

**MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.**

- 1) Choose the example that used scientific principles to answer questions.
- A) Jeff concluded that his dog Molly liked her Frisbee best. He defined liked as choosing it over other toys when given a choice and recorded the toy she brought to him when he arrived home each day for a week.
  - B) Before Jenny bought her pop up camper, she asked her brother, who has owned a number of campers, what brands she should look at.
  - C) Alice chose the house she was buying by how she felt when she entered it the first time.
  - D) Eddy decided that he disagrees with abortion because his church tells him it is wrong.

Answer: A

- 2) One day, after their psychology class, Olivia and Hannah are talking about dreaming. Most mornings Olivia doesn't remember any of her dreams, but occasionally she has vivid recollections when she wakes. Hannah says she has the same experience and wonders why. When they talk to friends about the phenomenon, they notice a pattern related to the stress of the previous day. They verbalize this pattern as, "When people feel stressed out over something one day, they are more likely to remember their dreams the following day." Olivia and Hannah have just formed a
- A) hypothesis.
  - B) scientific attitude.
  - C) hindsight.
  - D) valid statement.

Answer: A

- 3) Adira is driving to work when she sees a car fire at the side of a busy highway. She considers stopping, but then thinks that in the age of cell phones, and with so many cars passing by, someone must have already called the police. She passes the fire by. The next day, she sees an article in the newspaper about the person who had the car fire. He says he was astonished that nobody stopped to try to help him. The reaction Adira and the other drivers had produced was a
- A) scientific principle.
  - B) demand characteristic.
  - C) placebo effect.
  - D) diffusion of responsibility.

Answer: D

- 4) Sarah has just moved to a new city, where she works the night shift at the local hospital. On her way home from work, she walks through a park having a high crime rate. Sarah reasons that she is safe, because there are always a lot of people around. According to the research conducted by Darley and Latané, Sarah is
- A) correct; the more people she encounters, the lower the likelihood that Sarah will even be noticed.
  - B) mistaken; the more people she encounters, the lower the likelihood any one of them would help her in an emergency.
  - C) mistaken; the more people she encounters in any given situation, the higher the likelihood one of them will attack her.
  - D) correct; there is safety in numbers, and as long as the park is crowded, she's safe.

Answer: B

- 5) Zhuang is trying to decide which major he should choose in college. His older brother notes that Zhuang is always asking questions, so maybe he should become a scientist. If Zhuang asks the same kinds of questions that successful scientists ask, he is probably asking things like
- A) Where will I use this information? Will it help me get ahead in life?
  - B) How does this affect me? Why is it important that I know this?
  - C) Who? What? When? Where? How? Can I get a quote?
  - D) Why? How do you know? Where's your evidence? Is there another explanation?

Answer: D

- 6) Hailie is writing a psychology research paper. She has collected research from the past three decades, which her professor says is fine. What is confusing for Hailie is that her articles say different things. She finally asks you why all of the research has been published if some of it is obviously wrong. You tell her that
- A) scientists rarely work together or review previous research, which can leave publications in disagreement with each other.
  - B) truth and reality are in the eye of the beholder.
  - C) part of the scientific process is testing and retesting a theory, to see if everyone reaches the same results each time; if they don't, the research may not agree.
  - D) there is no review process in scientific publication; if someone writes well enough, the article will be published, regardless of its validity.

Answer: C

- 7) Kathy is uncomfortable with some of the things she's learning in her science classes, and she becomes convinced that many scientists are just buying in to the theories they've been taught and perpetuating inaccurate information in their own research. In reality,
- A) she's right. We have no idea how much of the information we rely on as fact is accurate.
  - B) theories are modified only if someone with a great deal of research experience suggests they should be.
  - C) theories are tested, modified, and then tested again by additional research; if they're inaccurate, they're discarded.
  - D) she's right. At least 75 percent of the information published in journals is believed to be inaccurate.

Answer: C

- 8) Thea is taking a social psychology class and is asked to come up with a hypothesis. She decides to see if opposites do in fact attract. On campus the next day, she notices how many people in couples seem to be opposites. When Thea arrives in class with her hypothesis, she mentions it to Melaina, who sits next to her. Melaina is surprised. She says, "My roommate suggested I see if 'birds of a feather' really 'flock together,' and they sure seemed to!" Both Melaina and Thea have found evidence for their hypotheses. What principle is affecting the reasoning of each?
- A) Hindsight
  - B) Diffusion of responsibility
  - C) Theory of social impact
  - D) Bystander apathy

Answer: A

- 9) For her experimental psychology class, Kristen has developed the hypothesis that intelligent people are more stressed out. Kristen's teacher tells her she needs to use operational definitions for her variables. This means that she needs to decide
- A) the procedures she will use to collect her data.
  - B) which type of experimental design she will be using.
  - C) which behaviours or qualities differentiate one person's intelligence and level of stress from the next person's.
  - D) which variables are independent and which are dependent.

Answer: C

- 10) Nathaniel is designing an experiment: He wants to learn how much time other students at his university spend studying for their art history exams. He decides to use a self-report survey, but he knows that people might over- or under-report their study time, due to
- A) the hindsight bias.
  - B) the social desirability bias.
  - C) placebo effects.
  - D) random assignment.

Answer: B

- 11) Dr. Child has developed a straightforward theory on emotional eating (the tendency for people to eat for emotional reasons rather than hunger). Dr. Gordion has also developed a theory, though hers is far more complicated. Both theories generate a number of new hypotheses. Both theories predict the phenomenon well. In the scientific community, Dr. \_\_\_\_\_ theory will probably be preferred because \_\_\_\_\_.
- A) Gordion's; complexity suggests that she has thought the problem through more carefully
  - B) Gordion's; complexity is more likely to capture the complexity of eating behaviour
  - C) Child's; it conforms to the law of parsimony
  - D) Child's; it will be easiest to prove or disprove

Answer: C

- 12) Ramon is studying bullying behaviour among elementary schoolchildren. He arranges to spend one day following around a class of children, making notes on their behaviour. Unfortunately, when he presents his research to his professor, his professor says that Ramon's data were compromised by the way he collected it. What did Ramon forget to do?
- A) He did not use unobtrusive measures, and his presence may have affected the children's behaviour.
  - B) He did not introduce himself to each student; that is, he failed to build rapport with his subjects.
  - C) He did not introduce himself to the children as a person in authority; as a result, the children may not have paid enough attention to him throughout the day.
  - D) He forgot to take some kind of reward to thank the children for having him there.

Answer: A

- 13) As Werner and his classmates begin to observe bullying among children for a class paper, he realizes that the children have many different reactions and his group needs to find a way to measure those responses. What would be the *best* approach?
- A) Give each child a personality test.
  - B) Develop a coding system to classify the children's behaviour in meaningful categories.
  - C) Focus on only one type of reaction and ignore the others.
  - D) Ask each child what he or she would call the type of reaction he or she had.

Answer: B

- 14) Priscilla wants to design a study that will let her look at whether people with high self-esteem are more likely to leave an unsatisfying relationship than those with low self-esteem. The only problem is that she can't look inside people's heads to see their degree of self-esteem. What should be her *first* step?
- A) Find an assessment instrument that has already been used extensively by other researchers.
  - B) Create an operational definition that translates the abstract concept of self-esteem into something observable and measurable.
  - C) Find someone who has already studied self-esteem to work with.
  - D) Choose another topic.

Answer: B

- 15) Nahele has agreed to participate in a survey so he can receive extra credit in his psychology class. When he arrives, he is given a questionnaire that contains questions like "I enjoy playing team sports," "I often worry about getting things done," "I prefer to try new ways of doing things," and "I sometimes find it hard to trust other people." He is most likely taking a/an \_\_\_\_\_ test.
- A) intelligence
  - B) achievement
  - C) neuropsychological
  - D) personality

Answer: D

- 16) Hailey is doing research on the Canadian killer, Robert "Willy" Pickton using the transcripts from a number of interviews, and the court and police records. This is ideal for a/an
- A) naturalistic observation.
  - B) correlational study.
  - C) case study.
  - D) operationalization.

Answer: C

- 17) The psychologist Ann Rule spent a great deal of time with serial killer Ted Bundy after he was captured. She then wrote a best-selling book called *The Stranger Beside Me*, in which she described Bundy's life, experiences, and motivations. She also wrote about her own reactions to him; for example, "He certainly seemed to have made the most of his considerable assets. He was brilliant. handsome. [and his] treatment of me was the kind of old-world gallantry that he invariably showed toward any woman I ever saw him with, and I found it appealing." Though some say Rule's book is an important part of any posthumous research involving Bundy, case studies often have several drawbacks. What type of bias does the excerpt above suggest about Rule's approach to gathering and interpreting data?
- A) Because he was already in jail, she was unable to do naturalistic observation.
  - B) She was more interested in getting published than in learning about Bundy.
  - C) She does not seem to be very objective about Bundy.
  - D) She failed to use formal survey methods in obtaining data.

Answer: C

- 18) Sitting in the park one sunny day, Chaim notices that people who are walking dogs smile at him more often than people without dogs. Chaim concludes that people who own dogs are happier than those who do not own dogs. Based on the principles of psychological research there are many problems with Chaim's conclusion. What is the biggest problem?
- A) Just because someone is walking a dog doesn't mean the person owns that dog.
  - B) Correlation does not prove causation; the association may be spurious.
  - C) Chaim did not observe people with cats before coming to his conclusion.
  - D) Chaim did not operationalize dogs.

Answer: B

- 19) Lelani wants to know what percentage of all American college students receive financial aid in their freshman year. She attends a two-year community college, to which many students commute to campus every day. She stands outside the dining hall one weekday evening and hands out surveys to every third person entering the hall for dinner. Her data will
- A) be valid and generalizable as long as she continues to stand there; her presence will compel people to return the surveys to her.
  - B) not be generalizable to all American college students, because she did not use a representative sample.
  - C) be valid and generalizable, because she used random sampling and a representative sample.
  - D) be completely invalid, because evenings are never a good time to do research.

Answer: B

- 20) Survey research uncovers a strong positive correlation between family size and parental patience. Which of the following conclusions can accurately be made?
- A) Impatient parents have fewer children.
  - B) Children in large families are better behaved.
  - C) Parents with large families learn to be more patient with their children.
  - D) None of the above; correlation and causation are not the same thing.

Answer: D

21) Gary's son Sam is learning to drive. Each night, Gary takes Sam out in the family car for driving lessons. Gary notices that Sam improves more in lessons in which Gary is extremely critical. In fact, the more critical Gary is, the more Sam improves. After Sam gets his driver's license, Gary's wife Chrissy tells him that every time Gary was critical of Sam, she took him out so he could improve before his next lesson with his father. What was the problem with Gary's initial interpretation of Sam's improvement?

- A) Nonrepresentative sample problem
- B) Generalizability problem
- C) Third variable problem
- D) Parsimonious problem

Answer: C

22) Ashley does a correlational study and learns that the less students study, the worse their grades are. She has gotten a strong \_\_\_\_\_ correlation.

- A) negative
- B) scatterplot
- C) positive
- D) There is no correlation.

Answer: C

23) Felix does a correlational study on grey hair and activity level. He learns that the two variables have a are correlated, but not perfectly correlated. His correlation coefficient will be close to

- A) +1
- B) -0.85
- C) 0
- D) -10

Answer: B

24) If scientific research shows that there is a positive correlation between the number of bars in a city and the number of churches in a city, we know that

- A) churchgoing people are more likely to go to bars.
- B) there are several possible explanations for this relationship.
- C) drinking makes people feel like going to church.
- D) this relationship is a result of living in big cities.

Answer: B

25) Maddie does a study to learn if turning off the television at least an hour before one goes to bed shortens the time it takes one to get to sleep. In her study, the independent variable is

- A) turning off the television.
- B) Madison.
- C) the bed.
- D) the time it takes to get to sleep.

Answer: A

26) Madison does a study to find out if talking on a cell phone while driving increases drivers' ability to react quickly to unexpected events. In her study, the dependent variable is

- A) the cell phone.
- B) the car.
- C) the time to react.
- D) Madison.

Answer: C

- 27) Stephanie conducts an experiment to learn if brunettes have more fun. She has three brunette female friends and three blonde female friends go to the same party, and record how many times they are asked to dance. In her experiment, Stephanie has defined her \_\_\_\_\_ as the number of times the friends were asked to dance, and her \_\_\_\_\_ as hair colour.
- A) independent variable; dependent variable                      B) independent variable; extraneous variable  
C) dependent variable; independent variable                      D) extraneous variable; dependent variable

Answer: C

- 28) Stephanie conducts an experiment to learn if brunettes have more fun. She has three brunette female friends and three blonde female friends go to the same party and record how many times they are asked to dance. When Stephanie discovers that two of the three brunette friends in her experiment are terrible dancers, she realizes that her results may be invalid due to a
- A) lack of redheads in the study.                                      B) poor manipulation.  
C) confounding variable.    D) fourth variable.

Answer: C

- 29) Matthew is conducting research to learn whether chewing peppermint gum during learning will improve recall if the participants are also chewing peppermint gum when they take a test. Matthew assigns the first 10 people who arrive to his experimental group. He assigns the last 10 people to his control group. What mistake has Matthew already made?
- A) He forgot to ask how old each of the subjects is.  
B) He failed to use random assignment.  
C) He didn't ask if anyone prefers cinnamon gum.  
D) He forgot that food (including gum) is always confounded.

Answer: B

- 30) In a memory experiment, the subjects are asked to learn three lists of words. Each of the word lists is of equivalent difficulty. The first list contains university names, the second list is of dog breeds, and the third list contains kitchen appliances. After running 20 participants, the researchers notice that recall of university names, the first list that the participants learn, is much higher than recall for either of the other two lists. How can the researchers make sure that one list is actually easier to recall and not just an artifact of the way the test is set up?
- A) Counterbalance the word lists.  
B) Take a random sample of the participants' answers.  
C) Change all of the university names to non-American proper names.  
D) Confound one of the variables.

Answer: A

- 31) Emily does a study to see if people who are learning difficult tasks are hungrier than people who are learning easy tasks. She carefully develops one task that is easy and one that is difficult, controls the temperature and noise of the room for each group, and randomly assigns people to either the difficult or the easy group. She provides each group with Rocky Road ice cream and observes how many people eat it in each group. There is a confounding variable in her experiment. What is it?
- A) Some people might not like that they got the easy group rather than the difficult group or vice versa.
  - B) Some people might not like or be able to eat ice cream.
  - C) She did not treat her subjects equally in all respects except for the variable that is of particular interest.
  - D) She did not use a coexperimenter.

Answer: B

- 32) Dr. Sesay is testing a new antidepressant. He carefully screens his subjects and assigns them to either the control group or the experimental group. He gives one group the new medication and the other group sugar pills that look exactly the same as the real medication. By doing this, he is hoping to control for \_\_\_\_\_ effects.
- A) meta-analytical
  - B) scatterplot
  - C) placebo
  - D) correlational

Answer: C

- 33) Dr. Sesay is testing a new antidepressant. He gives the experimental group the new medication and the control group sugar pills that look exactly the same as the real medication. However, some of the people who are taking the sugar pills start to feel less depressed. What is the *most likely* explanation?
- A) The subjects are secretly taking other antidepressants on the side.
  - B) Dr. Sesay accidentally gave them the real antidepressants.
  - C) They expect to feel better, which makes them feel better.
  - D) Sugar relieves depression to some extent.

Answer: C

- 34) Dr. Sesay is testing a new antidepressant. He gives the experimental group the new medication and the control group sugar pills that look exactly the same as the real medication. He is excited about all the good he believes this new medication will do for people. When he gives his control group the sugar pills, he shows little emotion, but when he hands out the antidepressants, he grins at his participants. To control for \_\_\_\_\_, Dr. Sesay should use a \_\_\_\_\_ design instead.
- A) placebo effects; double-blind
  - B) placebo effects; correlational
  - C) experimenter expectancy effects; double-blind
  - D) experimenter expectancy effects; correlational

Answer: C



- 35) Dr. Howard really wants her newly developed antianxiety medication to help people, but by smiling at the people who are getting the new drug and not at those who are getting the placebo, she is influencing her experimental subjects to respond differently than her control group subjects. In other words, she is unintentionally creating
- A) experimenter expectancy effects.
  - B) validity replication.
  - C) correlational effects.
  - D) placebo effects.

Answer: A

- 36) In 1971, Phillip Zimbardo and colleagues conducted an experiment to learn about the power of roles. The subjects were randomly assigned to a "prisoner" group or a "guard" group. The guards were to do whatever they deemed necessary to maintain control. Less than two days into the experiment, one prisoner had a "nervous breakdown." Because the experimenters believed that the prisoner was trying to trick them into releasing him, they chided him for being weak and made him stay. If this experiment were done today, it would be in violation of the APA's ethical standards for informed consent, because
- A) the study would be ethical if it were done today.
  - B) the participant was not allowed to leave freely without penalty.
  - C) the researchers lied about what they were studying.
  - D) it is unethical to study prison situations.

Answer: B

- 37) Samantha conducts an experiment on her college campus. She learns that more women than men talk to their fathers on the phone daily. Samantha may not be able to generalize her findings to the larger population of all college women, because most of the students at her college come from extremely patriarchal surrounding towns. Samantha's problem is a lack of
- A) specific variables.
  - B) external validity.
  - C) a control group.
  - D) internal validity.

Answer: B

- 38) Dr. Deshi has gathered the results of 52 studies on antenatal (during pregnancy) and subsequent postpartum depression to learn whether antenatal depression is a significant risk factor for postpartum depression. To combine the results of all 52 studies and see how strongly the two problems are related, she should use a
- A) correlational study.
  - B) mode.
  - C) case study.
  - D) meta-analysis.

