CHAPTER 2: Research Methodology

MULTIPLE CHOICE

1. When researchers collect enough data to develop an explanation of why people behave as they do, the researchers are creating a(n):
   a. theory
   b. experiment
   c. hypothesis
   d. generalization

   ANS: A DIF: Easy KEY: Theory (I.B.2.a)
   NOT: Factual

2. Jean Piaget observed children to see how they solved problems. Over the course of many studies, he was able to spot general patterns of behaviour. This led him to connect different concepts and behaviours within a single:
   a. theory
   b. hypothesis
   c. experiment
   d. sample

   ANS: A DIF: Moderate KEY: Theory (I.B.2.a)
   NOT: Applied

3. A specific prediction of behaviour that is tested in an experiment is called a:
   a. theory
   b. hypothesis
   c. sample
   d. naturalistic observation

   ANS: B DIF: Easy KEY: Hypothesis (I.B.2.b)
   NOT: Factual

4. A researcher believes that presenting possible suspects in a lineup one at a time instead of in a group would lead to more accurate identification of the true suspect. This belief represents:
   a. a hypothesis
   b. an independent variable
   c. response performance
   d. a theory

   ANS: A DIF: Moderate KEY: Hypothesis (I.B.2.b)
   NOT: Applied

5. Research that is done to test a theory:
   a. typically involves naturalistic observation
   b. has to rely on self-report methods
   c. involves systematic collection of data
   d. relies on positive correlations rather than negative correlations

   ANS: C DIF: Easy KEY: Research (I.B.2.c)
   NOT: Factual

6. When researchers document that a phenomenon is real by repeating a study done by another scientist, they are engaging in:
   a. meta-analysis
   b. experience sampling
   c. replication
   d. correlational research

   ANS: C DIF: Moderate KEY: Replication (I.B.3.a)
   NOT: Factual

7. Psychologists have greater confidence in research results when:
   a. the data involve stimulus judgments
   b. the research has used participant observation
   c. the results are replicated
   d. there is an experimenter expectancy effect

   ANS: C DIF: Moderate KEY: Replication (I.B.3.a)
   NOT: Factual

8. George is looking for a research project. He could make use of theory because:
   a. theories are shown to be true, so subsequent research is successful
   b. one of the benefits of theories is that they lead to testable hypotheses
   c. a theory can be successfully replicated by researchers
   d. theories are likely to result in serendipity, which leads to successful research

   ANS: B DIF: Difficult KEY: Testable (I.B.2.a.1)
   NOT: Conceptual

9. According to some psychologists, Sigmund Freud's theory of the meaning of dreams was not a successful theory because:
   a. it was too socially controversial
   b. he developed the theory from previous ideas
   c. it did not lead to many testable hypotheses
   d. it was based on research later shown to be invalid

   ANS: C DIF: Easy KEY: Testable (I.B.2.a.1)
   NOT: Factual

10. Something is considered a variable if it:
    a. has no operational definition
    b. can be manipulated by an experimenter
    c. involves random assignment
    d. is theoretical rather than concrete

    ANS: B DIF: Easy KEY: Variables (II.A.1)
    NOT: Factual

11. Something that can be measured or manipulated by an experimenter is considered:
    a. a descriptive statistic
    b. data
    c. a confound
    d. a variable

    ANS: D DIF: Easy KEY: Variables (II.A.1)
    NOT: Factual

12. The precise way a researcher measures and defines a variable is known as the:
    a. operational definition
    b. response accuracy
    c. stimulus judgment
    d. central tendency

    ANS: A DIF: Easy KEY: Operational Definitions (II.A.2)
    NOT: Factual

13. If a researcher defined happiness based on the number of times a person smiled in a 15-minute period, the number of smiles would be:
    a. an open-ended measurement

b. the operational definition of happiness
c. a meta-analysis of the variable
d. a measure of reaction time

ANS: B DIF: Moderate KEY: Operational Definitions (II.A.2)
NOT: Applied

14. It would not be possible for a researcher to study creativity in an experiment if the researcher:
a. had to rely on inferential statistics
b. did not account for the directionality problem
c. did not create an operational definition to measure creativity
d. did not measure event-related potential

