Glossary

1. **Bivariate**
   Involving two random variables.

2. **Conditional Probability Distribution**
   Given two jointly distributed random variables X and Y, the conditional probability distribution of Y given X is the probability distribution of Y when X is known to be a particular value.

3. **Discrete**
   Defined for a finite or countable set of values.

4. **Distribution**
   A set of numbers and their frequency of occurrence collected from measurements over a statistical population.

5. **Factorial**
   It is the product of all the positive integers from one up to and including a given integer.

6. **Function**
   A variable so related to another that for each value assumed by one there is a value determined for the other.

7. **Integer**
   A member of the set of positive whole numbers {1, 2, 3, . . .}, negative whole numbers {-1, -2, -3, . . . }, and zero {0}.

8. **Integral**
   It is the limit of an increasingly large number of increasingly smaller quantities, related to the function that is being integrated (the integrand).

9. **Marginal Distribution**
   In probability theory and statistics, the marginal distribution of a subset of a collection of random variables is the probability distribution of the variables contained in the subset.

10. **Parameter**
    A quantity, such as a mean, that is calculated from data and describes a population.

11. **Probability**
    A number expressing the likelihood of the occurrence of a given event, especially a fraction expressing how many times the event will happen in a given number of tests or experiments.

12. **Random Variable**
    In probability and statistics, a random variable or stochastic variable is a variable whose value is not known.

13. **Summation**
    The act or process of determining a sum.

14. **Two-Dimensional**
    A shape that only has two dimensions (such as width and height) and no thickness.

15. **Variable**
    A quantity capable of assuming any of a set of values.