Answer: D

- 39) Dr. Graham submitted a research proposal to the Ethics Review Board (ERB) at his university in late November. He is studying student's gender identification and life satisfaction. He tells you (his colleague) that he plans to do some interviews with students before they leave for Christmas, so he would have some data to look at over the holidays. He has not received ERB approval for his study, but knows it is a simple research design. As a colleague of his, you would
- A) be surprised that Eric thought any research approvals were needed for a simple interview, as it is a harmless procedure.
  - B) not get involved. If anything happens it will only affect Dr. Graham's research program.
  - C) tell him not to do any interviews until ERB approval is received.
  - D) agree because ERBs take too long to respond.

Answer: C

- 40) Carol just started working in Dr. Ryan's Behavioural Research Lab. She plans to work with the zebrafish. Dr. Ryan will
- A) give Carol all lab standard operating procedures. They will review them together and then will begin working with the zebrafish.
  - B) never meet Carol. The senior graduate student in the lab will instruct Carol on what has always been done. There will be no other formal training or readings required when working with laboratory animals.
  - C) just show her around the lab and give her a few papers to read on the day Carol starts. She will begin working with animals right away.
  - D) ensure that Carol takes Animal Use and Care Training provided by their university. Carol will also have to read and understand the lab animal care manual as well as any Standard Operating Procedures she will be using.

Answer: D

- 41) Dr. Doucette is preparing a new research study to look at alterations to prepulse inhibition magnitude and latency in adult rats following neonatal treatment with domoic acid and social isolation rearing. She will have to
- A) contact the Canada Council on Animal Care to determine if all ethical guidelines are adhered to.
  - B) just start the experiment because her PhD gave her the training she needs to plan any research project she wants.
  - C) change her research plan because animals cannot be given any chemical, even if scientifically justified.
  - D) submit a research plan to the ethics review board (ERB).

Answer: D

- 42) Katie just saw a report on CBS by Dana Tyler where one man said that had taken a smart pill, specifically modafinil, on the recommendation of friends. "It really helped me stay on top of things," he said. "I was able to manage everything pretty well, better than if I hadn't taken it." Katie should
- A) buy some modafinil right away to help her be smarter.
  - B) Disbelieve this because there is only one story to support the claim. If there were lots of success stories then she should buy it.
  - C) know there has never been and will never be a pill that can make people smarter.
  - D) find out if there is data to support this claim before buying anything.

Answer: D

## Answer Key

Testname: UNTITLED17

- 1) A
- 2) A
- 3) D
- 4) B
- 5) D
- 6) C
- 7) C
- 8) A
- 9) C
- 10) B
- 11) C
- 12) A
- 13) B
- 14) B
- 15) D
- 16) C
- 17) C
- 18) B
- 19) B
- 20) D
- 21) C
- 22) C
- 23) B
- 24) B
- 25) A
- 26) C
- 27) C
- 28) C
- 29) B
- 30) A
- 31) B
- 32) C
- 33) C
- 34) C
- 35) A
- 36) B
- 37) B
- 38) D
- 39) C
- 40) D
- 41) D
- 42) D

**MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.**

- 1) Which of the following is NOT an attitude associated with scientific thinking?
- A) open-mindedness
  - B) curiosity
  - C) intolerance
  - D) skepticism

Answer: C

- 2) Which of the following best represents a good scientific attitude? Science:
- A) can solve world problems.
  - B) always provides firm conclusions.
  - C) is more valuable when people have a healthy skepticism.
  - D) is a collection of facts.

Answer: C

- 3) The first step in the scientific process is to:
- A) create a hypothesis.
  - B) create a prediction.
  - C) test a hypothesis.
  - D) form a question about something interesting.

Answer: D

- 4) Which of the following is the first step in the scientific process?
- A) A curious observer asks "why?" an event occurred.
  - B) Data analysis
  - C) Hypothesis
  - D) Theory

Answer: A

- 5) If John Darley and Bibb Latané were to make the statement, "If an emergency occurs, then, the greater the number of bystanders, the less likely any one bystander will be to intervene," it would be considered an example of a(n):
- A) hypothesis.
  - B) correlation.
  - C) initial research question.
  - D) theory.

Answer: A

- 6) Freud developed a psychodynamic perspective to explain human behaviour. This perspective is an example of a(n):
- A) dependent variable.
  - B) theory.
  - C) hypothesis.
  - D) independent variable.

Answer: B

- 7) A hypothesis is best considered as a(n):
- A) set of formal statements that explain how certain events are related to one another.
  - B) tentative explanation or prediction about some phenomenon.
  - C) particular type of experimenter expectancy.
  - D) attempt to explain something after it has already occurred.

Answer: B

- 8) The statement, "If patients are given Drug X, then they will be less depressed," is an example of a(n):
- A) operational definition.
  - B) hypothesis.
  - C) theory.
  - D) variable.

Answer: B

- 9) Which of the following is a formal set of statements that explains why and how certain events are related to one another?
- A) hypothesis
  - B) operational definition
  - C) theory
  - D) specific prediction

Answer: C

- 10) One of the main differences between theories and hypotheses is that:
- A) theories tend to be broader than hypotheses.
  - B) theories tend to be externally valid, whereas hypotheses tend to be internally valid.
  - C) hypotheses tend to be broader than theories.
  - D) theories use operational definitions, whereas hypotheses do not.

Answer: A

- 11) Which of the following statements regarding theories and hypotheses is TRUE? Hypotheses:
- A) specify lawful relations between behaviours and their causes, whereas theories do not.
  - B) do not use operational theories but theories do.
  - C) use independent variables, whereas theories use dependent variables.
  - D) are derived from theories.

Answer: D

**TRUE/FALSE. Write 'T' if the statement is true and 'F' if the statement is false.**

- 12) With regard to the sequence of steps involved in the scientific process, forming hypotheses typically occurs after theory building.

Answer: True  False

- 13) A hypothesis is a tentative explanation or prediction about some phenomenon.

Answer:  True  False

- 14) Hypotheses typically specify lawful relations between certain behaviours and their causes, and tend to be broader than theories.

Answer: True  False

**MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.**

- 15) Which of the following is a major problem of after-the-fact or "hindsight" explanations?
- A) Hindsight explanations overemphasize the importance of external validity.
  - B) Science requires that theories be testable and hindsight explanations are usually too theoretically complex and sophisticated to be testable.
  - C) Hindsight explanations fail to provide a foundation on which further scientific study can occur.
  - D) There are many ways of explaining past events and there is usually no way to know which of these explanations is correct.

Answer: D

- 16) When presented with the findings of psychological research, it is not uncommon for people to comment that the results are trivial, obvious, and that they "knew that all along." This tendency is referred to as:
- A) the bystander effect.
  - B) an unobtrusive measure.
  - C) hindsight bias.
  - D) the law of parsimony.

Answer: C

- 17) If a research study found that career motivation was higher among recent immigrants to America than among Americans, most people could readily offer several reasonable explanations for this finding. However, if the study found that career motivation was higher among Americans than recent immigrants to America, most people could generate an equally convincing set of explanations. This example demonstrates the problems associated with:
- A) hypotheses.
  - B) operational definitions.
  - C) after-the-fact explanations.
  - D) theoretical predictions.

Answer: C

- 18) A friend of yours is telling you about the results of a multimillion-dollar government-funded study she heard about on the news last night. She complains that she could have predicted the results of the study before it was done and that here is yet another instance of the government wasting the taxpayers' hard-earned money. Which of the following issues would have the most relevance to the potential accuracy of your friend's complaints? It is the \_\_\_\_\_.
- A) limitations of correlational research
  - B) problem of experimenter expectancy effects
  - C) problem of demand characteristics
  - D) limitations of hindsight explanations

Answer: D

- 19) Which of the following is a characteristic of a good theory?
- A) Complexity and intricacy.
  - B) Does not require future research.
  - C) Different than existing research.
  - D) Testability.

Answer: D

- 20) One common characteristic of a good theory is that:
- A) it tends NOT to generate new hypotheses.
  - B) all things being equal, a good theory is simple.
  - C) all things being equal, a good theory is complex.
  - D) it focuses exclusively on independent variables.

Answer: B

- 21) You develop a new theory that resolves several seemingly conflicting findings and theories, and explains the research results within a single broad framework. This best demonstrates which characteristic of a good theory? Your theory:
- A) conforms to the law of parsimony.
  - B) organizes information in a meaningful way.
  - C) is testable.
  - D) predictions are supported by new research.

Answer: B

- 22) The notion that if two theories can equally explain and predict the same phenomenon, then the simpler one is the preferred theory is referred to as the law of \_\_\_\_\_.
- A) parsimony
  - B) simplicity
  - C) consistency
  - D) least complexity

Answer: A

**TRUE/FALSE. Write 'T' if the statement is true and 'F' if the statement is false.**

- 23) All other things being equal, a simpler theory is considered to be better than a more complex theory.
- Answer:  True      False

**MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.**

- 24) Which of the following defines a variable in terms of the specific procedures used to measure it?
- A) dependent variable
  - B) operational definition
  - C) archival measure
  - D) independent variable

Answer: B

- 25) Which of the following refers to any characteristic that can vary?
- A) variable
  - B) theory
  - C) operational definition
  - D) hypothesis

Answer: A

- 26) The essential function of an operational definition is that it translates something:
- A) abstract into something observable and measurable.
  - B) measurable into something observable.
  - C) observable into something abstract.
  - D) measurable into something abstract.

Answer: A



- 27) A psychologist decides that she will assess stress by measuring subjects' blood pressure. This is an example of a(n):
- A) control group.
  - B) case study.
  - C) operational definition.
  - D) population.

Answer: C

- 28) Researchers decide to measure depression by evaluating the participants' levels of the neurotransmitter serotonin. The operational definition for depression is the \_\_\_\_\_.
- A) level of serotonin
  - B) depression
  - C) participant
  - D) researcher

Answer: A

- 29) In a study looking at which factors influence interpersonal attraction, the researcher uses a very attractive person for an assistant. Interpersonal attraction is then assessed by whether subjects call up the attractive assistant to ask the person on a date. The method used to assess interpersonal attraction would be considered a(n):
- A) correlational study
  - B) case study
  - C) hypothesis
  - D) operational definition

Answer: D

- 30) The social desirability bias was discussed as a limitation of which of the major ways of measuring behaviour?
- A) behavioural observations
  - B) self-report measures
  - C) physiological measures
  - D) reports by others

Answer: B

- 31) The tendency to respond in what is believed to be a socially appropriate manner rather than according to how a person actually thinks, feels, or behaves is called \_\_\_\_\_.
- A) the social desirability bias
  - B) reactivity
  - C) the placebo effect
  - D) confounding

Answer: A

- 32) If a researcher conducting an observational study of people at a shopping mall is making use of an unobtrusive measure, which of the following will he NOT have to worry about?
- A) The generalizability of the findings from his study.
  - B) The people in the mall changing their behaviour because they know they are being watched.
  - C) Using operational definitions to define the variables in which he is interested.
  - D) Potential experimenter expectancy effects contaminating his observations.

Answer: B

33) A young man is interested in making a good impression on the parents of the person he is currently dating. Because of this, when he meets them he overemphasizes his good qualities and ignores many of his shortcomings. This man's behaviour is most relevant to which of the following concepts?

- A) confounding variables
- B) the social desirability bias
- C) experimenter expectancy effects
- D) demand characteristics

Answer: B

34) Imagine you have created a new personality questionnaire and you are worried about social desirability influencing people's responses. Which of the following would minimize the impact of this potential problem?

- A) use random assignment
- B) make sure that the sample of people completing the questionnaire is representative
- C) have the people complete the questionnaire anonymously
- D) use the double-blind procedure

Answer: C

35) If you are conducting research that involves making observations of people's behaviour, one major issue that you would need to be concerned about is:

- A) that you must consider at least two different variables in order to draw cause-and-effect conclusions.
- B) that if you do not have a representative sample, then your observations will be confounded.
- C) that people's behaviours often do not have good internal validity.
- D) that people may behave differently when they know they are being watched.

Answer: D

36) Researchers sometimes gather information about people's overt behaviours by using pre-existing records or documents which are called \_\_\_\_\_.

- A) random samples
- B) archival measures
- C) physiological responses
- D) self-report measures

Answer: B

37) In order to assess the effectiveness of a new statewide seatbelt law, researchers collected data from the Department of Transportation regarding the number of traffic fatalities in the last year. This type of measurement of behaviour is called a(n):

- A) sample.
- B) case study.
- C) meta-analysis.
- D) archival measures.

Answer: D

- 38) A college advisor wants to know how much TV students in her dorm are watching, but she has noticed that students tend to leave the TV room when she comes in to see who is watching. To get around this problem, she decides to measure wear-and-tear on the TV remote control as a measure of how much TV is being watched. Like many psychologists, this advisor is using a(n):
- A) unobtrusive measure.
  - B) placebo control group.
  - C) double-blind procedure.
  - D) hypothesis.

Answer: A

- 39) A museum is interested in determining which particular pieces of art are the most popular but does not want to directly ask its patrons. Instead, the head of the museum decides to keep track of the wear on the carpet in front of each of the pieces, assuming that the more popular pieces will have more worn carpet in front of them. This particular way of measuring art popularity is making use of a(n):
- A) placebo.
  - B) unobtrusive measure.
  - C) representative sample.
  - D) confounding variable.

Answer: B

- 40) A series of questions that asks about how a person typically feels or behaves is called a(n):
- A) intelligence test.
  - B) personality test.
  - C) neuropsychological test.
  - D) physiological test.

Answer: B

- 41) Specialized tests that evaluate normal or abnormal brain functioning are called \_\_\_\_\_ tests.
- A) reaction time
  - B) physiological
  - C) personality
  - D) neuropsychological

Answer: D

- 42) One problem with physiological measures is:
- A) subjectivity.
  - B) ambiguity about their meaning.
  - C) objectivity.
  - D) social desirability.

Answer: B

- 43) While conducting a survey interview, a participant becomes slightly embarrassed and decides to answer the questions in such a way as to make himself look more friendly and acceptable to the interviewer. The participant does this on his own and is NOT responding to any cues the interviewer is providing. This example most clearly demonstrates which limitation of survey research?
- A) the social desirability bias
  - B) random sampling
  - C) demand characteristics
  - D) experimenter effects

Answer: A

**TRUE/FALSE. Write 'T' if the statement is true and 'F' if the statement is false.**

- 44) An operational definition defines a variable in terms of the specific procedures used to produce or measure it.

Answer:  True       False

45) One of the main limitations of archival measures of behaviour is that they are vulnerable to the social desirability bias.

Answer: True  False

**MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.**

46) Coding systems are used:

- A) to determine the cause of a behaviour.                      B) to record reaction times.  
C) to determine the levels of behaviour.                      D) to record different categories of behaviour.

Answer: D

47) The case study of D.F. provided evidence that visual object recognition and action are:

- A) processed independently by the ventral and dorsal streams.  
B) processed first in the ventral stream.  
C) processed dependently by both the ventral and dorsal streams.  
D) processed first in the dorsal stream.

Answer: A

48) The case study is an example of which kind of research method?

- A) hypothetical                      B) experimental                      C) correlational                      D) descriptive

Answer: D

49) Which of the following would specifically be an advantage of the case study method of research?

Case Studies:

- A) are very useful for determining cause-effect relationships.  
B) generally are not susceptible to experimenter expectancy effects.  
C) are a good method for studying rare events.  
D) generally are not vulnerable to experimental confounds.

Answer: C

50) When the researcher observes behaviour as it occurs in a normal or typical setting, she is using

\_\_\_\_\_:

- A) correlational research                      B) survey research  
C) naturalistic observation                      D) a case study

Answer: C

51) Examining the social behaviours of whales as they migrate is an example of:

- A) naturalistic observation.                      B) survey research.  
C) an experiment.                      D) a case study.

Answer: A

- 52) In order to learn about the social behaviour of children, a developmental psychologist goes to a school and watches the children playing on the playground outside during recess. This psychologist is engaged in which method of research?
- A) correlational research
  - B) naturalistic observation
  - C) experiment research
  - D) a case study

Answer: B

- 53) An important advantage of naturalistic observation is that it can:
- A) more easily be incorporated into meta-analyses.
  - B) provide detailed information on naturally occurring behaviour.
  - C) tend to have low external validity.
  - D) provide important information on cause-effect relationships.

Answer: B

- 54) Initially, people or animals may behave differently if they are being watched, but, over time, they become acclimated to the presence of an observer and their behaviour returns to normal. This process is specifically referred to as:
- A) adaptation.
  - B) naturalization.
  - C) habituation.
  - D) adjustment.

Answer: C

- 55) Which of the following would be a potential limitation of naturalistic observation?
- A) The observer's presence may disrupt or influence the behaviour of the person or animal they are watching.
  - B) The settings in which naturalistic observations typically occur tend to be unrealistic laboratory settings.
  - C) Naturalistic observation makes improper use of random assignment.
  - D) Naturalistic observation relies too heavily on the use of archival measures.

Answer: A

- 56) Which of the following correctly defines the term sample, as it is used in survey research?
- A) all the members of any experimental or control group
  - B) all the individuals we are interested in drawing conclusions about
  - C) a subset of individuals drawn from the entire group in which we are interested
  - D) a preliminary survey designed to determine whether there are any problems with it

Answer: C

- 57) If a sample in a survey accurately reflects the important characteristics of the population from which it is drawn (e.g., the sample has 53% women and the population has 53% women), the sample is said to be:
- A) a representative sample.
  - B) a random sample.
  - C) internally valid.
  - D) randomly assigned.

Answer: A

- 58) With regard to survey research it can be said that it is:
- A) better to have an internally valid sample than an externally valid sample.
  - B) better to have a larger unrepresentative sample than a smaller representative sample.
  - C) better to have a smaller representative sample than a larger unrepresentative sample.
  - D) better to have a smaller sample than a larger sample.