ANS: C DIF: Moderate KEY: Operational Definitions (II.A.2)
NOT: Applied

15. If a researcher wanted to study the behaviour of protesters that were in a closed group and did not easily admit new people, the researcher would probably use what approach to study them?
a. naturalistic observation
b. participant observation
c. meta-analysis
d. closed-ended questions

ANS: A DIF: Easy KEY: Naturalistic Observation (II.B.1.a)
NOT: Applied

16. When a researcher joins a social group and talks to the members in order to study that group, the approach is referred to as:
a. a self-report method
b. participant observation
c. experience sampling
d. response performance

ANS: B DIF: Easy KEY: Participant Observation (II.B.1.b)
NOT: Factual

17. Data collection is particularly problematic when a researcher uses participant observation because:
a. the researcher is only able to make use of closed-ended questions
b. the researcher fails to recognize the third variable problem
c. random error occurs in the initial stages of observation
d. the researcher loses objectivity in participating with a group

ANS: D DIF: Difficult KEY: Participant Observation (II.B.1.b)
NOT: Conceptual

18. Anam is studying the intelligence of a group of people as they progress through early adulthood to old age. Her approach should involve:
a. cross-sectional research
b. experimental research
c. random assignment
d. longitudinal research

ANS: D DIF: Moderate KEY: Longitudinal Studies (II.B.1.c.2.A)
NOT: Factual

19. Which of the following would be best researched using a longitudinal study?
a. the change in children's concepts of sharing from infancy through adolescence
b. the difference between children and adults in their responses to a natural disaster

c. the frequency with which people think about sources of stress in their lives over the course of a single day
d. the rates of hospitalization of psychiatric patients over the course of the last century

ANS: A DIF: Moderate KEY: Longitudinal Studies (II.B.1.c.2.A)
NOT: Applied

20. When collecting data in a study, if researchers unconsciously code a person's behaviour to match their expectations, we say that there is:
a. a directionality problem
b. an observer bias
c. a sampling error
d. reactivity

ANS: B DIF: Easy KEY: Observer Bias (II.B.1.d.1)
NOT: Factual

21. If a researcher does not have a clear operational definition of the behaviour he is studying, he might experience:
a. observer bias
b. reactivity
c. confounds
d. a directionality problem

ANS: A DIF: Easy KEY: Observer Bias (II.B.1.d.1)
NOT: Factual

22. When a researcher's bias affects the coding of data, there is a problem with:
a. the Hawthorne effect
b. experimenter expectancy
c. a third variable
d. confounds

ANS: B DIF: Easy KEY: Experimenter Expectancy Effect (II.B.1.d.1.A)
NOT: Factual

23. The psychologist Robert Rosenthal told student researchers that some rats in a study would learn a task quickly and others would learn the task slowly. In reality, there was no difference in the rats' ability to learn the task. When the students tested the rats, the animals' learning matched what the students were told. These results reflect:
a. the Hawthorne effect
b. the experimenter expectancy effect
c. the directionality problem
d. the third variable problem

ANS: B DIF: Moderate KEY: Experimenter Expectancy Effect (II.B.1.d.1.A)
NOT: Applied

24. Which of the following is likely to be associated with observer bias?
a. reactivity
b. experience sampling
c. experimenter expectancy
d. the Hawthorne effect

ANS: C DIF: Moderate KEY: Experimenter Expectancy Effect (II.B.1.d.1.A)
NOT: Applied

25. When a researcher who is collecting data does not know a study's hypothesis, the study is a:
a. blind study
b. confounded study
c. meta-analytic study
d. reactivity study

ANS: A DIF: Easy KEY: Use of "Blind" Experimenters (II.B.1.d.2.A)
NOT: Factual

26. Gwen is studying the effects of comedic film on depressed participants. She is concerned that the data collectors will produce biased observations if they know the purpose of the study. She addresses this problem by using a(n):
    a. blind study
    b. correlational study
    c. experimental study
    d. descriptive study

    ANS: A DIF: Moderate KEY: Use of "Blind" Experimenters (II.B.1.d.2.A)
    NOT: Applied

