

CHAPTER 5 - DATA COLLECTION AND SAMPLING

MULTIPLE CHOICE QUESTIONS

In the following multiple-choice questions, please circle the correct answer.

- 5-01. A marketing research firm selects a random sample of adults and asks them a list of questions regarding their beverage preferences. What type of data collection is involved here?
- An experiment.
 - A survey.
 - Direct observation.
 - None of these choices.
- 5-02. Which of the following must be avoided in designing a survey?
- Dichotomous questions.
 - Leading questions.
 - Demographic questions.
 - All of these choices are true.
- 5-03. Which method of data collection is involved when a researcher counts and records the number of students wearing backpacks on campus in a given day?
- An experiment.
 - A survey.
 - Direct observation.
 - None of these choices.
- 5-04. A researcher conducts a study where she divides subjects into two groups, gives each group a certain treatment, and records their responses. What type of data collection is being used here?
- An experiment.
 - Direct observation.
 - A survey.
 - A census.

- 5-05. Which of the following data collection methods is not observational?
- A personal interview.
 - A telephone interview.
 - A self-administered questionnaire.
 - An experiment.
- 5-06. The difference between a sample mean and the population mean is called:
- nonresponse error.
 - selection bias.
 - sampling error.
 - nonsampling error.
- 5-07. When the population is divided into mutually exclusive sets, and then a simple random sample is drawn from each set, this is called:
- simple random sampling.
 - stratified random sampling.
 - cluster sampling.
 - selection bias.
- 5-08. A pharmaceutical company interested in measuring how often physicians prescribe a certain drug has selected a simple random sample from each of two groups: M.D. (Medical Doctors) and D.O. (Osteopaths). What is this type of sampling called?
- Simple random sampling.
 - Cluster sampling.
 - Stratified random sampling.
 - None of these choices.

- 5-09. When every possible sample with the same number of observations is equally likely to be chosen, the result is called a:
- simple random sample.
 - stratified random sample.
 - cluster sample.
 - biased sample.
- 5-10. Which of the following types of samples should not be used to make good statistical inferences from a sample to a population?
- Stratified random samples.
 - Self-selected samples.
 - Cluster samples.
 - All of these choices are true.
- 5-11. Which of the following causes sampling error?
- Taking a random sample from a population instead of studying the entire population.
 - Making a mistake in the process of collecting the data.
 - Nonresponse bias.
 - All of these choices are true.
- 5-12. The mean age of all students at York University is 24 years. The mean age of a random sample of 100 students selected from this university is found to be 24.6 years. The difference $24.6 - 24 = 0.6$ is called the:
- probability error
 - nonsampling error
 - sampling error
 - population error

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- 5-13. To give away a door prize, the host of a dinner party put each person's name into a hat, mixed them up, and selected one name. What sampling method was used?
- Simple random sample
 - Systematic sample
 - Stratified random sample
 - Cluster sample
- 5-14. Which of the following situations lends itself to cluster samples?
- When it is difficult to develop a complete list of the population members.
 - When the population members are widely dispersed.
 - When selecting and collecting data from a simple random sample is too costly.
 - All of these choices are true.
- 5-15. Which of the following describes selection bias?
- A leading question is selected for inclusion in the survey.
 - Some members of the target population are excluded from possible selection for the sample.
 - A person selected for the sample has a biased opinion about the survey.
 - All of these choices are true.

Chapter 5 MCQ Answer Key

5-01 b	5-02 b	5-03 c	5-04 a	5-05 d	5-06 c	5-07 b	5-08 c	5-09 a	5-10 d
5-11 a	5-12 c	5-13 a	5-14 d	5-15 b					