SPRING MIDTERM #1

SAMPLING SURVEY GLOSSARY

1. Natural Setting	1. Observing or gathering data from subjects in their "real life" environment.
2. Contrived Setting	2. Observing or gathering data from subjects being studied is artificially created by the observer.
3. Disguised Observation	3. Subjects do not know they are being observed in the data collection process.
4. Non- Disguised Observation	4. Subjects do not know they are being observed in the data collection process.
5. Human Observation	5. Human beings collect data for a study.
6. Mechanical Observation	6. Computers or other non-human devices collect data for a study.
7. Direct Observation	7. Observing or gathering data by looking at the actual behavior or occurrence.
8. Indirect Observation	8. A data gathering strategy used when observations cannot be made by direct means, or when gathering the data through direct observation tends to be too expensive.
9. Structured Observation	9. Observing or collecting data that can be organized into predictable groups so the observer can record the data by checking off category boxes and/or by filling in numerical data on an observation form.
10. Non- Structured Observation	10. Observing or collecting data that cannot be organized into predictable groups. The observer records everything that occurs but does not look for specific facts or actions.
11. Population	11. Set of all observations that can be made. In a sampling survey of human subjects, it is all members of the group being studied but not all of these members contribute data to the study.
12. Sample	12. Subset of observations drawn from a population. In a sampling survey of human subjects, it is the members from whom data is actually gathered.
13. Census	13. A study that obtains data from every member of a population.
14. Sample Survey	14. A study that obtains data from a subset of a population, in order to estimate population parameters such as population means or population proportions.
15. Experiment	15. A controlled study in which the researcher attempts to understand cause-and-effect relationships.
16. Observational Study	16. A study in which a researcher observes behavior in a systematic manner without influencing or interfering with the behavior of the subjects.

17. Causation	17. Determining that one event directly influences another event. For this conclusion to be drawn in statistics, an experiment must carefully control assignment of subjects to treatment groups in order to isolate the influences on the variable.
18. Generalization	18. The appropriateness of applying the results from a sampling survey to a larger population.
19. Resources	19. The labor and supplies required to perform a sample survey or census.
20. Parameter	20. A measurable characteristic for a population, such as a mean or a standard deviation or normal shape.
21. Statistic	21. A characteristic from a sample that is used to estimate an unknown population parameter.
22. Non-Probability Samples	22. Methods of data collection which are not random and do not allow you to estimate the extent to which sample statistics are likely to differ from population parameters
23. Voluntary Sample	23. A sample where subjects self-select themselves for participation in a survey. Does not meet the requirements of random.
24. Convenience Sample	24. A sample where subjects are chosen by the data collector, usually based on being in close proximity. Does not meet the requirements of random.
25. Probability Samples	25. Samples that are gathered using methods where probability theory can be applied in inference procedures.
26. Simple Random Samples	26. A sampling method where probability theory can be applied in inference procedures. It requires that all possible samples of size "n" objects are equally likely to occur.
27. Stratified Random Samples	27. A sampling method where the population is divided into groups (called strata), then a random sample is drawn from each strata. When well designed, this sampling method will allow probability theory to be applied in inference procedures.
28. Cluster Samples	28. A sampling method where an inventory of all members of a population exists. This sampling method selects every "n_{th}" member from the inventory with the starting point for the first selection randomly determined.
29. Multistage Samples	29. Selecting a sample by using a combination of different sampling methods. Most commonly used in situations where the population is large, and not concentrated in a small geographic region.
30. Undercoverage Bias	30. A type of selection bias that occurs when some members of the population are inadequately represented in the sample making them less likely to be chosen in the sample.
31. Nonresponse Bias	31. When individuals chosen for the sample are unwilling or unable to participate in the survey, and their lack of participation results in undercoverage of certain groups who are less inclined to respond to a survey. Does not meet the definition of random.

32. Voluntary Response Bias	32. Sample members self-select themselves, and their participation results in certain groups being more likely to be included in the sample. Does not match the definition of random.
33. Random Sampling	33. Sampling from a population where selection of a sample is based on chance. Required for probability-based inference procedures.
34. Response Bias	34. The bias that results from a subject's response to a sampling survey being influenced by perceived judgments of the interviewer or peers who will be aware of their survey responses.
35. Leading Questions	35. A form of response bias where the wording or presentation of the question influences the subject's response thereby favoring one group of responses over others.
36. Social Desirability	36. A form of response bias where a subject alters their response because they perceive that their peers may negatively judge their true response. This form of bias is particularly prevalent when people are asked to admit unsavory attitudes or illegal activities, and survey results are not anonymous and confidential.
37. Sampling Error	37. The unavoidable error that results from examining a sample to estimate a population parameter, compared with calculating the actual parameter value from a census of the entire population.
38. Accuracy	38. The difference between a sample statistic to a population parameter.
39. Population Parameter	39. The true value of a population attribute such as a mean or proportion.
40. Sample Statistics	40. An estimate of a population parameter using a sample such as a sample mean or sample proportion.
41. Precision	41. A characteristic of a statistical procedure that describes how narrowly an estimate can be expressed. It is inversely related to the level of significance chosen for the procedure.
42. Standard Error	42. An estimate of the standard deviation for a sampling distribution.
43. Margin of Error	43. A measure of the amount of random sampling error in a confidence interval. It is added and subtracted from the estimate.
44. Natural Clusters	44. A subdivision of a population that is useful for choosing samples. For example, city blocks, schools, hospitals, etc.
45. Heterogeneous Clusters	45. Groups of people, events, or objects that are unlike each other.
46. Proportionate Stratification	46. The sample size of each strata is proportionate to the population size of the strata.
47. Disproportionate Stratification	47. The sample size of each strata is not proportionate to the population size of the strata.
48. Homogeneous Strata	48. Strata where its members are similar to each other with respect to an influential characteristic of the population.