27. Researchers are likely to choose a correlational design when:
    a. they are concerned that there will be a third variable problem
    b. the directionality problem is likely
    c. it is impossible to control the variables being studied
    d. they are using psychophysiological assessments

    ANS: C DIF: Difficult KEY: Correlational (II.B.2)
    NOT: Conceptual

28. When two variables are correlated, it is not clear which one is a causal variable and which is an effect. This ambiguity reflects:
    a. the third variable problem
    b. random error
    c. selection bias
    d. the directionality problem

    ANS: D DIF: Easy KEY: Directionality (II.B.2.b.1.A)
    NOT: Factual

29. Using correlational studies, psychologists have studied whether exposure to violence in the media leads to violent behaviour. They have found that participants who have been exposed to more violence in the media are, in general, more violent. It is not clear from such research which one causes the other. The problem in interpreting these results involves:
    a. directionality
    b. selection bias
    c. sampling error
    d. confounds

    ANS: A DIF: Difficult KEY: Directionality (II.B.2.b.1.A)
    NOT: Applied

30. Samir is conducting a correlational study, and he cannot determine whether one variable causes another. One reason is that the additional variables that he did not study could influence the variables he did study. This reflects the problem with:
    a. selection bias
    b. response accuracy
    c. the third variable problem
    d. the occurrence of random error

    ANS: C DIF: Moderate KEY: Third Variable Problem (II.B.2.b.1.B)
    NOT: Applied

31. There is a correlation between depression and memory: more frequently depressed people often have worse memory than less frequently depressed people. Genetics, however, may have an effect on a study participant's depression and memory. This is known as:
    a. selection bias
    b. the experimenter expectancy effect
    c. the directionality problem
    d. the third variable problem

    ANS: D DIF: Moderate KEY: Third Variable Problem (II.B.2.b.1.B)

NOT: Applied

32. A research team told one group of people that they would hear a set of jokes that were very funny and a second group that they would hear jokes that were not very funny. A third group was not told anything about the jokes. The jokes in all conditions were the same. Research with this design is:
    a. observational
    b. correlational
    c. experimental
    d. psychophysiological

    ANS: C DIF: Moderate KEY: Experimental (II.B.3)
    NOT: Applied

33. When a researcher manipulates a variable to see what effect the manipulation has on a study participant's behaviour, the research design involves:
    a. a correlational study
    b. an experiment
    c. naturalistic observation
    d. participant observation

    ANS: B DIF: Easy KEY: Establishing Causality (II.B.3.a)
    NOT: Factual

34. Dr. Bloomin wants to investigate the impact of talking to plants on their growth. He decides to talk to a group of 40 tulips each day for six weeks. A second group is not talked to at all. After six weeks he discovers that the tulips he talked to are five centimetres taller than the tulips not talked to. This study is best described as:
    a. an observational study
    b. a case study
    c. a meta-analysis
    d. an experiment

    ANS: D DIF: Easy KEY: Establishing Causality (II.B.3.a)
    NOT: Factual

35. Paloma randomly assigns participants to two groups and compares the group that receives a treatment with the group that receives no treatment. The group that gets no treatment is the:
    a. variable group
    b. confounded group
    c. experimental group
    d. control group

    ANS: D DIF: Easy KEY: Control Group vs. Experimental Group (II.B.3.a.2)
    NOT: Applied

36. Wilhelm randomly assigns participants to two groups and compares the group that receives a treatment with the group that receives no treatment. The group that gets the treatment is the:
    a. variable group
    b. confounded group
    c. experimental group
    d. control group

    ANS: C DIF: Easy KEY: Control Group vs. Experimental Group (II.B.3.a.2)
    NOT: Applied

37. Researchers investigated whether mood affects participants' ratings of jokes. Participants in the first mood group read sad statements. In the second group, participants read neutral statements. In this study, the participants who read the sad statements constituted the:
    a. control group
    b. population
    c. experimental group
    d. observational group

    ANS: C DIF: Moderate KEY: Control Group vs. Experimental Group (II.B.3.a.2)