Answer: C

- 59) Assume that you are a researcher conducting a survey. Which of the following steps would be most important if you wanted to ensure that the sample in your survey is representative?
- A) Random assignment to create your sample.
  - B) Unobtrusive measures of behaviour.
  - C) A placebo control group in your survey.
  - D) Random sampling to create your sample.

Answer: D

- 60) A procedure in which every member of a population has an equal probability of being selected to participate in the study is called:
- A) random sampling.
  - B) snowball sampling.
  - C) random assignment.
  - D) population assignment.

Answer: A

- 61) A sample that accurately reflects the population from which it was taken is called a \_\_\_\_\_ sample.
- A) representative
  - B) theory-generated
  - C) concentrated
  - D) developed

Answer: A

- 62) Case studies, naturalistic observations, and correlational studies are all similar in that:
- A) none of them need to be concerned with the problem of reactivity.
  - B) they are all poorly suited for drawing cause-effect conclusions.
  - C) none of them need to be concerned with the problem of social desirability.
  - D) the experimenter has a high degree of control over the research setting.

Answer: B

**TRUE/FALSE. Write 'T' if the statement is true and 'F' if the statement is false.**

- 63) An unobtrusive measure assesses behaviour without participants being aware that they are being observed.

Answer:  True  False

- 64) The research method in which the researcher observes behaviour occurring in a natural setting is called a case study.

Answer:  True  False

- 65) Random sampling occurs when every member of a target population has an equal chance of being in a survey.

Answer:  True  False

**MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.**

- 66) A researcher is examining the relation between two variables: variable X and variable Y. If she is conducting a correlational study, the researcher \_\_\_\_\_ variable X and \_\_\_\_\_ variable Y.
- A) measures; measures  
B) measures; manipulates  
C) manipulates; measures  
D) manipulates; manipulates

Answer: A

- 67) Which of the following goals is best suited to correlational research? To
- A) determine cause-effect relations.  
B) examine associations between several variables.  
C) gather detailed information about a single variable.  
D) observe behaviour in natural settings.

Answer: B

- 68) A psychologist suggests that, as there is a positive correlation between people who take more vacations and better physical health, people should take more vacations to improve their physical health. After thinking about this result, you realize that this association may be a result of a third factor: income. People with more income can afford more vacations and can afford better health care. This explanation best illustrates which limitation of correlational research?
- A) experimenter expectancy effects  
B) placebo effect  
C) bidirectional causality problem  
D) third variable problem

Answer: D

- 69) You study 100 children for a month, measuring how much TV they watch and how many aggressive acts they perform. You find that TV watching and aggression are highly and positively correlated. Based on this study, you can:
- A) conclude that TV watching and aggression are causally related, although you can't tell which causes which.  
B) NOT draw any causal conclusions about the relation between TV watching and aggression.  
C) conclude that watching TV caused children to behave more aggressively.  
D) conclude that an aggressive personality causes children to watch more TV.

Answer: B

- 70) A statistic that indicates the strength and direction of a relation between two variables is called a(n) \_\_\_\_\_ coefficient.
- A) association  
B) relation  
C) Causality  
D) correlation

Answer: D

- 71) Which of the following would be most useful in helping you determine if two variables are associated with one another? A(n):
- A) good operational definition  
B) unobtrusive measure of behaviour  
C) representative sample  
D) Scatterplot

Answer: D

72) In a negative correlation, higher scores on one variable are associated with \_\_\_\_\_ scores on a second variable.  
A) Higher                      B) the same                      C) lower                      D) random

Answer: C

73) A researcher wants to study the effect of child abuse on intellectual development. Which type of methodology would be ethically acceptable?

- A) both correlational and experimental
- B) experimental
- C) correlational
- D) This research could not be conducted ethically.

Answer: C

74) A graph used to graphically represent a correlation between two variables is called a(n) \_\_\_\_\_.  
A) correlation map              B) association chart              C) scatterplot              D) scattergram

Answer: C

75) One of the important advantages of correlational research is that it:

- A) can be used to make predictions.
- B) is not susceptible to the social desirability bias.
- C) tends to have higher internal validity than do other research methods.
- D) can be used to infer causal relations.

Answer: A

76) The range of the correlation coefficient is:

- A) 0 to 1.0.                      B) 0 to 100.
- C) negative infinity to positive infinity.                      D) -1.0 to +1.0.

Answer: D

77) If there is a strong correlation suggesting that more parental involvement is associated with a higher IQ for children, which would be the most likely correlation coefficient?

- A) 0.80                      B) 0.20                      C) 0                      D) 1.90

Answer: A

78) If there is a weak correlation suggesting that more exposure to media violence is associated with more aggressive behaviour, which would be the most likely correlation coefficient?

- A) 0.20                      B) -1.00                      C) -0.20                      D) 1.00

Answer: A

79) If there is a strong correlation suggesting that more parental involvement is associated with fewer behaviour problems for children, which would be the most likely correlation coefficient?

- A) 1.00                      B) -0.20                      C) 0.20                      D) -0.80

Answer: D



**TRUE/FALSE. Write 'T' if the statement is true and 'F' if the statement is false.**

80) In correlational research, the experimenter measures all of the variables and statistically determines whether there is an association between them.

Answer:  True  False

81) The problem that occurs when we can't tell which of two variables causes the other (i.e., does A cause B or does B cause A) is called the third-variable problem.

Answer:  True  False

82) A correlation of .53 is considered to be stronger than a correlation of -.78.

Answer:  True  False

**MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.**

83) In experimental research, the researcher \_\_\_\_\_ the independent variable and \_\_\_\_\_ the dependent variable.

A) measures; manipulates

B) manipulates; manipulates

C) measures; measures

D) manipulates; measures

Answer: D

84) The logic behind most experimental research design contains three essential steps: manipulate one variable, measure whether this manipulation affects another variable, and:

A) use random sampling.

B) attempt to control or hold constant other factors.

C) interpret the correlation between the two variables.

D) attempt to manipulate other factors.

Answer: B

85) One of the essential features of true experiments is that:

A) except for the manipulation of the independent variable, participants in all conditions are treated the same.

B) except for the measurement of the dependent variable, participants in all conditions are treated the same.

C) except for the use of random selection, participants in all conditions are treated the same.

D) participants in all conditions are treated exactly the same.

Answer: A

- 86) One of the essential differences between experimental research and correlational research is that:
- A) experimental research uses random sampling, whereas correlational research uses random assignment.
  - B) in experimental research, subjects are randomly assigned to the levels of the independent variable.
  - C) experimental research has higher external validity than correlational research.
  - D) in experimental research all variables are measured, whereas in correlational research at least one variable is manipulated.

Answer: B

- 87) A researcher wants to assess the effect of sleep on test performance. She brings students into the lab, gives each student an IQ test, and then asks them how much they slept last night. This would NOT be an experiment because
- A) no variable was manipulated.
  - B) sleep was measured second.
  - C) sleep and IQ were measured at the same time.
  - D) IQ was measured first.

Answer: A

- 88) In order for a study to be considered an experiment, there must be both random assignment of subjects/participants to groups, and \_\_\_\_\_.
- A) preliminary testing to see if participants are eligible
  - B) specific measurement of variables
  - C) equal numbers of male and female subjects
  - D) manipulation of an independent variable

Answer: D

- 89) In experimental research, the variable that is manipulated by the experimenter is called the \_\_\_\_\_ variable.
- A) random
  - B) independent
  - C) operational
  - D) dependent

Answer: B

- 90) An educational psychologist wants to study the effectiveness of using the Internet as a way of taking academic classes. She designs a study in which one group of students is assigned to take a course in a standard classroom with a live instructor. Another group of students is assigned to take the same course over the Internet. The psychologist then compares the course grades for students in each of the two groups. In this case, the instruction group (regular class vs. Internet class) would be considered the \_\_\_\_\_ variable.
- A) confounding
  - B) independent
  - C) dependent
  - D) correlational

Answer: B

- 91) In an experiment assessing the effect of pain on anxiety, pain is the
- A) independent variable.
  - B) control condition.
  - C) experimental condition.
  - D) dependent variable.

Answer: A

- 92) In an experiment assessing the effect of pain on anxiety, anxiety is the  
A) dependent variable. B) experimental condition.  
C) independent variable. D) control condition.

Answer: A

- 93) The experiment on driving and cell phone use conducted by Strayer (2003) described in the text had two independent variables. Each independent variable had two levels. How many conditions were there?  
A) 16 B) 2 C) 4 D) 8

Answer: C

- 94) In an experiment, which of the following is defined as a group that is not exposed to the treatment or that receives a zero-level of the independent variable?  
A) control B) contrast C) check D) experimental

Answer: A

- 95) An animal researcher is studying the effect of a new drug on the memory of mice. One group of mice receives the drug, whereas a second group does not. The memory of the mice is then tested by how quickly they can negotiate a maze. In this example, the group of mice that does NOT receive the drug would be considered the \_\_\_\_\_ group.  
A) control B) confounding C) experimental D) correlational

Answer: A

- 96) The procedure that ensures that all subjects have an equal chance of being in any group or condition within the experiment is called:  
A) random assortment. B) random choice.  
C) random sampling. D) random assignment.

Answer: D

- 97) Random assignment controls important differences between individual participants by \_\_\_\_\_.  
A) equalizing them B) randomly sampling them  
C) balancing them D) holding them constant

Answer: C

- 98) Designs in which each participant is exposed to each condition or group in an experiment, control for individual differences by \_\_\_\_\_.  
A) holding them constant B) randomly sampling them  
C) balancing them D) equalizing them

Answer: A

**TRUE/FALSE. Write 'T' if the statement is true and 'F' if the statement is false.**

- 99) In an experiment, the independent variable is the one that is manipulated by the researcher.

Answer:  True  False

100) Random assignment is used to ensure that a sample is representative of the population from which it is drawn.

Answer: True  False

101) Researchers often manipulate more than one independent variable in experiments because it better captures the complexity of human behaviour.

Answer:  True False

**MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.**

102) The concept of interaction

A) is the way one independent variable influences the dependent variable and is dependent on another independent variable.

B) is the way variables influence one another.

C) is the way people behave in small groups.

D) is the way one dependent variable influences the independent variable based on another dependent variable.

Answer: A

103) You read about some research that is assessing a new treatment for social phobia (a psychological disorder). Immediately you notice that the research may have been affected by both placebo effects and experimenter expectancy effects. You would now be concerned about which of the following?

A) Whether the new treatment is ethical

B) External validity

C) Internal validity

D) Meta-analysis

Answer: C

**TRUE/FALSE. Write 'T' if the statement is true and 'F' if the statement is false.**

104) If an experiment has a confounding variable, this significantly lowers its internal validity.

Answer:  True False

**MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.**

105) An experimental group listened to 10 minutes of a Mozart sonata, a control group listened to 10 minutes of relaxation to instructions, while the other control group listened to silence. The Mozart group performed much better on a subsequent test of spatial abilities than the two control groups. The results of this experiment are not valid because

A) 10 minutes is an inadequate amount of time.

B) there are two control groups.

C) there could be confounding variables.

D) the amount of time is not indicated for the group who listened to silence.

Answer: C



- 112) When discussing the concept of replication, the text presents research related to psychics and paranormal abilities. Which of the following best summarizes the current state of this research and the attitude that science should have toward it?
- A) Over 30 years of scientific research hasn't produced any solid evidence that supports the existence of paranormal phenomena so science shouldn't bother to continue studying them.
  - B) Over 30 years of scientific research hasn't produced any solid evidence that supports the existence of paranormal phenomenon but science should continue to examine these phenomena with an open-minded but skeptical attitude.
  - C) Researchers have consistently demonstrated valid and reliable paranormal phenomena in scientific settings but conservative critics have unfairly rejected these results.
  - D) As research techniques have gotten more sophisticated, there are a growing number of psychic abilities that have been shown to be reliable and valid and science should continue to investigate these phenomena.

Answer: B

- 113) In an experiment, the main difference between internal validity and external validity is that:
- A) internal validity is based on random selection, whereas external validity is based on random sampling.
  - B) external validity concerns the degree to which the experiment supports clear causal conclusions, whereas internal validity concerns the generalizability of the results.
  - C) internal validity is based on random sampling, whereas external validity is based on random selection.
  - D) internal validity concerns the degree to which an experiment supports clear causal conclusions, whereas external validity concerns the generalizability of the results.

Answer: D

- 114) Dr. Sussman conducts a study on the effect of various motivational factors on job performance. In her study, she does an excellent job of controlling extraneous factors and as a result, we can have high confidence in the causal conclusions she draws. However, the participants in her study were from a select group of the population and, therefore, Dr. Sussman will be rather limited in terms of her ability to apply her results to other people and situations. Taken as a whole, this study would be said to have \_\_\_\_\_ internal validity and \_\_\_\_\_ external validity.
- A) poor; good                      B) good; good                      C) good; poor                      D) poor; poor

Answer: C

- 115) Meta-analysis is used to:
- A) combine the results from different studies examining the same topic.
  - B) evaluate the internal validity of a particular study.
  - C) ensure that a sample is representative of the population from which it is drawn.
  - D) evaluate the external validity of a particular study.

Answer: A

116) A psychologist specializes in a research area in which there is an ongoing debate about the effectiveness of a particular treatment. In order to gain more information, this psychologist reviews approximately 50 studies that have utilized this particular treatment, and using this information, the psychologist finds that the vast majority of the studies found the treatment to be effective. This psychologist has just completed what is best described as a(n):

- A) experimental study.
- B) operational definition.
- C) meta-analysis.
- D) correlational study.

Answer: C

117) The goal of meta-analysis is to

- A) manipulate high numbers of independent variables.
- B) measure high numbers of dependent variables.
- C) analyze the results of an experiment.
- D) reach overall conclusions about a phenomenon.

Answer: D

118) Numerous researchers have conducted research examining the effect of media violence on aggression. Which of the following would you want to conduct to reach an overall conclusion about the phenomenon?

- A) a survey
- B) a case study
- C) an experiment
- D) a meta-analysis

Answer: D

**TRUE/FALSE. Write 'T' if the statement is true and 'F' if the statement is false.**

119) External validity is concerned with the degree to which we can generalize the results of a study to other people and settings.

Answer:  True  False

**MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.**

120) In Canada, research ethics rules are determined by the:

- A) individual university administrations
- B) Canadian Council for Ethics
- C) tri-council policy for ethical conduct
- D) inter-university policy

Answer: C

121) The ethical guideline that refers to how participants should be given full descriptions about the procedures involved in a study and told that they are free to withdraw from a study at any time is called \_\_\_\_\_.

- A) psychological risk
- B) informed consent
- C) social risk
- D) right to privacy

Answer: B

- 122) Considerations about whether the setting of an experiment is public or private and the manner in which information gained in an experiment will be recorded and distributed are most relevant to which ethical area?
- A) risk benefit ratio
  - B) increasing internal validity
  - C) ensuring privacy and confidentiality
  - D) deception

Answer: C

- 123) The Canadian Code of Ethics for Psychologists includes all of the following requirements for psychologists using human subjects EXCEPT:
- A) obtain informed consent
  - B) avoid doing harm to participants
  - C) protect and promote the welfare of participants
  - D) provide monetary compensation for subjects time and participation

Answer: D

**TRUE/FALSE. Write 'T' if the statement is true and 'F' if the statement is false.**

- 124) According to ethical guidelines, deception is justified when there are no other alternatives and the study has potential significant benefits that outweigh the risks of deceiving participants.

Answer:  True       False

**MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.**

- 125) Ethical guidelines for the treatment of animals in research state that if there are experimental risks for animals, these risks need to be justified by the importance of the research. However, a problem associated with this guideline is that:
- A) there are additional psychological ethical guidelines which prohibit all animal research.
  - B) the majority of psychologists feel that animal research is unethical and unnecessary.
  - C) the majority of research done with animals has no benefit for humans.
  - D) it is often difficult to make the determination of what is "justified."

Answer: D

- 126) Which of the following is NOT a good question to ask when critically evaluating presentations (e.g., ads, newspaper articles) about psychological information?
- A) What is the most reasonable conclusion to be drawn?
  - B) What are the variables?
  - C) What is the quality of the evidence?
  - D) What claim is being made?

Answer: B



- 127) Which of the following was NOT listed as a question that one should ask to facilitate critical thinking?
- A) What is the most reasonable conclusion to draw?
  - B) Do the studies have strong external validity?
  - C) What evidence is being presented to support this claim?
  - D) What is the quality of the evidence?

