Glossary

1. Function

It is a quantity whose value depends on the value given to one or more related quantities.

2. Probability

A number expressing the likelihood that a specific event will occur expressed as the ratio of the number of actual occurrences to the number of possible occurrences.

3. **Mean**

It is the average value of a set of numbers.

4. Variance

It is the square of the standard deviation.

5. Bernoulli variable

A random variable X which assumes values 1 and 0 with respective probabilities p and q = 1-p is called Bernoulli variable.

6. Mean deviation

It is the difference between an observed value of a variable and it's mean

7. Moment

It is the expected value of a positive integral power of a random variable. The first moment is the mean of the distribution.

8. Skewness

It is non symmetrical about the mean.

9. Kurtosis

It is the general form or a quantity indicative of the general form of a statistical frequency curve near the mean of the distribution.

10. Random variable

It is a variable whose values are random but whose statistical distribution is known.

11. Probability Mass Function

Let S be the set of integers, then probability mass function of the discrete uniform distribution having n values is given by,

p(x) = 1/n, a < x < b

= 0 otherwise

12. Cumulative

Of or relating to the sum of the frequencies of experimentally determined values of a random variable that are less than or equal to a specified value.

13. Variate

It is a random variable with a numerical value that is defined on a given sample space.

14. Dichotomised

It is to separate into two parts or classifications.

15. Biased Coin

In probability theory and <u>statistics</u>, a sequence of <u>independent Bernoulli trials</u> with probability 1/2 of success on each trial is metaphorically called a fair coin. One for which the probability is not 1/2 is called a biased or unfair coin.