TEST BANK

PART A
Section 1

1) Empirical approach refers to acquiring knowledge based on
   a. Theory
   b. Observation
   c. Intuition
   d. Agreement with others

2) The difference between empirical research and everyday observations is _____.
   Answer: EMPIRICAL RESEARCH IS PLANNED IN ADVANCE

3) For an empirical research, the researcher plans
   a. What to observe
   b. Whom to observe
   c. How to observe
   d. When to observe
   e. Observations under particular circumstances
   f. All of the above

4) If the population being observed is large, the researcher
   a. Observes the entire population
   b. Observes a sample of the population
   c. Changes the research question
   d. Changes the observation plan

5) What is a possible constraint of a research plan?
   a. Physical
   b. Ethical
   c. Legal
   d. Financial
   e. All of the above

6) Which term is NOT used to refer to individuals being observed?
   a. Subjects
   b. Participants
   c. Respondents
   d. Population

7) Flawed research can be
   a. Interesting
   b. Helpful
   c. Misleading
   d. Vital

8) True or False: The term "participants" is used when individuals have consented to participate.
ANSWER: TRUE

9) True or False: Timing and circumstances of the observations are two things that will not affect the results. ANSWER: FALSE, THEY MAY AFFECT THE RESULTS

10) Fill-in-the-blank: The term _____ is appropriate to use to refer to those who did not consent to observations such as animals. ANSWER: SUBJECTS

Section 2

1) In an experimental study on friendliness and tipping, every alternate customer to whom the waiter is extra friendly toward are referred to as the
a. Control group
b. Experimental group
c. Nonexperimental group
d. Dependent group

2) Fill-in the-blank: Which is the independent variable and which is the dependent variable. The treatment is called the _____ variable while the response is called the _____variable. ANSWER: INDEPENDENT, DEPENDENT

3) The purpose of experiments is to identify
a. Outcome of something
b. Independent variable
c. Conclusion
d. Cause-and-effect- relationships

4) True or False:
a. A nonexperimental study is one in which multiple treatments are administered.
ANSWER: FALSE, NO TREATMENTS ARE ADMINISTERED

b. Unless the experimental research is properly planned with appropriate control conditions including a control group, there may be many alternative explanations for the results of an experiment.
ANSWER: TRUE

c. The purpose of a non-experimental study is to determine the status of what exists at a given point in time without administering treatments.
ANSWER: TRUE

5) Non-experimental design can be
a. descriptive in nature
b. Exploratory or explanatory in nature
c. Predictive in nature
d. a. and b.

6) Fill-in-the-blank: In the given scenario which is the treatment and which is the response?

2

We might try a new laundry detergent to see if our clothes are cleaner than when we used our old brand. The laundry detergent is _____, while cleaner clothes are the _____.

ANSWER: LAUNDRY DETERGENT (THE TREATMENT, CLEANER CLOTHES (THE RESPONSE)

Section 3

1) What is NOT true about variables?
   a. It is a measurable factor that has an effect on a phenomenon
   b. It must have at least two categories with varying answers
   c. There are four types of variables
   d. The type of variable does not determines the types of statistical analysis

2) What are the scales of measurements, listing them from the lowest to the highest level of scale?
   ANSWER: NOMINAL, ORDINAL, INTERVAL, RATIO

3) What type of variables are these?
   a. Three brands of hand lotion are ranked according to consumers' preferences for them. _____ ORDINAL
   b. Heights of each participant measured to the nearest inch. _____ RATIO
   c. Intelligence measured for each student. _____ INTERVAL
   d. Participants name the states in which they reside. _____ NOMINAL
   e. Amount of money in savings account. _____ RATIO
   f. Religions Affiliation _____ NOMINAL
   g. Instructors classified as: Easy, Hard, Very Hard. _____ ORDINAL
   h. Income earned last year. _____ RATIO
   i. The distance between 7 and 8 is the same distance from 1 to 2 on a 10-point rating scale (2 possible answers) _____ INTERVAL, RATIO