NOT: Applied

38. Researchers assess the baseline performance of people with respect to a given behaviour so they can identify what happens to behaviour when they manipulate a variable. The use of baseline groups and groups that experience a manipulation of a variable is characteristic of:
    a. correlational studies
    b. longitudinal research
    c. naturalistic observation
    d. experimental research

    ANS: D DIF: Easy KEY: Control Group vs. Experimental Group (II.B.3.a.2)
    NOT: Conceptual

39. The variable that a researcher manipulates in an experiment is called the:
    a. independent variable
    b. dependent variable
    c. confounding variable
    d. stimulus

    ANS: A DIF: Easy KEY: Independent vs. Dependent Variables (II.B.3.a.1)
    NOT: Factual

40. Dr. Bloomin wants to investigate the impact of talking to plants on their growth. He decides to talk to a group of 40 tulips each day for six weeks. A second group is not talked to at all. After six weeks he discovers that the tulips he talked to are five centimetres taller than the tulips not talked to. In this example, the *dependent* variable is:
    a. the group of tulips spoken to
    b. whether or not the tulips are spoken to
    c. the height of the tulips
    d. the group of tulips not spoken to

    ANS: C DIF: Easy KEY: Independent vs. Dependent Variables (II.B.3.a.1)
    NOT: Factual

41. Dr. Bloomin wants to investigate the impact of talking to plants on their growth. He decides to talk to a group of 40 tulips each day for six weeks. A second group is not talked to at all. After six weeks he discovers that the tulips he talked to are five centimetres taller than the tulips not talked to. In this example, the *independent* variable is:
    a. the group of tulips spoken to
    b. whether the tulips are spoken to
    c. the height of the tulips
    d. the group of tulips not spoken to

    ANS: B DIF: Easy KEY: Independent vs. Dependent Variables (II.B.3.a.1)
    NOT: Factual

42. Dr. Lasagna tests a new diet. Overweight adults are weighed and placed into one of two groups so that the weight of the groups is equal to start with. One group of adults is given the new diet and the other is placed on a waiting list. After three months, Dr. Lasagna observes that the group on the new diet weighs less. In this example, the *dependent* variable is:
    a. the group that received the new diet
    b. the group on the waiting list
    c. the weight of the adults
    d. the new diet

    ANS: C DIF: Easy KEY: Independent vs. Dependent Variables (II.B.3.a.1)
    NOT: Factual

43. Dr. Lasagna tests a new diet. Overweight adults are weighed and placed into one of two groups so that the weight of the groups is equal to start with. One group of adults is given the new diet and the other is placed on a waiting list. After three months, Dr. Lasagna observes that the group on the new diet weighs less. In this example, the *independent* variable is:
    a. the experimental group
    b. the control (or comparison) group
    c. the weight of the adults
    d. whether the adults get the new diet

    ANS: D DIF: Easy KEY: Independent vs. Dependent Variables (II.B.3.a.1)
    NOT: Factual

44. Dr. Lasagna tests a new diet. Overweight adults are weighed and placed into one of two groups so that the weight of the groups is equal to start with. One group of adults is given the new diet and the other is placed on a waiting list. After three months, Dr. Lasagna observes that the group on the new diet weighs less. In this example, the adults who receive the new diet are:
    a. the experimental group
    b. the control (or comparison) group
    c. randomly assigned
    d. the population

    ANS: A DIF: Easy KEY: Control Group vs. Experimental Group (II.B.3.a.2)
    NOT: Factual

45. The variable that a researcher measures in an experiment to see if it has changed after a treatment is called the:
    a. independent variable
    b. dependent variable
    c. confounding variable
    d. stimulus

    ANS: B DIF: Easy KEY: Independent vs. Dependent Variables (II.B.3.a.1)
    NOT: Factual

46. One criticism that is made of many experimental studies in psychology is that:
    a. human behaviour is almost impossible to study scientifically
    b. human behaviour is seldom related to animal behaviour
    c. they are conducted in artificial, laboratory settings
    d. it is very difficult to separate the effects of independent and dependent variables

