## **Summary**

- Simple random sampling is a method of selecting n units from a population of size N such that every possible sample of size n has equal chance of being drawn
- The methods of selection of simple random samples are:
  - The lottery method
  - Random numbers method
  - Using computers
- The Lottery method is an old classical method but it is a powerful technique and modern methods of selection are very close to this method
- The lottery method is quite time consuming and cumbersome to use if the population is sufficiently large.
- When the population is of large size we use random numbers to draw samples. Random numbers are the numbers obtained by random sampling and recorded by the Statisticians
- We have three procedures for selecting random samples for many populations.
  - Ungrouped Data
  - Grouped Data ( Frequency Distribution)
  - Contingency Table
- SRS can be terribly inefficient, and particularly difficult when large samples are needed
- SRS is essential, both as a method and as an easy-to-understand method of selecting a sample