Answer: B

## Answer Key

Testname: UNTITLED15

- 1) C
- 2) C
- 3) D
- 4) A
- 5) A
- 6) B
- 7) B
- 8) B
- 9) C
- 10) A
- 11) D
- 12) FALSE
- 13) TRUE
- 14) FALSE
- 15) D
- 16) C
- 17) C
- 18) D
- 19) D
- 20) B
- 21) B
- 22) A
- 23) TRUE
- 24) B
- 25) A
- 26) A
- 27) C
- 28) A
- 29) D
- 30) B
- 31) A
- 32) B
- 33) B
- 34) C
- 35) D
- 36) B
- 37) D
- 38) A
- 39) B
- 40) B
- 41) D
- 42) B
- 43) A
- 44) TRUE
- 45) FALSE
- 46) D
- 47) A
- 48) D
- 49) C
- 50) C

## Answer Key

Testname: UNTITLED15

- 51) A
- 52) B
- 53) B
- 54) C
- 55) A
- 56) C
- 57) A
- 58) C
- 59) D
- 60) A
- 61) A
- 62) B
- 63) TRUE
- 64) FALSE
- 65) TRUE
- 66) A
- 67) B
- 68) D
- 69) B
- 70) D
- 71) D
- 72) C
- 73) C
- 74) C
- 75) A
- 76) D
- 77) A
- 78) A
- 79) D
- 80) TRUE
- 81) FALSE
- 82) FALSE
- 83) D
- 84) B
- 85) A
- 86) B
- 87) A
- 88) D
- 89) B
- 90) B
- 91) A
- 92) A
- 93) C
- 94) A
- 95) A
- 96) D
- 97) C
- 98) A
- 99) TRUE
- 100) FALSE

## Answer Key

Testname: UNTITLED15

- 101) TRUE
- 102) A
- 103) C
- 104) TRUE
- 105) C
- 106) FALSE
- 107) A
- 108) B
- 109) B
- 110) B
- 111) B
- 112) B
- 113) D
- 114) C
- 115) A
- 116) C
- 117) D
- 118) D
- 119) TRUE
- 120) C
- 121) B
- 122) C
- 123) D
- 124) TRUE
- 125) D
- 126) B
- 127) B

**MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.**

- 1) According to the results of the study done by John Darley and Bibb Latané, if you are robbed at gunpoint while walking home from the grocery store, your best chance of receiving help from witnesses would be when:
- A) it is broad daylight and the street is very crowded
  - B) the robber wears a mask and thinks he is not recognized by the bystanders
  - C) several people getting off of a bus across the street see what is happening
  - D) one person across the street witnesses the crime

Answer: D

- 2) What three key attitudes did John Darley and Bibb Latané display in their research on "bystander apathy"?
- A) rationality, curiosity, skepticism
  - B) curiosity, optimism, open-mindedness
  - C) curiosity, skepticism, open-mindedness
  - D) creativity, optimism, curiosity

Answer: C

- 3) Many people doubted Sigmund Freud and his psychodynamic theory. They wanted to know what evidence Freud was basing his conclusions on and wondered if there might be a better explanation for the causes of human behaviour. These people's doubts are most similar to which key scientific attitude?
- A) skepticism
  - B) curiosity
  - C) liberalism
  - D) creativity

Answer: A

- 4) Sitting in class one day, Ben wonders aloud to his friend James, why the multiple-choice exams seem harder than essay exams. James, whose older sister is a college professor, tells him that research shows that it is easier to trick students with multiple-choice questions so they are in fact harder. "Wow!" Ben thinks, "So that explains it." Ben would have been better off seeking another opinion, or at least asking James about the research he is talking about. If he had, Ben would be demonstrating a healthy scientific attitude of:
- A) creativity
  - B) open-mindedness
  - C) skepticism
  - D) liberalism

Answer: C

- 5) A researcher, who is always willing to consider criticisms of his theory and to make theoretical revisions and adjustments when the evidence supports it, is demonstrating behaviour most consistent with which key scientific attitude?
- A) open-mindedness
  - B) skepticism
  - C) curiosity
  - D) rationality

Answer: A

- 6) The first step in the scientific process is to:
- A) test a theory.
  - B) propose a prediction.
  - C) create a hypothesis.
  - D) form a question about something interesting.

Answer: D

- 7) Which of the following lists the steps of the scientific process in the proper order?
- A) ask question, conduct research, create hypothesis, build theory, analyze data
  - B) conduct research, ask question, create hypothesis, analyze data, build theory
  - C) ask question, create hypothesis, conduct research, analyze data, build theory
  - D) create hypothesis, ask question, conduct research, analyze data, build theory

Answer: C

- 8) John Darley's and Bibb Latané's statement, "IF an emergency occurs, THEN the greater the number of bystanders, the less likely any one bystander will be to intervene" is best considered an example of a(n):
- A) proven theory.
  - B) initial research question.
  - C) specific prediction.
  - D) behavioural correlation.

Answer: C

- 9) As part of their research on bystander apathy, John Darley and Bibb Latané created fake "emergencies" in their experimental laboratory and observed people's responses. When making these observations, what step of the scientific process were they engaged in?
- A) generating a theory
  - B) creating a prediction
  - C) conducting research
  - D) creating a hypothesis

Answer: C

- 10) A hypothesis is best considered as:
- A) an empirical or correlational statement.
  - B) a set of formal statements that explain how certain events are related to one another.
  - C) a specific prediction, often in the form of an "if-then" statement.
  - D) a tentative explanation about some phenomenon.

Answer: C

- 11) John Darley and Bibb Latané made the following assumption: "diffusion of responsibility reduces the likelihood of any single bystander feeling responsible to intervene in an emergency." This assumption is an example of a(n):
- A) dependent variable.
  - B) independent variable.
  - C) operational definition.
  - D) hypothesis.

Answer: D

- 12) A psychodynamic psychologist assumes that people with unresolved childhood issues are more susceptible to stress and anxiety. This psychologist's assumption is best viewed as an example of:
- A) correlational research.
  - B) a theory.
  - C) a hypothesis.
  - D) a dependent variable.

Answer: C

- 13) A humanistic psychologist believes that people who don't have a clear sense of meaning in their lives are more vulnerable to depression and physical illness. This psychologist's beliefs are best viewed as an example of:
- A) a theory.
  - B) scientific skepticism.
  - C) a hypothesis.
  - D) conducting research.

Answer: C

- 14) Bruce notices that on the days that he eats lunch at Archie's diner, people are less likely to ask him to join them for the afternoon coffee break. Bruce wonders why this is happening and thinks that his co-workers must assume that he doesn't want coffee after a hearty lunch. If Bruce were to use the scientific process, now that he has a tentative explanation, he would translate this into a(n):
- A) experiment
  - B) specific prediction
  - C) trial
  - D) theory

Answer: B

- 15) On the first day of school, Ted's fifth grade teacher asks her students to introduce themselves and tell the class what they did on their summer vacation. Ted notes that all of the smart kids had gone on great trips; so travel, he reasons, must make you smart. Ted gathers information from the students in his school and analyzes it. Ted is testing this \_\_\_\_\_.
- A) hypothesis
  - B) formal explanation
  - C) theory
  - D) fact

Answer: A

- 16) A formal set of statements that explains why and how certain events are related to one another is called a(n) \_\_\_\_\_.
- A) specific prediction
  - B) hypothesis
  - C) operational definition
  - D) theory

Answer: D

- 17) A theory is best defined as:
- A) a specific prediction, often in the form of an "if-then" statement.
  - B) conducting research to test a prediction.
  - C) a set of statements that explains the relationship between various events.
  - D) a tentative explanation or prediction about some phenomenon.

Answer: C

- 18) A distinction between theories and hypotheses is that:
- A) theories use operational definitions while hypotheses do not.
  - B) theories tend to be externally valid while hypotheses tend to be internally valid.
  - C) hypotheses tend to be broader and more externally valid than theories.
  - D) theories tend to be broader than hypotheses.

Answer: D

- 19) One of the problems of after-the-fact or "hindsight" explanations is that:
- A) there are many ways of explaining past events, without overemphasizing external validity.
  - B) there are many ways of explaining past events and there is usually no way to know which of these ways is correct.
  - C) they are usually too theoretically complex and sophisticated.
  - D) they fail to provide a foundation on which further scientific study can occur.

Answer: B

- 20) When presented with the findings of psychological research, it is not uncommon for people to comment that the results are trivial and obvious. This tendency illustrates one of the limitations of:
- A) theories.
  - B) independent variables.
  - C) hypotheses.
  - D) hindsight understanding.

Answer: D

- 21) After a visit to her doctor, Kristen is told she has a rare disease and needs surgery immediately. When Kristen seeks a second opinion, she avoids a hindsight understanding from her second doctor. What did Kristen do to avoid the second doctor's hindsight understanding?
- A) She told the second doctor the first doctor's diagnosis so that she has all of the information necessary to make her own diagnosis.
  - B) She told the second doctor the first doctor's diagnosis because it is rare and the symptoms might be easily missed.
  - C) She did not tell the second doctor the first doctor's diagnosis so that he/she is not influenced by the first doctor's explanation.
  - D) She did not tell the second doctor the first doctor's diagnosis, as the second opinion is costing her just as much as the first.

Answer: C

- 22) If a research study found that career motivation was higher among recent immigrants to Canada than long-standing Canadian residents, most people might readily offer several reasonable explanations for this finding. However, if a study found that career motivation was higher among long-standing Canadian residents than recent immigrants to Canada, most people might generate an equally convincing set of explanations. This example demonstrates the problems associated with:
- A) theoretical predictions.
  - B) hindsight reasoning.
  - C) hypotheses.
  - D) operational definitions.

Answer: B



23) Scientists typically test their understanding through:

- A) the use of survey research.
- B) prediction and control.
- C) the use of narrative research.
- D) examining existing variables.

Answer: B

24) Which of the following is a characteristic of a good theory?

- A) A good theory organizes information in a meaningful way.
- B) A good theory is complex and sophisticated.
- C) A good theory uses operational definitions.
- D) A good theory is difficult to test through empirical science.

Answer: A

25) Professor Smith has developed a theory that is rather straightforward compared to the complex theory of Professor Jones. Both theories generate a number of new hypotheses from other researchers. Even though both theories predict the same phenomena well, the preferred theory is \_\_\_\_\_.

- A) Professor Jones' because its complexity allows for more testability.
- B) Professor Jones' because it is complex and will generate more hypotheses.
- C) Professor Smith's because it will be easiest to prove.
- D) Professor Smith's because it conforms to the law of parsimony.

Answer: D

26) Which of the following was mentioned in the text as a characteristic of a good theory?

- A) Good theories focus on independent variables.
- B) Good theories are simple theories.
- C) Good theories are long and explicative theories.
- D) Good theories confirm pre-existing hypotheses.

Answer: B

27) The notion that if two theories can equally explain and predict the same phenomenon, then the simpler one is the preferred theory is the law of \_\_\_\_\_.

- A) consistency
- B) parsimony
- C) least complexity
- D) simplicity

Answer: B

28) Imagine a research area in psychology where there are several seemingly conflicting findings and theories. You develop a new theory that resolves these conflicts and explains the findings of this area within a single broad framework. Your theory best demonstrates which characteristic of a good theory?

- A) Your theory conforms to the law of parsimony.
- B) Your theory organizes information in a meaningful way.
- C) Your theory's predictions are supported by previous research.
- D) Your theory conforms to the law of simplicity.

Answer: B

- 29) A psychologist during the time of Freud creates a new and different theory designed to explain human behaviour. Using this new theory, it is relatively easy to design studies and experiments to evaluate its validity. This is in contrast to the concepts of Freud's theory, which were very difficult to measure. This new theory best illustrates which characteristic of a good theory?
- A) The theory organizes information in a meaningful way.
  - B) The theory is parsimonious.
  - C) The theory is consistent with previous research findings.
  - D) The theory is testable.

Answer: D

- 30) A(n) \_\_\_\_\_ definition defines a variable in terms of the specific procedures used to measure it.
- A) dependent
  - B) operational
  - C) independent
  - D) representative

Answer: B

- 31) Shireen thinks that people learn better when they enjoy the course in which they are studying. In order to test her prediction, she must operationalize her variables. Which of the following best represents valid operational definitions of the variables contained within her prediction?
- A) number of hours studying; number of assignments submitted
  - B) number of hours studying; student ratings of the course
  - C) test score; number of assignments submitted
  - D) test score; student ratings of the course

Answer: D

- 32) In research, any characteristic that can vary is called a(n) \_\_\_\_\_.
- A) hypothesis
  - B) operational definition
  - C) theory
  - D) variable

Answer: D

- 33) The essential function of an operational definition is that it translates something:
- A) observable into something abstract and relevant.
  - B) observable into something abstract and measurable.
  - C) relevant into something abstract and observable.
  - D) abstract into something observable and measurable.

Answer: D

- 34) A psychologist is interested in studying stress. Since stress can mean different things to different people, she decides that she would like to assess stress by measuring people's blood pressure. This psychologist has just created a(n):
- A) control group.
  - B) operational definition.
  - C) case study.
  - D) independent variable.

Answer: B

35) A researcher is interested in studying what factors influence interpersonal attraction. In a study designed to explore this variable, the researcher uses a very attractive person for an assistant. Interpersonal attraction is then assessed by whether the people participating in the study call up the attractive assistant to ask the person on a date. In this example, the means used to assess interpersonal attraction would be considered a(n):

- A) hypothesis
- B) correlational study
- C) operational definition
- D) case study

Answer: C

36) An advantage of using operational definitions is that:

- A) they are consistent with the law of parsimony.
- B) they automatically generate the relevant dependent and independent variables.
- C) they let other researchers know exactly what is meant by the various terms.
- D) they allow other researchers to agree with these definitions.

Answer: C

37) The social desirability bias exists as a limitation of which of the ways of measuring behaviour?

- A) self-report measures
- B) physiological measures
- C) reports by others
- D) behavioural observations

Answer: A

38) The tendency to respond in a socially appropriate manner rather than according to how a person actually thinks, feels, or behaves is called the:

- A) social worth bias.
- B) social acceptability bias.
- C) social desirability bias.
- D) social adequacy bias.

Answer: C

39) A child psychologist is working with a young child named Sally. In order to get more information, the psychologist interviews Sally's parents and asks them about Sally's childhood experiences. This would best be considered an example of which of the major ways of measuring behaviour?

- A) physiological measures
- B) behavioural observations
- C) reports by others
- D) self-report measures

Answer: C

40) A researcher is interested in studying the frequency of aggression in school-aged children. Which would be the best method to use to measure aggression?

- A) archival records
- B) behavioural observations
- C) physiological measures
- D) self-report measures

Answer: B

- 41) In a study designed to investigate the causes of stress, a psychological researcher measures stress by monitoring people's heart rate and blood pressure. In this study, the researcher has utilized which method of measuring behaviour?
- A) behavioural observations
  - B) self-report measures
  - C) physiological measures
  - D) archival records

Answer: C

- 42) A limitation of physiological measures of behaviour is that:
- A) they are subject to random sampling of physiological measures.
  - B) they fail to convey what a given physiological response means.
  - C) they fail to use operational definitions for physiological measures.
  - D) they are subject to the social desirability bias of physiological measurement.

Answer: B

- 43) A social psychologist is interested in studying aggression in sports fans. He goes to various sporting events and keeps track of the number of aggressive acts that occur between fans using a well-defined coding system. This psychologist is using which of the following ways of measuring behaviour?
- A) physiological measures
  - B) behavioural observations
  - C) self-report measures
  - D) scientific measures

Answer: B

- 44) One of the major limitations of behavioural observations is that:
- A) researchers do not know what a given physiological response really means.
  - B) researchers know that people may not behave differently when they know they are being watched.
  - C) researchers do not know whether people's behaviours are internally valid.
  - D) researchers know that people may behave differently when they know they are being watched.

Answer: D

- 45) If a measure of behaviour is reliable, we know that it is:
- A) valid.
  - B) based on a theory.
  - C) consistent.
  - D) operationally defined.

Answer: C

- 46) Two research assistants trained to code the type of interactions observed between siblings, repeatedly disagree on how to code siblings' sarcastic comments toward one another. The resulting data may then be:
- A) useless, as the information derived may be unreliable
  - B) useful, as there is diversity in the observation
  - C) useless, as the coding system may be faulty
  - D) useful, and the consistent disagreement can be further studied

Answer: A

47) Pre-existing documents that researchers use to gather information about people's overt behaviours are called \_\_\_\_\_.

A) archival measures

B) random samples

C) physiological reports

D) self-report measures

Answer: A

48) In order to assess the effectiveness of a new province-wide seatbelt law, researchers collect data from the department of transportation regarding the number of traffic fatalities in the last year. This type of measurement of behaviour is called a(n):

A) historical record.

B) archival record.

C) sequential record.

D) chronological record.

Answer: B

49) People sometimes change their behaviour when they know that they are being observed. To counter this problem, psychologists monitor behaviours in a way that people are unaware that they are being observed. These measures are called \_\_\_\_\_.

A) unobtrusive measures

B) unintentional measures

C) hidden measures

D) subtle measures

Answer: A

50) A researcher wants to know how much time students in a dorm spend watching TV, but she has noticed that students tend to leave the TV room when she comes in to see who is watching. To get around this problem, she decides to observe wear-and-tear on the TV remote control as a measure of how much time students spend watching TV. Like many psychologists, this researcher is using a(n):

A) hypothetical measure.

B) unobtrusive measure.

C) double-blind measure.

D) placebo measure.

Answer: B

51) A case study is considered to be which type of research method?

A) experimental research

B) descriptive research

C) hypothetical research

D) correlational research

Answer: B

52) An fMRI study confirmed that the ventral and dorsal streams of the visual cortex independently processes object perception and object \_\_\_\_\_.

A) action

B) size

C) colour

D) shape

Answer: A

53) Brain imaging technology is generally used to explore the following:

A) physical disabilities

B) drug efficacy

C) social skills acquisition

D) motivation

Answer: A

- 54) Despite having excellent vision, Kris was unable to grasp or pick up objects properly. It is likely that he has damaged his:
- A) motor cortex.
  - B) cerebellum.
  - C) visual cortex: dorsal stream.
  - D) visual cortex: ventral stream.

Answer: C

- 55) An in-depth study of an individual, a group, or an event is called a \_\_\_\_\_.
- A) correlational study
  - B) survey
  - C) case study
  - D) naturalistic observation

Answer: C

- 56) Which of the following is an advantage of the case study method of research?
- A) Case studies are very useful for determining cause-effect relationships.
  - B) Case studies are a good method for studying a large number of participants.
  - C) Case studies are generalizable to the population at large.
  - D) Case studies are a good method for studying rare events.

Answer: D

- 57) At the University of Western Ontario, Mel Goodale and his colleagues' studied a patient who had suffered from carbon monoxide poisoning and had suffered damage to several parts of her brain. The research on this patient provided evidence that perception and action can be processed independently, by different parts of the human brain. The research method used was a(n):
- A) naturalistic observation.
  - B) correlational study.
  - C) experiment.
  - D) case study.

