



KERALA AGRICULTURAL UNIVERSITY
B.Sc. (Hons.) Ag. 2016 admission
VI Semester Final Examination - July-2019

tat.3202

Statistical methods and applications (2+1)

Marks: 50
Time: 2 hours

I Fill in the blanks **(10x1=10)**

- 1 If p-value is 0.0025, then it is significant at..... level.
- 2 In 4 x 4 Latin Squared Design (LSD), the total degrees of freedom is
- 3 The sum of deviations of individual observations is zero from
- 4 The probability of drawing any of these N^n samples is.....
- 5 Residual effect is also called as.....
- 6 F-distribution was discovered by.....
- 7 Standard Deviation of Binomial distribution is.....
- 8 If Mean=15 and Median=17 then Mode is
- 9 The type of correlation between supply and demand is.....
- 10 The standard error of difference between the treatments is.....

II Write short notes on ANY FIVE of the following **(5x2=10)**

- 1 Type I and Type II Error.
- 2 Addition theorem and Multiplication theorem of probability.
- 3 Coefficient of Variation (CV).
- 4 Standard Error (SE).
- 5 Binomial distribution.
- 6 Sampling unit and sampling frame.
- 7 Experimental unit.

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

- 1 Define Correlation. Explain types of correlation.
- 2 Explain test procedure of F-test.
- 3 Define Statistics. Explain importance of statistics in different sectors.
- 4 Define measure of central tendency.
- 5 Explain test procedure of paired t-test.
- 6 Explain assumptions of one way ANOVA.
- 7 Explain layout of Latin Square Design and its merits.

IV Write an essay on ANY ONE of the following **(1x10=10)**

- 1 Explain layout and test procedure for Randomized Block Design (RBD).
- 2 What is Chi-square test? Write its uses in Agriculture and test procedure of Yate's correction test.
