

**KERALA AGRICULTURAL UNIVERSITY**  
**B.Sc.(Hons.) Agriculture – 2008 Admission - II<sup>nd</sup> Semester**  
**Supplementary Examination - March 2010**

Cat. No. : Stat 1201

Max. marks: 80

Title : **Basic Statistics (1+1)**

Time : 3 hours

**I. Match the following:**

(7x0.5=3.5)

A	B
a Probability	1. Two outcomes
b Upper limit of 'r'	2. Rejecting $H_0$ when it is true
c Normal Curve	3. Asymmetry of the distribution
d Skew ness	4. Non Negative
e Coefficient of Variation	5. + 1
f Type- I Error	6. Relative measure of dispersion
g Binomial variable	7. Bell shaped Curve

**II. Fill up the blanks:**

(8 X 0.5 =4.0)

1. In tossing 3 fair coins the probability of getting 2 heads is \_\_\_\_\_
2. Expanded form of RBD -----
3. The difference between upper and lower limit of a class is called -----
4. Set of all possible out come of the experiment is known as -----
5. In 2 X 2 contingency table the degree of freedom for Chi square is -----
6. If A and B are independent, then  $P(A \cup B) =$  -----
7. The longer tail of the positively skewed curve lies towards -----
8. Parameters of Normal distribution is \_\_\_\_\_

**III. State TRUE or FALSE :**

(5 X 0.5 =2.5)

- 1) Total area under normal curve is more than one.
- 2) Mean is based on all the values in the data.
- 3) If C.V.is less, it is more consistent..
- 4) The second central moment is variance..
- 5) Mean of a binomial distribution is 20 for  $P = \frac{1}{2}$  then the standard independent.

**IV. Define the following.**

**(10 X 1 = 10)**

- |                              |                               |                    |            |                      |
|------------------------------|-------------------------------|--------------------|------------|----------------------|
| (1) Coefficient of variation | (2) Probability Mass function |                    |            |                      |
| 3) Correlation Coefficient   | 4) Median                     | (5) Geometric Mean |            |                      |
| (6) Parameter                | 7) Moments                    | (8) Kurtosis       | (9) Sample | (10) Critical Region |

**V. Write short notes on (ANY TEN)**

**(10 X 2 = 20)**

1. Write properties of Arithmetic Mean.
2. Write the two merits and demerits of Arithmetic mean.
3. Skew ness.
4. Test of independence
5. Write the difference between mean deviation and standard deviation
6. One tailed and two tailed test
7. What are the assumptions made in the binomial distribution
8. What is a least square technique?
9. Write the function of poisson distribution and mention the utility
10. Brief the types of correlation with suitable example
11. Write any four properties of regression coefficient
12. Distinguish between parameter and statistic

**VI Write short essays on ANY FOUR of the following**

**(4 X 5=20)**

1. Normal distribution
2. Chi square test and its utility
3. Rank Correlation and coefficient of concordance
4. One sample test and two sample test
5. Different Measure of Dispersion
6. One way and two way anova

**VII. Write essays on ANY TWO**

**(2x10=20)**

1. Different Types of Sampling
2. Normal Distribution
3. Different measures of Central Tendency