## **Summary**

- In sampling surveys there would naturally be certain amount of inaccuracy in the information collected, there is a tendency of a sample estimator to systematically over-or under-estimate a population parameter
- Errors often occur when the survey sample does not accurately represent the population. The bias that results from an unrepresentative sample is called selection bias
- Biased errors are the errors arise from any bias in selection, estimation etc.
- Unbiased errors are the errors arise due to chance differences between the members of the population included in the sample and those not included
- Voluntary response bias occurs when sample members are self-selected volunteers, as in voluntary samples
- Variability among statistics from different samples is called as sampling error
- Sampling errors can be controlled by (1) Careful sample designs, (2) Large samples, and (3) Multiple contacts to assure representative response
- Non response error arises when some of the potential respondents included in the sample do not respond
- Proper care should be taken in the planning and execution of the sample survey otherwise the results obtained may be inaccurate and misleading
- Sampling theory requires the services of experienced, trained and qualified personnel and sophisticated equipment for its planning, execution and analysis