Answer: D

- 58) The case study method was used to study the program which was designed to train the mothers of "failure-to-thrive" infants in nutrition and feeding techniques at Surrey Place Centre in Toronto. The case study method helped researchers to:
- A) generalize the findings to other training programs.
  - B) illustrate how effective the interventions developed by the clinical psychologists are to treat special populations.
  - C) access and use archival methods.
  - D) study the phenomenon and determine the cause of infant weight gain due to the program.

Answer: B

- 59) Imagine that someone has developed an absurd theory that asserts that every child with blond hair will be over 6 feet tall when they are adults. An adult friend of yours is blond but happens to only be 5'6". This example best demonstrates which of the following advantages of the case study method?
- A) A single case study can be a rich source for new ideas and hypotheses.
  - B) Case studies are useful for studying rare events.
  - C) A single case study can challenge the validity of a theory.
  - D) Case studies tend to have variables with stronger operational definitions than do other methods.

Answer: C

60) An important limitation of the case study research method is that it:

- A) is a poor method for determining cause-effect relationships.
- B) is a poor method for studying rare events.
- C) is a poor source for new ideas and hypotheses.
- D) is a poor source for studying people.

Answer: A

61) Which of the following is a disadvantage of the case study research method?

- A) Case studies often have high internal validity.
- B) A case study is a poor method for studying rare events or people.
- C) Case studies often have questionable generalizability.
- D) A single case study cannot be used to refute or challenge a theory.

Answer: C

62) A researcher who observes behaviour as it occurs in a normal or typical setting is doing \_\_\_\_\_.

- A) survey research
- B) case study
- C) naturalistic observation
- D) correlational research

Answer: C

63) As part of a class on animal behaviour, students are sent to a local park and are asked to watch and record the feeding behaviour of the crows there. These students are engaged in which method of research?

- A) an experiment
- B) naturalistic observation
- C) a survey
- D) a case study

Answer: B

64) In order to learn about the social behaviour of children, a developmental psychologist goes to an elementary school, finds a seat near one of the windows in a classroom, and watches the children playing on the playground outside during recess. This psychologist is engaged in which method of research?

- A) naturalistic observation
- B) a case study
- C) correlational research
- D) experimental research

Answer: A

65) An important advantage of the method of naturalistic observation is that:

- A) it can provide detailed information on naturally occurring behaviour.
- B) it can provide important information on cause-effect relationships.
- C) it can more easily be matched to correlational research.
- D) it can more easily be incorporated into meta-analyses.

Answer: A

- 66) Which of the following statements about naturalistic observations is true?
- A) Naturalistic observations tend to have more independent than dependent variables.
  - B) Naturalistic observations tend to have low external validity.
  - C) Naturalistic observations do not contribute to making causal conclusions.
  - D) Naturalistic observations often make use of the double-blind procedure.

Answer: C

- 67) Some psychologists studied the bullying behaviour by elementary school-aged children as it occurred during school recess. They found that:
- A) the observations made during the research permitted causal conclusions about bullying behaviour.
  - B) the schoolmates were frequently present during bullying episodes but rarely intervened.
  - C) the research methods did not influence the children's behaviours.
  - D) naturalistic observation was not an effective research method for studying children's bullying behaviour.

Answer: B

- 68) Which of the following was discussed as a potential limitation of naturalistic observation?
- A) Naturalistic observation often makes improper use of random assignment.
  - B) The observer's presence may disrupt or influence the behaviour of the person or animal he/she is watching.
  - C) The settings in which naturalistic observations typically occur tend to have low external validity.
  - D) Naturalistic observation relies too heavily on the use of archival data about the person or animal being observed.

Answer: B

- 69) What type of research gathers information about a topic by administering questionnaires or interviews to people of an area of interest?
- A) survey research
  - B) naturalistic observations
  - C) case studies
  - D) experimental research

Answer: A

- 70) In order to estimate the results in a local election, a pollster contacts a select group of people and asks them how they voted. The pollster is using which of the following research methods?
- A) naturalistic observation
  - B) survey research
  - C) correlational research
  - D) a case study

Answer: B



71) In survey research, a population is defined as:

- A) the individuals who responded in the survey with a particular response (e.g., 53 percent "yes", 47 percent "no").
- B) all the individuals about whom we are interested in drawing conclusions.
- C) the people who actually complete the survey.
- D) the people selected to be in a survey.

Answer: B

72) In survey research, a sample is defined as:

- A) a subset of individuals drawn from the entire group in which we are interested.
- B) a pilot survey designed to determine whether there are any problems with the instrument.
- C) a specific percentage of the individuals we are interested in drawing conclusions about.
- D) all the individuals about whom we are interested in drawing conclusions.

Answer: A

73) Dr. Jones is interested in conducting a survey of all the college students at her university. She is careful when conducting her research to make sure that each student on campus has an equal opportunity to participate in her survey. To create her survey sample Dr. Jones will use:

- A) random assignment.
- B) random appointment.
- C) random preference.
- D) random sampling.

Answer: D

74) Sally wants to know what percentage of Canadian university students are receiving financial aid their first year in university. Sally attends a small university with a large percentage of students who commute to campus every day. Sally stands outside of the residence dining hall one weekday evening and hands out surveys to every third person entering the hall for dinner. Sally's data will be invalid because \_\_\_\_\_.

- A) she did not do a pilot test of her survey
- B) she did not define her population
- C) she did not use random sampling
- D) she did not use a representative sample

Answer: D

75) A sample in a survey should accurately reflect the important characteristics of the population from which it is drawn. For example, if a certain population has 53% women and the sample has 53% women, then the sample is said to be a:

- A) random assignment.
- B) representative sample.
- C) random sample.
- D) characteristic sample.

Answer: B

76) An advantage of survey research is that it:

- A) allows us to make inferences regarding cause-effect relations.
- B) is an efficient way to gather information about people's opinions and lifestyles.
- C) is very effective at reducing the placebo effect.
- D) is usually conducted without people knowing what they are being asked.

Answer: B

- 77) Which of the following statements regarding survey research is true?
- A) It is better to have a smaller representative sample than a larger unrepresentative sample.
  - B) It is better to have a larger unrepresentative sample than a smaller representative sample.
  - C) It is better to have a smaller sample than a larger sample.
  - D) It does not matter whether the sample size is small or large.

Answer: A

- 78) While conducting a research interview, a participant becomes slightly embarrassed and decides to answer the questions in such a way as to make himself look more friendly and acceptable to the interviewer. This example most clearly demonstrates which limitation of interview methods in research?

- A) random sampling
- B) social desirability bias
- C) experimenter effects
- D) placebo effect

Answer: B

- 79) While conducting a phone survey, the interviewer asks questions in such a way that it influences and affects the answers of the people she is interviewing. This example most clearly demonstrates which limitation of survey research?

- A) placebo effect
- B) random assignment
- C) interviewer bias
- D) social desirability bias

Answer: C

- 80) A researcher is examining the relation between two variables: variable X and variable Y. If she is conducting a correlational study, the researcher measures variable X and \_\_\_\_\_ variable Y.

- A) maintains
- B) discounts
- C) measures
- D) manipulates

Answer: C

- 81) The main goal of correlational research is to:

- A) examine associations among several variables.
- B) determine cause-effect relationships.
- C) gather detailed information about a single variable.
- D) observe behaviour in natural settings.

Answer: A

- 82) Dr. Little has heard that people tend to become more politically conservative as they get older. She decides to conduct a study to see if this is true. She conducts a telephone survey where she asks participants their age and political affiliation. She then uses statistics to see whether there is a relationship between these two variables. Which of the following research designs best describes Dr. Little's research?

- A) naturalistic observation
- B) representational research
- C) experimental research
- D) correlational research

Answer: D

83) It is difficult to draw causal inferences in correlational research because:

- A) in correlational research variables are manipulated.
- B) of the social desirability bias.
- C) it is difficult to tell which variable causes the other.
- D) of the placebo effect.

Answer: C

84) A researcher conducted a study relating the time parents spent with their children to their children's happiness. From a correlational analysis of the data, the researcher concluded that happier children are a result of parents spending more time with them. The possibility that the parents spent more time with their children *in response to* the fact that their children were happier is an example of:

- A) the third-variable problem in correlational research.
- B) the spurious relationship problem in correlational research.
- C) the bidirectionality problem in correlational research.
- D) the generalizability problem in correlational research.

Answer: C

85) A psychologist notes that there is a correlation between physical health and the number of vacations that a person takes. According to him, people who take more vacations tend to have better physical health. After thinking about this result, you realize that this association may be due to a third factor: income. People with more income can afford more vacations and can afford better health care. Your explanation for this is most consistent with which limitation of correlational research?

- A) experimenter expectancy effects
- B) the bidirectional causality problem
- C) the third variable problem
- D) the placebo effect

Answer: C

86) Dr. Gonzalez has just completed a correlational study where he found a strong association between parental expectations and children's academic achievement. In other words, children who perform well in school tend to have parents who have high expectations of them. However, Dr. Gonzalez can't tell which variable causes the other. It may be that high expectations cause children to perform better, or that children's better performance cause their parents to have higher expectations. This particular problem is known as:

- A) the third variable problem.
- B) poor external validity.
- C) the bidirectional causality problem.
- D) the experimenter expectancy effect.

Answer: C

87) In a positive correlation, high scores on one variable are associated with \_\_\_\_\_ scores on the second variable.

- A) average
- B) high
- C) low
- D) below average

Answer: B

88) In a negative correlation, high scores on one variable are associated with \_\_\_\_\_ scores on the second variable.

- A) average
- B) low
- C) high
- D) above average

Answer: B

- 89) Dr. Lahore is a psychologist who is investigating the relation between stress and illness. In her research, she has observed that as stress increases, the occurrence of physical illness also tends to increase. The association between these two variables is an example of a:
- A) negative correlation.
  - B) random correlation.
  - C) positive correlation.
  - D) causal correlation.

Answer: C

- 90) A clinical psychologist has observed that there appears to be an association between parental anger and childhood self-esteem. In particular, parents who score higher on ratings of anger and hostility tend to have children who have lower self-esteem. If this psychologist's impressions are correct, the relation between parental anger and childhood self-esteem would be an example of a:
- A) causal correlation.
  - B) negative correlation.
  - C) random correlation.
  - D) positive correlation.

Answer: B

- 91) A statistic that indicates the strength and direction of a relation between two variables is called the \_\_\_\_\_.
- A) association coefficient
  - B) causality coefficient
  - C) correlation coefficient
  - D) relation coefficient

Answer: C

- 92) The plus or minus sign (+/-) on the correlation coefficient reflects:
- A) the strength of the association.
  - B) the magnitude of the association.
  - C) the validity of the association.
  - D) the direction of the association.

Answer: D

- 93) The size or absolute value of the correlation coefficient tells us:
- A) the validity of the association.
  - B) the direction of the association.
  - C) the randomness of the association.
  - D) the strength of the association.

Answer: D

- 94) Which of the following statements regarding correlation coefficients is false?
- A) A correlation of + 0.50 indicates a stronger association than a correlation of - 0.75.
  - B) A correlation of - 0.75 indicates a stronger association than a correlation of + 0.50.
  - C) A correlation of + 0.75 indicates a stronger association than a correlation of + 0.50.
  - D) A correlation of - 0.75 indicates a stronger association than a correlation of - 0.50.

Answer: A

- 95) When Dr. Pressley examines the study habits of his students he finds that as the number of hours they spend studying increases, so do their grades. He finds an even stronger correlation between partying and grades in that as their grades improve the number of hours they spend partying decreases. When he runs the statistics on these data he finds which of the following correlation coefficients for hours studying with grades and hours partying with grades respectively:

A) +0.63; -0.34      B) -0.34; +0.63      C) +0.34; -0.63      D) -0.63; +0.34

Answer: C

- 96) A graph used to represent a correlation between two variables is called a \_\_\_\_\_.
- A) scattergram                      B) scatterplot                      C) association chart                      D) correlation map

Answer: B

- 97) One of the significant advantages of correlational research is that:
- A) it is not susceptible to the social desirability bias.  
B) it tends to have higher internal validity than do other research methods.  
C) it can be used to infer causal relations.  
D) it can be used to make predictions.

Answer: D

- 98) Assume that there is a strong negative correlation between two variables: variable 1 and variable 2. If you know that a person's score on variable 1 is low, what would be your best prediction for the person's score on variable 2?
- A) The person's score on variable 2 should be above average.  
B) The person's score on variable 2 should also be low.  
C) The person's score on variable 2 should be high.  
D) The person's score on variable 2 should be average.

Answer: C

- 99) Danny owns an ice cream stand near the beach. He knows that he sells more ice cream on sunny days than on days when it is cloudy. Danny has some researchers collect data for him so that he can be more efficient when he orders his ice cream. This example illustrates which of the primary functions of correlational research?
- A) prediction                      B) causality                      C) efficiency                      D) directionality

Answer: A

- 100) Assume that there is a strong positive correlation between two variables: variable A and variable B. If you know that a person's score on variable A is low, what would be your best prediction for the person's score on variable B?
- A) The person's score on variable B should be below average.  
B) The person's score on variable B should be average.  
C) The person's score on variable B should be high.  
D) The person's score on variable B should also be low.

Answer: D

- 101) We can best predict the value of one variable from the value of another variable if the two variables have a correlation coefficient of:
- A) -0.50                      B) -0.75                      C) +0.60                      D) +0.00

Answer: B

- 102) In experimental research, the researcher manipulates the independent variable and \_\_\_\_\_ the dependent variable.
- A) maintains                      B) manipulates                      C) measures                      D) discounts

Answer: C

- 103) Experimental research contains three essential steps: manipulate one variable, measure whether this manipulation affects another variable, and:
- A) calculate the correlation between the two variables.
  - B) attempt to control or hold constant other factors.
  - C) attempt to manipulate other factors.
  - D) use random sampling.

Answer: B

- 104) What are the three essential characteristics of experimentation?
- A) manipulate one variable, measure another variable, and attempt to control other factors
  - B) manipulate one variable, manipulate another variable, and attempt to control all other factors
  - C) manipulate one variable, manipulate another variable, and examine the correlation between the two
  - D) measure one variable, measure another variable, and examine the correlation between the two variables

Answer: A

- 105) In experimental research, one variable is manipulated by the experimenter. This is called the \_\_\_\_\_ variable.
- A) dependent
  - B) independent
  - C) operational
  - D) random

Answer: B

- 106) Which of following most accurately describes the distinction between independent and dependent variables?
- A) The dependent variable "depends upon" the independent variable.
  - B) The independent variable "depends upon" the dependent variable.
  - C) The dependent variable is correlated with the independent variable.
  - D) The independent variable is correlated with the dependent variable.

Answer: A

- 107) An educational psychologist wants to study the effectiveness of using the Internet as an instructional method for academic courses. She designs a study in which one group of students is assigned to take a course in a standard classroom with a live instructor. Another group of students is assigned to take the same course over the Internet. The psychologist then compares the course grades for students in each of the two groups. In this case, the instruction method (regular class vs. Internet class) would be considered the:
- A) correlational variable.
  - B) confounding variable.
  - C) independent variable.
  - D) dependent variable.

Answer: C

108) Dr. White wants to look at the impact of failure on self-esteem. He designs an experiment where half of the participants are led to believe that they have failed on an ambiguous task, while the other half of the participants are told that they have succeeded. Dr. White then has the people in his study complete a questionnaire measuring self-esteem and he looks to see if there are any differences in self-esteem between the success and failure groups. In this example, self-esteem would be considered the:

- A) independent variable.
- B) placebo variable.
- C) confounding variable.
- D) dependent variable.

Answer: D

109) A stress researcher wants to look at the effect of meditation on anxiety. To do this, she creates two groups of subjects: one group receives instruction in meditation, while the other receives no training at all. One month later, she has subjects complete a questionnaire designed to measure anxiety and she looks to see whether there are any differences in anxiety between the two groups. In this experiment, the meditation condition (meditation vs. no meditation) is the independent variable and anxiety is the \_\_\_\_\_ variable.

- A) confounding
- B) correlational
- C) dependent
- D) independent

Answer: C

110) Amy conducts an experiment in which she discovers that brunettes have more fun. She has three brunette females and three blond females go to the same party and record how many times they were asked to dance. In her experiment, Amy has defined the dependent variable as the number of times they were asked to dance, and the \_\_\_\_\_ as hair colour.

- A) correlational variable
- B) independent variable
- C) extraneous variable
- D) confounding variable

Answer: B

111) In an experiment, a group that is not exposed to the treatment or that receives a zero-level of the independent variable is called the \_\_\_\_\_.

- A) independent group
- B) control group
- C) experimental group
- D) comparison group

Answer: B

112) Control groups are important in experiments because:

- A) they make calculations of the correlation coefficient possible.
- B) they decrease internal validity and external validity.
- C) they provide a standard of comparison for the experimental group.
- D) they provide a needed comparison of the confounding variables.

Answer: C

113) An animal researcher is studying the effect of a new drug on the memory of mice. One group of mice receives the drug while a second group does not. The memory of the mice is then tested by how quickly they can negotiate a previously learned maze. In this example, the group of mice that does not receive the drug would be considered the:

- A) control group.
- B) experimental group.
- C) correlational group.
- D) independent group.

Answer: A

114) A clinical psychologist has developed a new form of psychotherapy to treat a particular personality disorder. In order to test its effectiveness, a group of people with the personality disorder is selected to receive the therapy for 8 weeks. A second group of people with the disorder is also created, but this group receives no therapy at all. At the end of the 8 weeks, the mental health of people in both groups is assessed to evaluate the new psychotherapy. In this study, the people who did not receive any therapy would be in the:

- A) control group.
- B) random group.
- C) experimental group.
- D) sample group.

Answer: A

115) The experimental group is to the control group as:

- A) the active level of the independent variable is to the zero-level of the independent variable.
- B) the treatment of the independent variable is to the zero-level of the dependent variable.
- C) the treatment of the independent variable is to the active level of the independent variable.
- D) the active level of the independent variable is to the treatment of the dependent variable.

