



KERALA AGRICULTURAL UNIVERSITY
B.Tech.(Food Engg. & Technology)
VII Semester Re- Examination – February 2023
2019 Admission

Basc.3110

Statistics (1+1)

Marks: 50
Time: 2 hours

I Fill in the blanks

(10x1=10)

1. The number of times a treatment is repeated in an experiment is called its
2. Any population constant is called a
3. In a symmetrical distribution, the coefficient of skewness is

Choose the correct answer

4. Which of the following is a measure of central value?
(a) Median
(b) Mean
(c) Mode
(d) Quartile deviation
5. Type I error is also known as
(a) Level of significance
(b) Power of the test
(c) One tailed test
(d) Two tailed test

State True or False

6. A normal curve is completely defined by the mean and the standard deviation.
7. Professor R.A. Fisher is referred as the Father of Statistics.
8. The value of median and mode can be determined graphically.
9. The observations are infinite we can go for Lottery method.
10. Regression analysis reveals average relationship between two variables.

II Write short notes on ANY FIVE of the following

(5x2=10)

1. Define Type – I and Type – II error.
2. One-way ANOVA- Definition and its model
3. Define null and alternative hypotheses.
4. What is Randomized Block Design?
5. Explain Paired-t-test
6. Give different measures of skewness.
7. What is an orthogonal polynomial?

III Answer ANY FIVE of the following

(5x4=20)

1. What do you understand by 'Design of Experiments'? Write three basic principles of Design of Experiments.
2. Explain the procedure of constructing R-chart.
3. Explain probability and its laws
4. Define Normal distribution. Write on its properties.
5. State the conditions under which a binomial distribution is used.
6. Explain nonlinear regression.

7. What is a Scatter diagram? How is it constructed?

IV Write an essay on ANY ONE of the following

(1x10=10)

1. Discuss briefly the different applications of Chi-square as test statistic.
2. Write analysis of Variance of Randomized Complete Block Design.
