $S_1^2$  and  $S_2^2$  are unbiased variances.
- 8 In normal distribution skewness is zero.
- 9 When the heterogeneous population is divided into homogeneous sub groups, such group is called strata.
- 10 As the sample size increases the sampling distribution of the sample mean approaches the Binomial distribution

**II Write Short notes on any FIVE of the following (5x2=10)**

- 1 Parameter and Statistics
- 2 Characteristics of Normal Distribution. (any Three)
- 3 Type I and Type II error
- 4 Paired-t-test.
- 5 np chart.
- 6  $\chi^2$  test.
- 7 One way ANOVA.- Definition and its model

**III Answer any FIVE of the following. (5x4=20)**

- 1 Skewness and Kurtosis
- 2 Scatter diagram.
- 3 Probability and its laws.
- 4 Testing procedure of test for single mean.
- 5 Correlation analysis.
- 6 Normal distribution.
- 7 X-bar chat.

**IV Answer any ONE of the following (1x10=10)**

- 1 Basic principles of experimental design.
- 2 CRD

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