Answer: A

116) If you are a participant in an experimental study, the procedure that insures that you have an equal chance of being in any group or condition within the experiment is called:

- A) random assortment.
- B) random choice.
- C) random sampling.
- D) random assignment.

Answer: D

117) In survey research, random sampling is typically used to insure that a sample is representative; while in experiments, a different method is used to balance differences between subjects across various experimental groups. The method used in experiments is called:

- A) random choice
- B) random appointment
- C) random assortment
- D) random assignment

Answer: D

118) Dr. Jun is conducting an experiment that has two experimental groups. In order to control for differences among her subjects, she flips a coin and uses chance to determine which subjects belong in which group. The procedure that Dr. Jun is using to place participants in the various groups is called:

- A) random grouping.
- B) random sampling.
- C) random choice.
- D) random assignment.

Answer: D



- 119) Random assignment is important in experiments because:
- A) it balances differences among participants across conditions of the experiment.
  - B) it holds differences among participants constant.
  - C) it eliminates experimenter expectancy effects.
  - D) it insures that the samples are representative of the population.

Answer: A

- 120) In experiments, researchers often use random assignment to place participants in various groups or conditions in their experiments. An alternative to random assignment is to design the study in such a way that each participant:
- A) may receive both the independent and dependent variables.
  - B) is exposed to all conditions in the experiment.
  - C) is equally likely to end up in any one of the experimental conditions.
  - D) may be randomly sampled.

Answer: B

- 121) Dr. Williams is conducting an experiment and decides to use a design in which each participant will be exposed to all of the conditions in her study. In designing her study, Dr. Williams is:
- A) controlling the placebo effect.
  - B) making use of random assignment.
  - C) making use of an alternative to random assignment.
  - D) using the double-blind procedure.

Answer: C

- 122) As an alternative to random assignment, researchers will sometimes design experiments where each participant is exposed to all conditions or groups in an experiment. This second procedure controls for differences between individual participants by:
- A) making use of the double-blind procedure.
  - B) balancing these differences between the conditions or groups.
  - C) holding these differences constant.
  - D) increasing external validity.

Answer: C

- 123) Random assignment controls for important differences among individual participants by balancing them. This is in contrast to designs in which each participant is exposed to each condition or group in an experiment. This latter design controls the individual differences by \_\_\_\_\_.
- A) balancing these differences between the conditions or groups
  - B) randomly sampling them
  - C) holding them constant
  - D) controlling the placebo effect

Answer: C

- 124) In a memory experiment, participants are asked to learn a list of words and then are tested on the list and the number of words they recall is recorded. In total, participants will be learning three word lists. Each of the word lists is of equivalent difficulty, the first list contains proper nouns, the second list contains breeds of dogs, and the third is a list of kitchen appliances. After working with 20 participants, the researchers notice that these participants are better at recalling the proper nouns, the first list of the three that they learn. How can the researchers be certain that proper nouns are actually easier to recall and that they are not recalled better because they are the first words the participants learn?
- A) counterbalance the order of the word lists.
  - B) take a random sample of the participants' answers.
  - C) add a control group that only learns proper nouns.
  - D) vary the dependent variable between conditions.

Answer: A

- 125) Strayer and colleagues wanted to establish if there was a causal relationship between cell phone use while driving and increased risk of vehicular collision. The independent and dependent variables in that experiment were, respectively:
- A) the braking reaction time and whether or not the person was talking on a cell phone.
  - B) whether or not the person was talking on a cell phone, and the braking reaction time.
  - C) whether or not the person was talking on a cell phone, and the undergraduate students with a range of driving experience and visual acuity.
  - D) the undergraduate students with a range of driving experience and visual acuity, and whether or not the person was talking on a cell phone.

Answer: B

- 126) Strayer and colleagues wanted to establish if there was a causal relationship between cell phone use while driving, traffic density, and increased risk of vehicular collision. They found evidence of an interaction because:
- A) cell phone use led to an increase in braking reaction time in the low traffic density condition.
  - B) cell phone use led to an increase in braking reaction time in both the low and high traffic conditions.
  - C) cell phone use led to an increase in braking reaction time only in the high traffic density condition.
  - D) cell phone use did not affect reaction time in regardless of traffic density.

Answer: B

- 127) Often, psychological researchers will manipulate more than one variable in an experiment. The main reason for this is that:
- A) it reduces experimenter expectancy effects.
  - B) it allows the variables to be both independent and dependent variables at the same time.
  - C) it reduces demand characteristics.
  - D) it better captures the complexity of human behaviour.

Answer: D



- 133) Which of the following statements regarding the differences between experimental and correlational research is **FALSE**?
- A) Correlational researchers are not able to keep extraneous factors constant the way that experimental researchers can.
  - B) In experimental research, at least one variable is measured, while in correlational research, all variables are measured.
  - C) Experimental research involves manipulating at least one variable, whereas correlational research often uses methods such as surveys and naturalistic observations.
  - D) Correlational research makes more use of random assignment than does experimental research.

Answer: D

- 134) Jake and Jack are both interested in the effect of the loud music from the dorm room next door on their grades. Jake records the days and hours the music is loud and compares that information to the grades he received on exams taken the days following the loud music. Jack plays his own music loud before his first psychology exam and quietly before his second exam. He then compares his exam scores. The primary difference in the way Jake and Jack conducted their research is:
- A) Jake took more accurate measurements than Jack.
  - B) Jack only looked at psychology exams and Jake used several courses.
  - C) Jack had fewer types of data than did Jake.
  - D) Jake used correlational data and Jack manipulated a variable.

Answer: D

- 135) Internal validity represents the degree to which:
- A) the results from an experiment are generalizable to other situations.
  - B) it effectively utilizes random sampling.
  - C) a sample is representative of the population from which it is drawn.
  - D) an experiment supports clear causal conclusions.

Answer: D

- 136) If an experiment allows for clear causal conclusions to be drawn, it is said to have strong:
- A) hypotheses.
  - B) internal validity.
  - C) operational definitions.
  - D) external validity.

Answer: B

- 137) All of the following decrease internal validity **EXCEPT**:
- A) experimenter expectancy effects.
  - B) confounding variables.
  - C) random assignment.
  - D) the placebo effect.

Answer: C

138) A psychologist is interested looking at the effectiveness of a new computer program in helping students learn math. She decides to test this new program with a group of middle school students. At this particular school, the boys and girls tend to be disruptive when they are in the same classroom, so she decides to run them in separate groups in the experiment. She creates a group of boys, each of them using the computer program four times per week. She creates a group of girls to serve as a comparison group and they do not get the computer program. This experimental design is flawed because gender is a confounding variable and as a result the following has been lowered:

- A) internal validity
- B) internal reliability
- C) external validity
- D) external reliability

Answer: A

139) Canadian researchers Thompson, Schellenberg, and Husain conducted an experiment in which they assigned university students to either a group that listened to a Mozart Sonata (happy music) or a group that listened to an Albinoni Adagio (sad music). Thompson et al. concluded that what previous researchers had called the "Mozart effect" was really an artifact of the participants' arousal and positive mood. Thompson et al. were claiming that:

- A) the Mozart Sonata acted as a placebo in their experiment.
- B) arousal and positive mood were confounds of the "Mozart effect."
- C) listening to the Mozart Sonata created demand characteristics for the participants.
- D) the "Mozart effect" resulted from an experimenter expectancy effect.

Answer: B

140) Which of the following methods can be used to study rare phenomena in-depth?

- A) Naturalistic observations
- B) Experiments
- C) Case studies
- D) Correlational studies

Answer: C

141) A researcher is interested in studying the Canadian women's beliefs about the pros and cons of sending a child to daycare. She recruits ten women from a major city in each province and territory and asks them to fill in a survey and mail it back to her. The population for this study would be:

- A) the women who actually returned the survey.
- B) all women in Canada
- C) all of the women in the major cities where recruitment occurred.
- D) the ten women from each major city that were recruited.

Answer: B

142) One of the problems with collecting data over the internet is:

- A) experimenter expectancy effects.
- B) cost.
- C) random assignment.
- D) sampling bias.

Answer: D

- 143) The placebo effect refers to:
- A) how researchers can accidentally or unintentionally manipulate other dependent variables.
  - B) the problems associated with drawing causal conclusions in correlational research.
  - C) how participant's behaviour can change because of their expectations rather than the treatments they receive.
  - D) how participants can change their behaviour based on what they think the hypotheses of an experiment are.

Answer: C

- 144) A researcher conducting a study on the effectiveness of a new prescription medication gives the actual medication to a group of people. A second group of participants are told they are receiving the medication but instead are given an inert sugar pill. Though the drug is found to be effective for the people who actually took it, a sizeable percentage of the people given the sugar pill also improve. The improvement of this second group is most likely due to:

- A) experimenter expectancy effects.
- B) social desirability bias.
- C) sampling bias
- D) the placebo effect.

Answer: D

- 145) Sally has been suffering from depression and finally decides to seek help from a clinical psychologist. After a couple of months of therapy, Sally starts to recover from depression. However, her improvement really isn't due to the therapy she has received from her therapist, but instead is a product of Sally's expectation that psychotherapy is supposed to be effective and therefore she should be getting better. This example is best considered as an example of:

- A) the placebo effect.
- B) the double-blind effect.
- C) social desirability.
- D) an experimenter expectancy effect.

Answer: A

- 146) Placebo effects make it difficult to draw causal conclusions because we can't tell whether:

- A) it is the treatment or the experimenters' behaviours that are responsible for the results.
- B) it is the treatment or participants' expectations that are responsible for the results.
- C) random sampling or random assignment is the appropriate procedure.
- D) it is the independent variable or the dependent variable that is responsible for the results.

Answer: B

- 147) Experimenter expectancy effects are:

- A) the subtle and unintentional cues that participants pick up about the hypotheses of an experiment.
- B) instances when participants improve because of their expectations rather than the actual treatments they receive.
- C) instances when experimenters mistakenly use random selection instead of random assignment.
- D) the subtle and unintentional ways that experimenters can influence their participants to respond in ways consistent with their hypotheses.

Answer: D

- 148) The internal validity of an experiment is lowered by experimenter expectancy effects because:
- A) there is a confounding effect and you can't tell whether the independent variable or the dependent variable caused the results.
  - B) the experimenter made a mistake in using a correlational design instead of an experimental design.
  - C) the results of the experiment may have been due to participants' expectations about the treatment they thought they were receiving.
  - D) the behaviour of the experimenter may have caused the participants to respond the way they did.

Answer: D

- 149) Dr. Treadwell is designing a study to test the effectiveness of a new memory enhancement technique. He has two research assistants who will be carrying out the research for him and because he is curious, he tells one of the research assistants to expect the technique to significantly improve memory while he tells the other assistant to expect only a moderate improvement. Neither research assistant mentions their expectations to the participants. After the study has been completed, Dr. Treadwell notices that each research assistant obtained results consistent with what they had been led to expect. Participants who were studied by the first research assistant actually showed a significant improvement in memory while participants who were studied by the second research assistant only showed a moderate improvement. This result is most likely an example of:
- A) social desirability bias.
  - B) experimenter expectancy effects.
  - C) the placebo effect.
  - D) the double-blind procedure.

Answer: B

- 150) In a famous experiment by Robert Rosenthal and Lenore Jacobson (1966), teachers at an elementary school were told at the beginning of the year that certain students were "late bloomers" and most likely these particular students were going to become strong students during the school year ahead. Sure enough, by the end of the year, the identified students were doing much better in school. Interestingly, the researchers had selected these children randomly at the beginning of the year and they had no real evidence on which they could base their predictions. The findings in this study are most similar or analogous to the problem of:
- A) social desirability bias.
  - B) the placebo effect.
  - C) the double-blind procedure
  - D) experimenter expectancy effects.

Answer: D

- 151) The problem of participant placebo effects and experimenter expectancy effects are both minimized by:
- A) the double-blind procedure.
  - B) random sampling.
  - C) operational definitions.
  - D) random assignment.

Answer: A

- 152) A researcher is concerned that his expectations about the effectiveness of a new drug are influencing the reports of participants in his studies. Specifically, he believes that this new drug is effective and has shared this information with participants in his research. In order to better control the effect of his own expectations on participants, this researcher should:
- A) use random sampling.
  - B) operationally define his dependent variable.
  - C) operationally define his independent variable.
  - D) use the double-blind procedure.

Answer: D

- 153) Dr. Mentor is conducting an experiment examining the effects of cell phone conversations on reaction times while driving a car. Each participant, either conversing on a cell phone or not, manoeuvres a driving course on a simulator. This simulated drive is videotaped. The research assistant hired to do the coding of the video tapes does not believe cell phone use should be banned while driving a motor vehicle and tends to err in the coding of the reaction times in a way that favours this belief. This experimenter expectancy effect could be controlled by:
- A) counterbalancing
  - B) improved external validity
  - C) the double-blind procedure
  - D) the placebo effect

Answer: C

- 154) Dr. Kiel is designing a study to test the effectiveness of a new anxiety medication. The study includes a placebo control group and neither the participants nor the research assistants who give out the medications know whether a participant is receiving the actual drug or a placebo. This study is a good example of:
- A) random sampling.
  - B) operational definitions.
  - C) the double-blind procedure.
  - D) the placebo procedure.

Answer: C

- 155) The double-blind procedure strengthens the internal validity of a study because:
- A) it creates more confounding variables in the experiment so the experimenter can be assured of validity.
  - B) it eliminates the problem of the participants' social desirability bias.
  - C) it insures that a given sample is representative of the population from which it is drawn.
  - D) it minimizes the effect of experimenter or participant expectations on the outcome of an experiment.

Answer: D

- 156) The process of repeating an experiment to determine whether the same results can be obtained is called:
- A) duplication
  - B) replication
  - C) repetition
  - D) reiteration

Answer: B





- 162) The ethical guideline of informed consent specifically asserts that:
- A) participants should be told of the key procedures in a study and told that they withdraw from the study without consequence.
  - B) participants can be deceived when it is ethically justified and no other alternatives are feasible.
  - C) deception is always ethically justified and is a part of most experiments.
  - D) experimenters need to be informed about significant research that has already been done in their research areas.

Answer: A

- 163) Considerations about the manner in which information gained in an experiment will be recorded and distributed are most relevant to which ethical consideration?
- A) social risk
  - B) deception
  - C) the right to privacy
  - D) informed consent

Answer: C

- 164) If an experimental procedure involves deception then what are the ethical obligations of the experimenter toward the participants?
- A) That participants are compensated for their participation as they did not actually give informed consent.
  - B) Participants need to both be debriefed and compensated for not being informed ahead of time of the true nature of the study.
  - C) That participants be debriefed following the procedure as to the actual purpose and rationale of the study.
  - D) Deception is never permissible in a study and therefore such an experiment could not actually take place.

Answer: C

- 165) A statistical procedure for combining the results of different studies examining the same topic to calculate the overall significance of the findings is known as \_\_\_\_\_.
- A) factor analysis
  - B) meta-analysis
  - C) replication analysis
  - D) additive analysis

Answer: B

- 166) If a finding is generalized in a cross-cultural replication, it is strong evidence for the \_\_\_\_\_ of the phenomenon.
- A) applicability
  - B) external validity
  - C) confounding
  - D) low internal validity

Answer: B

- 167) One of the problems with experiments that have found evidence for paranormal phenomena is that they have:
- A) not been replicated.
  - B) low external validity.
  - C) not published their findings.
  - D) not used meta-analysis.

Answer: A

168) Dr. Ross is conducting an experiment in which the information being collected from the participants is highly sensitive. If anyone outside the study gained access to the information, it could be damaging for the participants in that they would be treated differently by other people. This particular aspect of the study is most relevant to which ethical consideration?

- A) protecting and promoting the welfare of participants
- B) avoid doing harm to participants
- C) right to privacy
- D) informed consent

Answer: B

169) When participants are misled about the nature of an experiment, researchers refer to this as:

- A) fabrication.
- B) falsification.
- C) deception.
- D) concealment.

Answer: C

170) The primary reason for using deception in psychological research is that sometimes it is the only way to obtain:

- A) a representative sample of participants.
- B) natural responses from participants.
- C) a random assignment of participants.
- D) a random sample of participants.

Answer: B

171) Susan is interested in whether or not college students are prejudiced against elderly people. She has students come into the lab, view the faces of elderly people, and make judgments about the emotion displayed by each face. Susan tells participants that they are working on an emotion recognition experiment; however she is actually measuring the number of negative emotions assigned to the elderly faces. Susan's proposed research involves which of the following violations of the ethical standards in human research?

- A) lack of privacy
- B) discrimination against the elderly
- C) use of deception
- D) use of psychological risk

Answer: C

172) Which of the following statements about deception is true?

- A) Psychological researchers generally agree about the value of deception.
- B) A vast majority of psychological experiments do not utilize deception.
- C) A vast majority of psychological experiments utilize deception.
- D) The use of deception in research has increased in recent years.

Answer: B

173) Which ethical principle does deception violate?

- A) debriefing
- B) the right to privacy
- C) informed consent
- D) psychological risk

Answer: C

174) Deception is justified in psychological research:

- A) as long as the researcher debriefs with the participants.
- B) when other alternatives may be available, but the study has benefits that clearly outweigh the costs of using deception.
- C) only when there are no other alternatives available.
- D) when there are no other alternatives available and the study has benefits that clearly outweigh the costs of using deception.

Answer: D

175) A researcher is designing a study and is debating the potential use of deception. After discussing the issue with her colleagues, it is decided that there really is no alternative methodology that she could use to test her idea. Having said this, all of her colleagues agree that the cost of using deception in her study would strongly outweigh any positive benefits that would be gained from the study. Given this information, which of the following statements is true?