    ANS: C DIF: Easy KEY: Establishing Causality (II.B.3.a)
    NOT: Conceptual

47. Researchers have used driving simulators to investigate whether talking on a cellphone impairs the ability to drive. The published studies show that using a cellphone has a detrimental effect on attention to driving. One valid criticism of these studies is that:
    a. it is common knowledge that cellphone use does not have an impact on driving ability
    b. behaviour is almost impossible to predict when it involves a complex set of behaviours like driving an automobile
    c. people are going to talk on cellphones while driving even if their driving ability is impaired
    d. participants may not take simulated driving tasks seriously because they know there are no real consequences if their driving behaviour is poor

    ANS: D DIF: Moderate KEY: Establishing Causality (II.B.3.a)
    NOT: Conceptual

48. When confounds are present in an experiment, they result in:
    a. an increase in the possibility of selection bias
    b. a decrease in the reactivity of the experimental participants
    c. possible alternative explanations for the results of the experiment
    d. the same treatment for experimental and control groups in the experiment

    ANS: C DIF: Easy KEY: Confounds (II.B.3.a.3.A)
    NOT: Factual

49. Bai is conducting a study on learning. When she manipulates an independent variable, it is possible that some other factor, like noise in the hall, can affect learning in one of the groups but not in the other. This possibility reflects the presence of:
    a. a confound
    b. a dependent variable
    c. selection bias
    d. random assignment

    ANS: A DIF: Easy KEY: Confounds (II.B.3.a.3.A)
    NOT: Applied

50. When identifying the pool of participants who will be in a research project, psychologists generally use:
    a. random assignment
    b. random sampling
    c. convenience sampling
    d. control participants

    ANS: C DIF: Easy
    KEY: Random Sampling vs. Convenience Sampling (II.B.3.a.4.A)
    NOT: Factual

51. If a researcher wants to be able to generalize about a population using data pulled from a sample, it is best to use:
    a. a convenience sample
    b. experience sampling
    c. a descriptive study
    d. a random sample

    ANS: D DIF: Easy
    KEY: Random Sampling vs. Convenience Sampling (II.B.3.a.4.A)
    NOT: Factual

52. Because psychologists regularly use university students as research participants, the research does NOT involve:
    a. random sampling
    b. convenience sampling
    c. selection bias
    d. populations

    ANS: A DIF: Easy
    KEY: Random Sampling vs. Convenience Sampling (II.B.3.a.4.A)
    NOT: Factual

53. Jafar conducted an experiment with student participants in which he investigated their reactions to advertisements that used humour. When analyzing his results, he should take into account that:
    a. there are likely to be many confounds in his methodology, so his results may not be reliable
    b. by using random assignment of participants to groups, it is likely that he avoided selection bias

c. he has a convenience sample and may not be able to generalize his findings to the larger population of adults
d. self-report methods are not an accurate way to get authentic reactions to the advertisements

ANS: C DIF: Difficult
KEY: Random Sampling vs. Convenience Sampling (II.B.3.a.4.A)
NOT: Conceptual

54. A researcher wants to investigate the response of students on a university campus to a plan to turn a grassy area into a parking lot. She plans to give a questionnaire to a random sample of students. It is likely that:
a. her results would generalize to the population of interest to her
b. she would not be able to generalize her results because she is using a convenience sample
c. if she repeated the study with another random sample, she would get very different results
d. her findings are not representative of the attitudes of students on the campus

ANS: A DIF: Difficult
KEY: Random Sampling vs. Convenience Sampling (II.B.3.a.4.A)
NOT: Conceptual

55. A psychologist wants to create two groups that are as similar as possible at the beginning of an experiment. To do this, she should use:
a. random sampling
b. random assignment
c. self-report methods
d. participant observation

ANS: B DIF: Easy KEY: Random Assignment (II.B.3.a.5.B)
NOT: Applied

56. In order to maximize the likelihood that experimental and control groups are similar before any treatment is applied, researchers typically use:
a. naturalistic observation
b. random assignment
c. sampling
d. participant observation

ANS: B DIF: Easy KEY: Random Assignment (II.B.3.a.5.B)
NOT: Factual

57. If a researcher created two groups by assigning the first 30 people to show up to the experimental group and the last 30 to the control group, the process would violate the principle of:
a. variability
b. generalization
c. random assignment
d. correlational research

