Glossary

1. **Arithmetic Progression**
   A sequence, such as the positive odd integers 1, 3, 5, 7. . . in which each term after the first is formed by adding a constant to the preceding term.

2. **Autocorrelation**
   It is the condition occurring when successive items in a series are correlated so that their covariance is not zero and they are not independent.

3. **Circular Systematic Sampling**
   This scheme is slightly modified to get a sample of constant size. The procedure consists of selecting a unit by a random start from 1, 2…,N. Thereafter, selecting every k^{th} unit, for k being an integer nearest to N/n in a circular manner until a sample of size n units is obtained.

4. **Cluster**
   It is a group of the same or similar elements gathered or occurring closely together.

5. **Linear Systematic Sampling**
   This procedure, a sample comprises of the unit r, r + k, r+2k, …, r+(n-1)k. This technique will generate k systematic samples with equal probability, which is equal to 1 / k. Under systematic sampling, let y_{ri} be the ith unit corresponding to the rth sample, where
   r=1, 2,….,k
   i=1, 2,…..,n

6. **Repeated Systematic Sampling**
   Repeated systematic sampling involves the selection of multiple samples from the target population and then combining them into a single sample. Instead of only one random start, several smaller systematic samples are selected using multiple random starts. This makes the process more time-consuming compared to linear systematic sampling.

7. **Periodicity**
   It is the quality of recurring at regular intervals.

8. **Population**
   It is the set of individuals, items, or data from which a statistical sample is taken.

9. **Predetermined**
   To influence or sway toward an action or opinion.

10. **Probability**
    It is 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.

11. **Sample Size**
    It is the number of elements in the sample.

12. **Sampling Frame**

A sampling frame is the source material or device from which a sample is drawn. It is a list of all those within a population who can be sampled, and may include individuals, households or institutions.

13. Sampling
Sampling is concerned with the selection of a subset of individuals from within a population to estimate characteristics of the whole population.

14. Systematic Sampling
Systematic sampling is a probability sampling procedure, in which first element of the sample is randomly selected and then the subsequent elements are selected using a fixed or systematic interval until the desired sample size is reached.

15. Truncate
It is to shorten (a number) by dropping one or more digits after the decimal point.