- A) The use of deception in this study is ethically justified, only if she uses the double-blind procedure.
- B) The use of deception in this study is ethically justified.
- C) The use of deception in this study is not ethically justified.
- D) The use of deception in this study is ethically justified, only if she does not tell her participants about the deception after the study is over.

Answer: C

176) Which of the following statements regarding animal research is true?

- A) Animal research has declined slightly in recent years.
- B) According to American Psychological Association standards, all animal research is unethical.
- C) Animal research has significantly increased in recent years.
- D) Most psychologists and college psychology researchers oppose animal research.

Answer: A

177) Which of the following is a Canadian Psychological Association guideline on animal research?

- A) animals cannot be used in a procedure that subjects them to pain, stress, or privation.
- B) the majority of research done with animals has no benefit for humans.
- C) the majority of psychologists feel that animal research is unethical and unnecessary.
- D) the risks to which animals are exposed must be justified by the potential importance of the research.

Answer: D

178) All of the following were mentioned as questions to ask yourself in order to become a better critical thinker except:

- A) What claim is being made?
- B) What evidence is being presented to support this claim?
- C) What is the quality of the evidence?
- D) What is the reputation of the person presenting the evidence?

Answer: D

179) Kyle could feel himself coming down with a nasty cold. His roommate, Dave, had been bragging about a new cold remedy he had discovered, guaranteeing that the remedy cured the common cold. Kyle went to Dave's room and asked him some questions about this new cure. Kyle was demonstrating critical thinking skills by asking:

- A) how much of the remedy needs to be taken and how often it needs to be taken.
- B) what advertising the manufacturers had done to support their claim of a cure.
- C) whether there was another plausible explanation for the remedy curing the common cold.
- D) to try a sample of the remedy.

Answer: C

**TRUE/FALSE. Write 'T' if the statement is true and 'F' if the statement is false.**

180) The three key scientific attitudes displayed by John Darley and Bibb Latané were curiosity, skepticism, and reason.

Answer: True  False

181) A hypothesis is a tentative explanation or prediction about some phenomenon.

Answer:  True  False

182) Hypotheses typically specify lawful relations between certain behaviours and their causes, and tend to be broader than theories.

Answer: True  False

183) All other things being equal, a simpler theory is considered to be better than a more complex theory.

Answer:  True  False

184) An operational definition defines a variable in terms of the specific procedures used to measure it.

Answer:  True  False

185) The optimum operational definition for exam stress would be to focus on the psychological variable of self-reported anxiety.

Answer: True  False

186) Self-report measures inform us about the behaviour of an individual, by asking for information from the people around him/her.

Answer: True  False

187) An unobtrusive measure assesses behaviour without participants being aware that they are being observed.

Answer:  True  False

188) Case studies enable us to make better generalizations than do naturalistic observations.

Answer: True  False

- 189) The research method in which the researcher observes behaviour occurring in a natural setting is called a case study.  
Answer: True  False
- 190) Random sampling occurs when every member of a target population has an equal chance of being in a survey.  
Answer:  True False
- 191) In correlational research, the experimenter measures all of the variables and statistically determines whether there is an association between them.  
Answer:  True False
- 192) The problem in which we can't tell which of two variables causes the other (e.g., does A cause B or does B cause A) is called the third-variable problem.  
Answer: True  False
- 193) A major disadvantage of correlational research is that the correlation coefficient tells you the direction of a correlation (i.e., whether X and Y are negatively or positively correlated) but not how strongly the two variables are related.  
Answer: True  False
- 194) A correlation of .53 is considered to be stronger than a correlation of -.78.  
Answer: True  False
- 195) In an experiment, the independent variable is the one that is manipulated by the researcher.  
Answer:  True False
- 196) The independent variable is the variable administered to the experimental group and the dependent variable is the variable administered to the control group.  
Answer: True  False
- 197) Random assignment is used to ensure that a sample is representative of the population from which it is drawn.  
Answer: True  False
- 198) Researchers often manipulate more than one independent variable in experiments because it better captures the complexity of human behaviour.  
Answer:  True False
- 199) In both correlational research and experimental research, the experimenter manipulates a variable.  
Answer: True  False
- 200) If an experiment has a confounding variable, this significantly lowers its internal validity.  
Answer:  True False

201) When the experimenter's subtle or unintentional behaviours influence the behaviour of participants in his/her experiment, the placebo effect occurs.

Answer: True  False

202) One of the primary techniques for reducing both the placebo effect and experimenter expectancy effects is random selection.

Answer: True  False

203) External validity is concerned with how generalizable the results of a study are to other people and settings.

Answer:  True False

204) According to the ethical guidelines, deception is justified when there are no other alternatives and the potential benefits of a study outweigh the risks.

Answer:  True False

**MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.**

205) An advantage of the case study method is that it \_\_\_\_\_, whereas a disadvantage of the case study method is that it \_\_\_\_\_.

- A) allows an in-depth study of rare phenomenon; has poor generalizability
- B) has high internal validity; is costly to run
- C) can be used to determine cause-and-effect relationships; has low internal validity
- D) eliminates researcher bias; has high participant bias
- E) None of these choices are correct.

Answer: A

206) One of the main differences between theories and hypotheses, is that

- A) theories use operational definitions, whereas hypotheses do not.
- B) hypotheses tend to be broader than theories.
- C) theories tend to be internally valid, whereas hypotheses tend to be externally valid.
- D) theories involve testable "If-Then" statements, whereas hypotheses do not.
- E) theories tend to be broader than hypotheses.

Answer: E

207) Dr. Archer, who wants to study the effects of poverty on crime, selects a group of individuals, and collects information about each individual's annual income and criminal record (or lack thereof). Dr. Archer finds that income is negatively correlated with crime. On the basis of these findings we can conclude that

- A) low income causes crime.
- B) income and crime increase together.
- C) as crime decreases, income increases.
- D) as income decreases, crime increases.
- E) as income decreases, crime increases AND as crime decreases, income increases.

Answer: E

- 208) If a researcher is conducting an experiment, the researcher will \_\_\_\_\_.
- A) measure two or more variables without altering any of the variables AND observe behaviour in the setting where it naturally occurs
  - B) alter the dependent variable and assess its effect on the independent variable
  - C) alter the independent variable and assess its effect on the dependent variable
  - D) observe behaviour in the setting where it naturally occurs
  - E) measure two or more variables without altering any of the variables

Answer: C

- 209) Dr. Sandeep wants to study the spending habits in London residents. To study this, he hands out questionnaires about spending habits to all of the students in his introductory psychology class. Dr. Sandeep's data will be \_\_\_\_\_ because \_\_\_\_\_.
- A) valid; he used random sampling
  - B) invalid; he did not use a representative sample
  - C) valid; he included all of his students in his sample
  - D) invalid; there is no control group
  - E) invalid; all of his students were residents of London

Answer: B

- 210) Random assignment is important in research because
- A) it eliminates the placebo effect.
  - B) it ensures that samples are representative of the population being studied.
  - C) it eliminates experimenter expectancy effects.
  - D) it ensures that the study can be replicated.
  - E) it balances differences between participants across experimental groups.

Answer: E

- 211) To say that a study has high external validity means that
- A) the dependent variable caused the effects of the independent variable in the study.
  - B) the results of the study are generalizable.
  - C) the study is not confounded.
  - D) the hypothesis is clearly supported by the findings of the study.
  - E) the results of the study are reliable over time.

Answer: B

- 212) The tendency to respond in what is believed to be a socially appropriate manner rather than according to how a person actually thinks, feels, or behaves is called the \_\_\_\_\_, and it is most problematic with \_\_\_\_\_.
- A) social acceptability bias; self-report measures
  - B) social acceptability bias; reports by others
  - C) social desirability bias; physiological measures
  - D) social desirability bias; self-report measures
  - E) social expectancy bias; behavioral observations

Answer: D



- 213) The "Canadian Code of Ethics for Psychologists" lists basic principles that should be followed when psychologists are involved in
- A) teaching.
  - B) administration.
  - C) direct service.
  - D) research.
  - E) Any of these activities

Answer: E

- 214) If a measure of behavior is reliable, then it is considered to be
- A) valid.
  - B) operationally defined.
  - C) based on theory.
  - D) consistent.
  - E) random.

Answer: D

- 215) A placebo effect makes it difficult to draw cause and effect conclusions because we cannot tell whether
- A) it is the treatment or the participant's expectations that are responsible for the results.
  - B) it is the treatment or the researcher's behaviors that are responsible for the results.
  - C) random sampling or random assignment is appropriate for the study.
  - D) the variables were operationally defined.
  - E) it is the independent variable or the dependent variable that are responsible for the results.

Answer: A

- 216) Dr. Samways is interested in the relationship between education level and annual income. He randomly selects 5000 Canadians and collects information about their highest completed education and last year's income. He then calculates a correlation coefficient, and finds that the correlation between education and income is  $+0.78$ . On the basis of this correlation we can conclude that
- A) as education increase income also increases AND higher education causes higher income.
  - B) there is no relationship between education and income.
  - C) as education increases income also increases.
  - D) as education increases income decreases.
  - E) higher education causes higher income.

Answer: C

- 217) A researcher who is interested in studying the effects of the amount of study time on exam anxiety selects a group of students to take part in her study. One group of students is allowed 10 hours of study time and a second group is allowed 20 hours of study time. Immediately before the exam, the researcher assesses each student's level of anxiety by measuring their blood pressure and heart rate. In this study, the independent variable is the \_\_\_\_\_, and the dependent variable is the \_\_\_\_\_.
- A) level of exam anxiety; amount of study time
  - B) the length of time the student spent writing the exam; number of correct answers on the exam
  - C) amount of study time; level of exam anxiety
  - D) Amount of study time; the number of groups
  - E) level of exam anxiety; the student's grade on the exam

Answer: C

- 218) A researcher is interested in the effects of a vegetarian diet on memory. One group eats a strict vegetarian diet for three months, a second group eats a strict vegan diet for three months, while a third group eats anything they want for three months. After three months, all participants are given a memory test. Results indicated that memory was is better for both the vegetarian and vegan groups. In this study, the independent variable is
- A) scores on the memory test.
  - B) the three month time frame.
  - C) impossible to tell in this situation.
  - D) the vegetarian diet but not the vegan diet.
  - E) the type of diet.

Answer: E

- 219) Dr. Jonas is interested in how parents interact with their children. So she goes to a local daycare centre and watches how parents greet their children when they come to pick them up at the end of the day. This study could best be described as
- A) a survey.
  - B) a case study.
  - C) a correlational study.
  - D) a naturalistic observation.
  - E) an experiment.

Answer: D

- 220) Which if the following is NOT a measure of variability?
- A) standard deviation
  - B) median
  - C) all are measures of variability
  - D) range
  - E) variance

Answer: B

221) After writing his Biology exam, Sam's professor announces that the grades from the exam were normally distributed with a mean of 60 and a standard deviation of 10. Sam's grade on the exam was 70. Approximately what percentage of the class had a grade on the exam that was higher than Sam's?

- A) 84%                      B) 34%                      C) 10%                      D) 16%                      E) 2%

Answer: D

222) Considering the following data set: (3, 4, 4, 0, 4, 1, 5), which of the following statements is/are FALSE?

- A) the mode is greater than the mean  
B) the mean is greater than the range  
C) the range is greater than the mode  
D) the mean is equal to 3  
E) the mode is equal to the median

Answer: B

223) Which of the following is/are TRUE of the normal distribution (bell-shaped curve)?

- A) approximately 68% of the scores fall between -1 standard deviation and +1 standard deviation  
B) the mean is equal to the median  
C) 50% of the scores fall below the mean  
D) the mean is equal to the mode  
E) All of these choices are correct.

Answer: E

224) After writing the licensing exam to practice Psychology, Dr. Evans is sent the following information: Her grade on the exam was 550. The scores on the exam were normally distributed with a mean of 450 and a standard deviation of 100. How well did Dr. Evans do on the licensing exam?

- A) Her grade was better than approximately 97% of the other examinees.  
B) Her grade was better than approximately 50% of the other examinees.  
C) Her grade was better than approximately 84% of the other examinees.  
D) Her grade was better than approximately 16% of the other examinees.  
E) Dr. Evans received the highest grade on the exam.

Answer: C

225) You are trying to find out your friend's IQ. She won't tell you. But she did say that her Z-score on a standard Wechsler test ( $M = 100$ ;  $SD = 15$ ) was +2.0. What's her IQ?

- A) 85                      B) 200                      C) 115                      D) 130                      E) 100

Answer: D

- 226) A major difference between experiments and correlational studies is
- A) control and manipulation of independent variables.
  - B) sampling methods.
  - C) external validity.
  - D) manipulation of independent variables.
  - E) control.

Answer: A

- 227) Which of the following is NOT a part of the scientific process?
- A) identify a question of interest
  - B) analyze data
  - C) build a body of knowledge
  - D) gather information and form hypothesis
  - E) conduct an experiment

Answer: E

- 228) Let's say that you conduct a study on the effects of vitamin B12 on maze learning in rats. Your statistical analysis reveals that 60% of the variance can be accounted for by the manipulation of vitamin B12. The remaining variance (40%) is referred to as
- A) independent variance.
  - B) variable fluctuation.
  - C) factor analysis.
  - D) normal variance.
  - E) error variance.

Answer: E

- 229) Typically, when psychologists conduct an experiment, they are willing to a \_\_\_\_\_ percent chance that the results are random and are due to chance.
- A) five
  - B) zero
  - C) ten
  - D) twenty
  - E) one

Answer: A

- 230) Professor Bono believes that there is a correlation between number of hours spent on social media and grades in first-year classes. Which of the following correlation coefficients would provide the STRONGEST support for her prediction?
- A) 0.0
  - B) -.70
  - C) +. 70
  - D) +. 25
  - E) -.85

Answer: E

- 231) Which of the following is NOT a characteristic of a good theory?
- A) It is testable.
  - B) Predictions are supported by new research.
  - C) It is parsimonious.
  - D) It is intuitive.
  - E) It incorporates existing facts and observations.

Answer: D

- 232) Elyse is interested in studying aggression. To do so, she decides to look at horn-honking behaviour at stop signs and records the number of times someone honks their car horn before the car in front moves on. In this example, horn-honking is the \_\_\_\_\_ and the number of honks recorded is the \_\_\_\_\_.
- A) controlled variable; measured variable
  - B) operational definition of aggression; dependent variable
  - C) independent variable; dependent variable
  - D) dependent variable; independent variable
  - E) dependent variable; error variance

Answer: B

- 233) An experimental design in which all participants are exposed to all of the conditions of an independent variable is called
- A) a made an error design.
  - B) an interaction design.
  - C) a between groups design.
  - D) a repeated measures design.
  - E) a counterbalanced design.

Answer: D

- 234) Which of the following research methods is MOST susceptible to threats to internal validity?
- A) experiments
  - B) naturalistic observation
  - C) case studies
  - D) correlational studies
  - E) surveys

Answer: A

- 235) A company manager believes that there should be a relationship between total sales for a month (in dollars) and the number of sales people on the floor. Which of the following correlation coefficients shows the strongest support for her belief?
- A) 0.92                      B) -0.90                      C) 0.33                      D) 0.0                      E) -0.67

Answer: A

- 236) Considering the following data set: (3, 4, 4, 0, 4, 1, 5), which of the following statements is true?
- A) The range is 2
  - B) The range is 4
  - C) The median is 0
  - D) The mode is 4
  - E) The mean is greater than the mode

Answer: D

- 237) Considering the following data set: (3, 4, 4, 0, 4, 1, 5), which of the following statements is false?
- A) The mode is 4
  - B) The mean is 3
  - C) The median is 4
  - D) The range is 5
  - E) The median is less than the mean

Answer: E

- 238) If you wanted to ensure that any differences among participants in an experiment were as balanced as possible, you would use
- A) representative sampling
  - B) random assignment
  - C) placebos
  - D) only two groups
  - E) blind controls

Answer: B

- 239) A researcher is interested in the effects of a vegetarian diet on memory. One group eats a strict vegetarian diet for three months, a second group eats a strict vegan diet for three months, while a third group eats anything they want for three months. After three months, all participants are given a memory test. Results indicated that memory was better for both the vegetarian and vegan groups. In this study, the dependent variable is
- A) scores on the memory test
  - B) the vegetarian diet
  - C) the type of diet
  - D) the vegan diet
  - E) not enough information to tell

Answer: A

- 240) Professor Jones was just asked to stop conducting one of his experiments. The experiment involved deception and the department chair said that he had failed to live up to his ethical responsibility. Most likely, Professor Jones failed to include which of the following in his study?
- A) double-blind procedure
  - B) repeated measures
  - C) informed consent
  - D) random assignment
  - E) post-test assessment

Answer: C

- 241) A researcher is interested in the effects of a vegetarian diet on memory. One group eats a strict vegetarian diet for three months, a second group eats a strict vegan diet for three months, while a third group eats anything they want for three months. After three months, all participants are given a memory test. The first 20 people who participated were assigned to the vegetarian group, the next 20 to the vegan group, and the final 20 to the eat anything group. What's wrong with this experiment?
- A) It is confounded because of a possible experimenter bias effect.
  - B) It is confounded because the study cannot be replicated.
  - C) There is nothing wrong with this experiment.
  - D) The experimenter introduced some demand characteristics.
  - E) It is confounded because there was no random assignment.

Answer: E

- 242) Professor Hoffman was interested in the effects of vitamin B12 deprivation on learning. One group is given vitamin B12 in a box labelled "Vitamin X." The comparison group is given a sugar pill in a plain white box. He finds that the vitamin group learns lists of words faster and concludes that B12 affects learning. What's wrong with this experiment?
- A) There were demand characteristics present in the study.
  - B) It is confounded because the study cannot be replicated.
  - C) There is nothing wrong with this experiment.
  - D) It is confounded because there was no random assignment.
  - E) It is confounded because of a possible experimenter bias effect.