ANS: C DIF: Easy KEY: Random Assignment (II.B.3.a.5.B)
NOT: Applied

58. In a study of the relation between happiness and personality, researchers combined the results of over 100 studies to conclude that people who are highly social and do not worry much are happiest. This study is best described as a(n):
a. observational study
b. case study
c. meta-analysis
d. experiment

ANS: C DIF: Easy KEY: Random Assignment (II.B.3.a.5.B)
NOT: Applied

59. The fact that small samples are generally less reliable indicators of typical behaviour than large samples is associated with the principle of:
    a. psychophysiological assessment
    b. descriptive statistics
    c. the use of random sampling
    d. the law of large numbers

ANS: D DIF: Moderate KEY: Meta-analysis (II.B.3.b.2.A)
NOT: Factual

60. The systematic recording of overt behaviour of human and nonhuman animals in their natural environment involves what research method?
    a. observational techniques
    b. case studies
    c. psychophysiological assessment
    d. response performance strategies

ANS: A DIF: Easy KEY: Observational Techniques (III.B.1)
NOT: Factual

61. In which of the following studies would the concept of reactivity be most relevant?
    a. a blind study
    b. a case study
    c. an observational study
    d. an electrophysiological study

ANS: C DIF: Easy KEY: Reactivity (III.B.1.c.1)
NOT: Applied

62. When people are aware of being observed, they might change their behaviours. This phenomenon illustrates:
    a. variability
    b. experimenter expectancy
    c. random assignment
    d. reactivity

ANS: D DIF: Easy KEY: Reactivity (III.B.1.c.1)
NOT: Factual

63. If you wanted to conduct observational research but were concerned that the people you observed would change their behaviours due to reactivity, you could:
    a. avoid debriefing them
    b. have the observer be as unobtrusive as possible
    c. conduct culturally sensitive research
    d. rule out alternative explanations

ANS: B DIF: Easy KEY: Reactivity (III.B.1.c.1)
NOT: Applied

64. The Hawthorne effect refers to changes in behaviour associated with:
    a. reactivity
    b. observer bias
    c. experimenter expectancy
    d. informed consent

ANS: A DIF: Easy KEY: Hawthorne Effect (III.B.1.c.2)
NOT: Factual

65. Philippe wants to study the number of times that close friends touch each other in their interactions. His interpretations of this behaviour would need to take into consideration:

a. cultural differences in the meaning of touches
b. whether participants were randomly assigned to groups
c. whether the directionality problem is an issue in the study
d. the fact that participant observation generally results in reactivity

ANS: A DIF: Moderate KEY: How Should the Data Be Collected? (III.B.1.b)
NOT: Applied

66. A researcher is interested in understanding how people like Kimveer Gill (the man who shot 19 people at Dawson College in Quebec) could commit murderous outbursts. In order to study these extremely rare individuals, a psychologist would most likely conduct:
a. a longitudinal study
b. a cross-sectional study
c. an experiment
d. a case study

ANS: D DIF: Moderate KEY: How Should the Data Be Collected? (III.B.1.b)
NOT: Applied

67. You are interested in studying a condition, called Coltard's syndrome, where people think that they are actually dead. Because this condition is very rare, you can only find one person to study. The technique you are most likely to use is:
a. a case study
b. a longitudinal study
c. a cross-sectional study
d. an experiment

ANS: A DIF: Moderate KEY: How Should the Data Be Collected? (III.B.1.b)
NOT: Applied

68. An extensive study of a single person or a few people is characteristic of:
a. self-report research
b. case studies
c. the scientific method
d. psychophysiological assessment

ANS: B DIF: Easy KEY: Case Study (III.B.2)
NOT: Factual

69. A study of the experiences of a person with an extremely rare brain disorder is likely to make use of:
a. random selection
b. a case study
c. cross-sectional research
d. participant observation

ANS: B DIF: Moderate KEY: Case Study (III.B.2)
NOT: Applied

70. A self-report technique that might require a respondent to retrieve a great deal of information from memory involves:
a. experience sampling
b. stimulus judgments
c. psychophysical assessments
d. open-ended questions

