KERALA AGRICULTURAL UNIVERSITY
B.Sc (Hons.) Agriculture 2014 & Previous Admissions
VI Semester Final Examination-August-2017

Stat.3203   Design and Analysis of Experiments (1+1)

Marks: 50
Time: 2 hours

I   Define the following   (10x1=10)
1. Tests of Hypothesis
2. ANOVA
3. Contrast
4. Border effects
5. Randomization
6. Experimental unit
7. Experimental error
8. ANOCOVA
9. Confounding
10. Strip-plot Design

II   Write short notes on any FIVE   (5x2=10)
1. Multiple comparison tests
2. Replication
3. Uniformity trials
4. CRD
5. Tuckey's test for pair wise treatment comparisons.
6. Yates' algorithm
7. Main effects and Interaction effects.

III   Answer any FIVE   (5x4=20)
1. Discuss the basic principles of experimental designs.
2. When is Latin Square Design preferred? Discuss its layout and analysis.
3. What are factorial experiments? Discuss its advantages.
4. An experiment was laid out in a Randomised Block Design to compare three varieties of Paddy and to study the response of these varieties to four different doses of ammonium sulphate. There were five replications. Describe how will you proceed to analyse the data from the experiment to achieve the objectives.
5. Distinguish between Split-plot design and Strip-plot design.
6. Write a comprehensive note on Experiments in Cultivators' field.
7. Explain the complete procedure of Analysis of One-way classified data.

IV   Write essay on any ONE   (1x10=10)
1. What do you understand by transformation of data? Explain the commonly used transformations for the analysis of data from agricultural experiments.