Answer: A

- 243) You have recently submitted a study for publication and one of the reviewers mentions that your study suffers from a third-variable problem. What do we know for sure about your study?
- A) Your study is correlational.
  - B) You used a repeated measures design.
  - C) You used a within subjects design.
  - D) There were three independent variables in your study.
  - E) You used a between subjects design.

Answer: A

- 244) A local advertising company wanted to find out what radio station people listened to most often. So they asked various car washing companies to record what was listed as the first preset station on the radios of the cars they were servicing. This observation would be considered
- A) a measure of reaction time
  - B) an independent variable
  - C) a source of bias
  - D) a case study
  - E) an unobtrusive measure

Answer: E

- 245) Dr. Monitz has been able to replicate a research finding in three different countries and with both men and women. This finding is likely to be considered to be
- A) an example of meta-analysis
  - B) high in internal validity
  - C) confounded
  - D) high in external validity
  - E) immune from expectancy effects

Answer: D

- 246) Professor Hoffman was interested in the effects of vitamin B12 deprivation on maze learning in rats. One group is given a vitamin B12 injection. The comparison group is given a placebo injection. He finds that the vitamin group learns the maze faster. In this study, the independent variable is \_\_\_\_\_ and the dependent variable is \_\_\_\_\_.
- A) type of injection; number of errors
  - B) type of injection; speed of learning
  - C) speed of learning; type of injection
  - D) vitamin B12; placebo
  - E) speed of learning; concentration of sugar

Answer: B

- 247) Dr. Jung argues that increases in temperature cause increases in aggression. To support his claim, he recorded the temperature each day and noted the number of reported assaults. More assaults were recorded on hotter days. His claim is inaccurate because
- A) the variables are controlled
  - B) this is a case study
  - C) the data are correlational
  - D) the data are based on self-report
  - E) assaults are negatively related to aggression

Answer: C

- 248) Internal validity is to external validity as
- A) sampling is to correlation
  - B) independent is to dependent
  - C) control is to generalization
  - D) demand characteristics is to experimenter expectancy
  - E) between subjects is to within subjects

Answer: C



- 249) Dr. Daily has come up with a new measure of aggression. It is a self-report scale and she has demonstrated that it is reliable. What do we know about this measure?
- A) It is a case study and shows validity.
  - B) It is a dependent variable and is hard to replicate.
  - C) It is a behavioural observation and lacks bias.
  - D) It is a type of survey and shows consistency.
  - E) It is an independent variable and has more than one level.

Answer: D

- 250) Which of the following would you use to determine a cause and effect relationship?
- A) case study
  - B) correlational study
  - C) survey
  - D) experiment
  - E) naturalistic observation

Answer: D

- 251) You conduct a study that involves establishing a baseline, performing a treatment, and then conduct a follow-up. Most likely, what kind of study are you doing?
- A) case study
  - B) survey
  - C) correlational study
  - D) experiment
  - E) naturalistic observation

Answer: A

- 252) Dr. West wanted to know about the media preferences of all students at Western University. The student body is 60 percent female and 40 percent male. So he conducted a survey in which 60 percent of the participants were women and 40 percent were men. In this study, students at Western would be considered
- A) a sample
  - B) a random sample
  - C) a case study
  - D) a representative
  - E) a population

Answer: E

- 253) Dr. West wanted to know about the media preferences of all students at Western University. The student body is 60 percent female and 40 percent male. So he conducted a survey in which 60 percent of the participants were women and 40 percent were men. In this study, Dr. West has used
- A) Internet sampling
  - B) archival data
  - C) stratified random sampling
  - D) an unrepresentative sample
  - E) a population measure

Answer: C

- 254) Consider the following distribution: (3, 4, 5, 2, 256). What would be the most representative measure of central tendency for you to report?
- A) the mean
  - B) the mode
  - C) the standard deviation
  - D) the median
  - E) the range

Answer: D

- 255) Dr. Paulo was interested in art appreciation between men and women. So, he showed a number of paintings to a group of men and to a separate group of women. The paintings were illuminated in either low light or higher, intense light. He found that there was no difference between men and women in the low light, but under higher intense light, the women liked the paintings better than the men. This result illustrates the concept of
- A) interaction
  - B) positive correlation
  - C) main effects
  - D) hindsight
  - E) experimenter bias

Answer: A

- 256) Dr. Jones was testing the effectiveness of a new vitamin supplement. Half of the participants received the vitamin and half received a sugar pill. He found that the sugar pill worked as well and sometimes better than the vitamin. This could reflect
- A) a placebo effect
  - B) an experimenter bias
  - C) an order effect
  - D) a replication bias
  - E) demand characteristics

Answer: A

- 257) In a study of aggression, Dr. Berkowitz had participants watch either violent or non-violent media after they had been frustrated by a colleague. They were then able to deliver electric shocks to the colleague as feedback for mistakes made on a memory test. Berkowitz recorded the intensity of shocks delivered. Results indicated that more intense shocks were given when participants watched the violent media. In this study, the shocks delivered are
- A) the operational definition of aggression
  - B) an interaction effect
  - C) the independent variable
  - D) the confounding variable
  - E) a measurement error

Answer: A

- 258) In a study of aggression, Dr. Berkowitz had participants watch either violent or non-violent media after they had been frustrated by a colleague. They were then able to deliver electric shocks to the colleague as feedback for mistakes made on a memory test. Berkowitz recorded the intensity of shocks delivered. Results indicated that more intense shocks were given when participants watched the violent media. In this study, the independent variable is \_\_\_\_\_ and the dependent variable is \_\_\_\_\_.
- A) type of media; number of mistakes on the memory test
  - B) intensity of shocks; type of media
  - C) type of media; number of shocks
  - D) number of shocks; type of media
  - E) number of shocks; number of mistakes on the memory test

Answer: C

- 259) In a study of aggression, Dr. Berkowitz had participants watch either violent or non-violent media after they had been frustrated by a colleague. They were then able to deliver electric shocks to the colleague as feedback for mistakes made on a memory test (this never really happened, they just thought they were giving shocks). Berkowitz recorded the intensity of shocks delivered. Results indicated that more intense shocks were given when participants watched the violent media. In this study, it is critical that we
- A) make sure that the shock intensity is high
  - B) do not tell the participants what really happened
  - C) control for replication
  - D) deceive the participants as much as possible
  - E) debrief the participants at the end of the study

Answer: E

**ESSAY. Write your answer in the space provided or on a separate sheet of paper.**

- 260) What key scientific attitudes did Darley and Latané display?

Answer: Answers will vary

- 261) How does the research done by Darley and Latané illustrate the basic steps of the scientific process?

Answer: Answers will vary

- 262) What is a hypothesis?  
Answer: Answers will vary
- 263) What is a theory? How does it differ from a hypothesis?  
Answer: Answers will vary
- 264) Explain the major drawback of hindsight understanding.  
Answer: Answers will vary
- 265) What approach to understanding do scientists prefer and why?  
Answer: Answers will vary
- 266) Describe the characteristics of a good theory.  
Answer: Answers will vary
- 267) Why are operational definitions important?  
Answer: Answers will vary
- 268) Describe the major ways psychologists measure behaviour, and suggest a limitation of each method.  
Answer: Answers will vary
- 269) If you were designing a research study, what measures would you choose to operationally define stress?  
Answer: Answers will vary
- 270) What is known as an unobtrusive measurement?  
Answer: Answers will vary
- 271) What is a case study? Identify its advantages.  
Answer: Answers will vary
- 272) What are the major limitations of case studies?  
Answer: Answers will vary
- 273) What is naturalistic observation, and what is its major advantage?  
Answer: Answers will vary
- 274) What problems can occur when conducting naturalistic observations?  
Answer: Answers will vary
- 275) Explain what representative sampling is and why survey researchers use it.  
Answer: Answers will vary

- 276) What are some advantages and disadvantages of survey research?  
Answer: Answers will vary
- 277) Explain the main goal of correlational research, and how this is achieved.  
Answer: Answers will vary
- 278) Why are we unable to draw causal conclusions from correlational findings?  
Answer: Answers will vary
- 279) How do positive and negative correlations differ?  
Answer: Answers will vary
- 280) How is a correlation coefficient interpreted?  
Answer: Answers will vary
- 281) Explain how correlational research can be used to predict behaviour.  
Answer: Answers will vary
- 282) Describe the logic of experimentation.  
Answer: Answers will vary
- 283) What are independent and dependent variables? How are they related?  
Answer: Answers will vary
- 284) Why are control groups important?  
Answer: Answers will vary
- 285) Why do researchers randomly assign participants to various conditions in an experiment?  
Answer: Answers will vary
- 286) Identify an alternative to using random assignment in experiments.  
Answer: Answers will vary
- 287) Why do researchers manipulate two independent variables in the same experiment?  
Answer: Answers will vary
- 288) Explain why confounding decreases the internal validity of experiments.  
Answer: Answers will vary
- 289) Explain how the "placebo effect" can cloud the interpretation of research results.  
Answer: Answers will vary
- 290) Why do experimenter expectancy effects lower the internal validity of experiments?  
Answer: Answers will vary

- 291) How do researchers minimize experimenter expectancy effects?  
Answer: Answers will vary
- 292) How does external validity differ from internal validity?  
Answer: Answers will vary
- 293) Describe the major ethical issues in human research and how participants' rights are protected.  
Answer: Answers will vary
- 294) Why does some research involve deception? What ethical principle does deception violate?  
Answer: Answers will vary
- 295) What are the justifications for, and criticisms of, research in which animals are harmed?  
Answer: Answers will vary
- 296) As a critical thinker, what questions should you ask when someone makes a claim or an assertion?  
Answer: Answers will vary
- 297) List the four ways of defining and measuring variables. For each method, give an example of how it could be applied in a study examining stress, and list a limitation.  
Answer: Answers will vary
- 298) Think of an example of an operational definition for academic performance using a: 1) self-report, 2) report by others, and 3) measure of overt behaviour. Explain a limitation of each type of measure using the same example.  
Answer: Answers will vary
- 299) List the five steps involved in the scientific process of gathering evidence. Discuss how each of these steps was applied in the research of John Darley and Bibb Latané.  
Answer: Answers will vary
- 300) Describe and define the three methods of descriptive research: case studies, naturalistic observations, and survey research. For each method, list at least one limitation and explain how the method could be used to study marriage.  
Answer: Answers will vary
- 301) A hypothetical study has found a correlation of  $-.47$  between women's income and the incidents of sexual harassment. What can the researcher conclude from these findings? What is the researcher not able to conclude since a correlational design was used and why?  
Answer: Answers will vary

302) Your textbook describes the research by Diener and Seligman exploring factors related to happiness. They found that happier students spent more time socializing with people and had more satisfying relationships compared to unhappy undergraduates. They did not find a relationship between levels of happiness and amount of money individuals had. Explain how this is a correlational study. Using this study, also explain why cause and effect cannot be determined from correlational designs due to: 1) the bidirectionality problem, and 2) the third variable problem.

Answer: Answers will vary

303) What is the correlation coefficient and what does it assess? In your answer, be sure to address the following points: 1) the range of possible values the correlation coefficient can have, 2) the difference between a positive and negative correlation, and 3) the difference between the strength and direction of the correlation coefficient.

Answer: Answers will vary

304) What is the double-blind procedure and what are the two types of threats to internal validity it is designed to minimize? In your answer, briefly define these two threats. Give a detailed example of how the double-blind procedure would work within the context of a study investigating the effectiveness of a new medication.

Answer: Answers will vary

305) Describe the key elements of experimental research. Your answer should address the following areas: 1) the difference between an independent and a dependent variable and how they are related 2) the difference between an experimental group and a control group, and 3) the two basic ways that participants can be assigned to various experimental conditions.

Answer: Answers will vary

306) What is internal validity and how is it related to confounding variables and experimenter expectancies? In your discussion, define each of these concepts. What is the difference between internal validity and external validity? Give a hypothetical example of: 1) a study with poor internal validity, and 2) a study with poor external validity.

Answer: Answers will vary

307) Compare and contrast features, advantages, and disadvantages of correlational research and experimental research.

Answer: Answers will vary

308) What is informed consent and what are the key aspects of this ethical guideline? How does deception conflict with the principle of informed consent? Define deception and mention the factors that determine whether or not it is justified?

Answer: Answers will vary

309) Discuss the advantages and disadvantages of animal research. In your opinion, is research with animals justified? Give the specific reasons for your conclusion.

Answer: Answers will vary

310) Using the research conducted by Strayer and his colleagues on cell phone use while driving as an example, discuss the major aspects of an experiment.

Answer: Answers will vary

311) What is a spurious correlation? Using an original example (i.e., one not covered in lecture or included in the text) describe how a spurious correlation might arise.

Answer: Answers will vary

312) Discuss the concepts of population and sample as they relate to survey research. In your answer be sure to refer to random and representative samples.

Answer: Answers will vary



## Answer Key

Testname: UNTITLED2

- 1) D
- 2) C
- 3) A
- 4) C
- 5) A
- 6) D
- 7) C
- 8) C
- 9) C
- 10) C
- 11) D
- 12) C
- 13) C
- 14) B
- 15) A
- 16) D
- 17) C
- 18) D
- 19) B
- 20) D
- 21) C
- 22) B
- 23) B
- 24) A
- 25) D
- 26) B
- 27) B
- 28) B
- 29) D
- 30) B
- 31) D
- 32) D
- 33) D
- 34) B
- 35) C
- 36) C
- 37) A
- 38) C
- 39) C
- 40) B
- 41) C
- 42) B
- 43) B
- 44) D
- 45) C
- 46) A
- 47) A
- 48) B
- 49) A
- 50) B

## Answer Key

Testname: UNTITLED2

- 51) B
- 52) A
- 53) A
- 54) C
- 55) C
- 56) D
- 57) D
- 58) B
- 59) C
- 60) A
- 61) C
- 62) C
- 63) B
- 64) A
- 65) A
- 66) C
- 67) B
- 68) B
- 69) A
- 70) B
- 71) B
- 72) A
- 73) D
- 74) D
- 75) B
- 76) B
- 77) A
- 78) B
- 79) C
- 80) C
- 81) A
- 82) D
- 83) C
- 84) C
- 85) C
- 86) C
- 87) B
- 88) B
- 89) C
- 90) B
- 91) C
- 92) D
- 93) D
- 94) A
- 95) C
- 96) B
- 97) D
- 98) C
- 99) A
- 100) D

## Answer Key

Testname: UNTITLED2

- 101) B
- 102) C
- 103) B
- 104) A
- 105) B
- 106) A
- 107) C
- 108) D
- 109) C
- 110) B
- 111) B
- 112) C
- 113) A
- 114) A
- 115) A
- 116) D
- 117) D
- 118) D
- 119) A
- 120) B
- 121) C
- 122) C
- 123) C
- 124) A
- 125) B
- 126) B
- 127) D
- 128) A
- 129) C
- 130) D
- 131) C
- 132) B
- 133) D
- 134) D
- 135) D
- 136) B
- 137) C
- 138) A
- 139) B
- 140) C
- 141) B
- 142) D
- 143) C
- 144) D
- 145) A
- 146) B
- 147) D
- 148) D
- 149) B
- 150) D

## Answer Key

Testname: UNTITLED2

- 151) A
- 152) D
- 153) C
- 154) C
- 155) D
- 156) B
- 157) B
- 158) B
- 159) B
- 160) D
- 161) D
- 162) A
- 163) C
- 164) C
- 165) B
- 166) B
- 167) A
- 168) B
- 169) C
- 170) B
- 171) C
- 172) B
- 173) C
- 174) D
- 175) C
- 176) A
- 177) D
- 178) D
- 179) C
- 180) FALSE
- 181) TRUE
- 182) FALSE
- 183) TRUE
- 184) TRUE
- 185) FALSE
- 186) FALSE
- 187) TRUE
- 188) FALSE
- 189) FALSE
- 190) TRUE
- 191) TRUE
- 192) FALSE
- 193) FALSE
- 194) FALSE
- 195) TRUE
- 196) FALSE
- 197) FALSE
- 198) TRUE
- 199) FALSE
- 200) TRUE

## Answer Key

Testname: UNTITLED2

- 201) FALSE
- 202) FALSE
- 203) TRUE
- 204) TRUE
- 205) A
- 206) E
- 207) E
- 208) C
- 209) B
- 210) E
- 211) B
- 212) D
- 213) E
- 214) D
- 215) A
- 216) C
- 217) C
- 218) E
- 219) D
- 220) B
- 221) D
- 222) B
- 223) E
- 224) C
- 225) D
- 226) A
- 227) E
- 228) E
- 229) A
- 230) E
- 231) D
- 232) B
- 233) D
- 234) A
- 235) A
- 236) D
- 237) E
- 238) B
- 239) A
- 240) C
- 241) E
- 242) A
- 243) A
- 244) E
- 245) D
- 246) B
- 247) C
- 248) C
- 249) D
- 250) D

## Answer Key

Testname: UNTITLED2

- 251) A
- 252) E
- 253) C
- 254) D
- 255) A
- 256) A
- 257) A
- 258) C
- 259) E
- 260) Answers will vary
- 261) Answers will vary
- 262) Answers will vary
- 263) Answers will vary
- 264) Answers will vary
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- 266) Answers will vary
- 267) Answers will vary
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- 292) Answers will vary
- 293) Answers will vary
- 294) Answers will vary

## Answer Key

Testname: UNTITLED2

- 295) Answers will vary
- 296) Answers will vary
- 297) Answers will vary
- 298) Answers will vary
- 299) Answers will vary
- 300) Answers will vary
- 301) Answers will vary
- 302) Answers will vary
- 303) Answers will vary
- 304) Answers will vary
- 305) Answers will vary
- 306) Answers will vary
- 307) Answers will vary
- 308) Answers will vary
- 309) Answers will vary
- 310) Answers will vary
- 311) Answers will vary
- 312) Answers will vary