

KERALA AGRICULTURAL UNIVERSITY B.Tech.(Food Engg.) 2019 Admission V Semester Final Examination-January 2022

Basc.3110

Statistics (1+1)

Marks:50
Time: 2hours

				Time anouts
I		Choose the correct answer		(10x1=10)
	1.	Probability ranges from to		
		a) 0 to 1	b)	-1 to 1
		c) $-\infty$ to $+\infty$	d)	0 to -1
	2.	2. A statement made about a population for testing purpose is called		
		a) Statistics		Hypothesis
		c) Level of Significance	d)	Test-Statistics.
	3.	A statement whose validity is tested on the basis of sample is called		
		a) Null Hypothesis	b)	Statistical Hypothesis
		c) Simple Hypothesis	d)	Composite Hypothesis
	4.	Which Chi-Square distribution looks the mos	st like	a normal distribution?
		a) A Chi Square distribution with 4	b)	A Chi Square distribution with 5
		degrees of freedom.		degrees of freedom.
		c) A Chi Square distribution with 6	d)	A Chi Square distribution with 16
		degrees of freedom.		degrees of freedom.
	5.			
		colours of chocolates were equally likely to be put in the bag, what would be the expected		
		number of chocolates of each colour?		
		a) 12	b)	
		c) 20	d)	9
	6.	$E(X) = \lambda$ is for which distribution?		
		a) Bernoulli's		Binomial
		c) Poisson's	,	Normal
	7.	J 1		
		a) Level of Confidence.		Level of Significance.
		c) Level of Margin	d)	Level of Rejection.
	8.	Type 1 error occurs when?		
		a) We reject H0 if it is True.		We reject H0 if it is False.
		c) We accept H0 if it is True.	d)	We accept H0 if it is False.
	0	State True or False		
	9.	The Variance of Chi Squared distribution is given as 'k', where 'k' is degrees of freedom.		
	10	Fill in the blanks		
	10.	Mean of a Standard normal distribution is	-	
II		Write short notes on ANY FIVE of the following	lowing	(5x2=10)
	1.	What is testing of hypothesis?		
	2.	What is Chi square test?		
	3.	How to use control charts?		
	4.	Define probability.		
	5.	What is meant by Regression?		

- 6. Define Skewness.
- 7. Write short note about Poisson distribution.

III Answer ANY FIVE of the following

(5x4=20)

- 1. How to perform fitting by orthogonal polynomial using iterative methods?
- 2. Write about the significance of means using t-test.
- 3. How to test the goodness of fit? Explain with example.
- 4. Explain the basic concepts of correlation.
- 5. Describe the addition law of probabilities.
- 6. Write briefly about the measures of dispersion.
- 7. Elaborate the concept of p and np charts with suitable examples.

IV Write an essay on ANY ONE of the following

(1x10=10)

- 1. Explain the randomized block design (RBD) with suitable example.
- 2. Describe the Chi-Square testing using examples.