4) Categorical measurements refer to _____ and _____, while Numerical (Continuous) measurements refer to _____ and _____. ASNWER: NOMINAL, ORDINAL; INVERVAL, RATIO

5) The football coach of UCLA wants to assign positions for defense players. He determines who gets the position through their weight. If he decides to go for the heavier guys, what kind of scale of measurement would the coach refer to?
   a. Ordinal
   b. Ratio
   c. Nominal
   d. Interval

6) "Who is your favorite baseball team?" What scale would this measurement be?
   a. Nominal
   b. Ordinal
   c. Interval
   d. Ratio

7) Of the four scales of measurement a rank order is known to be a(n) _____ measurement. ORDINAL

8) Fill-in-the-blank: A variable is any _____ factor that has an effect on a _____. ANSWER: MEASURABLE, PHEONOMENON

Section 4

1) Calculating for a relationship between college admission scores and freshman GPA requires what type of statistics?
   a. Descriptive statistics
   b. Correlational statistics
   c. Inferential statistics

2) Calculating the average of scores on a standardized test for 500 participants requires what type of statistics?
   a. Descriptive statistics
   b. Correlational statistics
   c. Inferential statistics

3) When the researcher is generalizing the results form a sample to a population, what type of statistics needs to be conducted?
   a. Descriptive statistics
   b. Correlational statistics
   c. Inferential statistics

4) What measures the degree to which the results from the sample is inaccurate?
   a. Sample error
   b. Margin of error
   c. Sampling bias
   d. Standard error

5) In the case that an Algebra teacher chooses to pretest all students at the beginning of a course, all members of the population are being studied. This is known as
   a. A population study
   b. Census
   c. A sample study
   d. A sample study that creates margin of error

PART B

Section 5

1) Fill-in-the-blank: A study of the population yields results referred to as _____ _____, while a study of sample yields results referred to as _____.
   ANSWER: POPULATION PARAMETERS, STATISTICS

2) Sampling instead of studying the entire population
   a. Creates sampling error
   b. May be due to physical reasons
   c. May be due to economic reasons
   d. May not accurately reflect the population
   e. All of the above
   f. None of the above

3) Unbiased sampling gives each member of a population an _____ chance of being selected, while biased sampling gives each member an _____ chance of being selected.
   ANSWER: EQUAL, UNEQUAL

4) A professor wishes to study the attitudes of all sophomores at a college. This is referred to as _____, but asks only those enrolled in her introductory psychology class. This is referred to as _____.
   ANSWER: POPULATION, SAMPLE

5) In the above scenario, what type of sampling was used?
   a. A sample of convenience
   b. A simple random sampling
   c. An unbiased sampling
   d. A sample of inconvenience

6) Is the sample bias or unbiased?
   a. A professor studying the attitudes of all sophomores at a college asks those who are enrolled in her psychology class. _____ BIAS

   b. A researcher doing a citywide survey on monthly spending at local grocery stores. _____ UNBIAS

   c. A magazine editor studying the opinion on a gun-control measure from all rifle owners, mails a questionnaire to only those who subscribe to her magazine. _____ BIAS

7) True or False:
   a. Random errors created by random sampling still exists in an unbiased sample. _____ TRUE

   c. One cannot be certain that the results from the sample accurately reflect those results that would have been obtained by studying the entire population. _____ TRUE

8) In predicting the results of a city-side election, the researcher persistently spends weeks at the shopping mall asking shoppers how they intend to vote. Discuss how even a large sample may differ from the population of voters thereby creating bias.
   ANSWER: THE LARGE SAMPLE MAY DIFFER FROM THE POPULATION OF VOTERS IN THAT THE PARTICIPANTS MAY HAVE MORE TIME TO SPEND SHOPPING AND BE MORE AFFLUENT.