ANS: D DIF: Easy KEY: Open-ended vs. Closed-ended Questions (III.B.3.b)
NOT: Factual

71. Self-report questions in which the investigator provides answers from which the respondent chooses are called:
a. closed-ended
b. observational
c. controlled
d. experimental

ANS: A DIF: Easy KEY: Open-ended vs. Closed-ended Questions (III.B.3.b)
NOT: Factual

72. Self-report questions on which the respondent can generate his or her own responses are called:
a. observational
b. open-ended
c. operational
d. event-related

ANS: B DIF: Easy KEY: Open-ended vs. Closed-ended Questions (III.B.3.b)
NOT: Factual

73. Jamal wants to find out whether the customers of his coffee shop prefer that he add booths or keep his tables and chairs. A researcher would be likely to use what kind of study to help him?
a. participant observation
b. self-report
c. correlational
d. experimental

ANS: B DIF: Moderate KEY: Methods for Asking Questions (III.B.3.a)
NOT: Applied

74. Investigators who are interested in gaining a lot of information about group attitudes quickly are likely to use what kind of research approach?
a. case study
b. psychophysiological assessment
c. participant observation
d. self-report

ANS: D DIF: Easy KEY: Methods for Asking Questions (III.B.3.a)
NOT: Applied

75. If a researcher asks a group of participants to record their thoughts or feelings at random times of the day, she is using:
a. correlational research
b. experimental research
c. longitudinal data
d. experience sampling

ANS: D DIF: Easy KEY: Experience Sampling (III.B.3.c)
NOT: Factual

76. If a researcher wants to assess participants' feelings at various times during the day and in many different locations, a useful methodology would be:
a. experience sampling
b. random selection
c. an experiment
d. a case study

ANS: A DIF: Easy KEY: Experience Sampling (III.B.3.c)
NOT: Applied

77. In order to look good, respondents sometimes give incorrect answers on a questionnaire. This behaviour illustrates:
a. the better-than-average effect
b. socially desirable responding
c. an experimental confound
d. selection bias

ANS: B DIF: Easy KEY: Socially Desirable Responses (III.B.3.d.1.A)
NOT: Factual

78. If a participant responds that she is getting a grade of A in a class but really is getting a B, she might not be lying; she might only remember her high test scores in that class. Such behaviour involves:
    a. observer bias
    b. experimenter expectancy
    c. better-than-average effect
    d. socially desirable responding

    ANS: C DIF: Easy KEY: Better-Than-Average Effect (III.B.3.d.1.B)
    NOT: Applied

79. In observational studies, participants sometimes show reactivity. A related phenomenon in self-report studies is called:
    a. participant observation
    b. experimenter expectancy
    c. socially desirable responding
    d. the third-variable problem

    ANS: C DIF: Moderate KEY: Socially Desirable Responses (III.B.3.d.1.A)
    NOT: Applied

80. Studies of self-esteem among people in the United States and in some Asian cultures have shown that:
    a. on average, Asians have higher self-esteem than people in the United States
    b. levels of self-esteem increase among Asians as they age but decline among people in the United States
    c. self-esteem is a concept that does not require culturally sensitive research
    d. if researchers use different ways to measure self-esteem, the comparisons among people in the different cultures show different patterns

    ANS: D DIF: Moderate KEY: Better-Than-Average Effect (III.B.3.d.1.B)
    NOT: Factual

81. If a researcher wants to see how quickly a person can process complex information, that researcher is likely to use:
    a. psychophysiological assessment
    b. stimulus judgments
    c. reactivity
    d. reaction time studies

    ANS: D DIF: Moderate KEY: Reaction Time (III.B.4.a)
    NOT: Factual

82. A researcher would be likely to use a reaction time study in order to see how quickly mental processes proceed when a person solves a problem. Reaction time is an example of:
    a. response performance
    b. stimulus judgment
    c. response accuracy
    d. experimental treatment

    ANS: A DIF: Easy KEY: Response Performance (III.B.4)
    NOT: Applied

83. Lily is studying a participant's arousal level when watching a violent video. She is likely to use:
    a. psychophysiological assessment
    b. experience sampling
    c. stimulus judgments
    d. participant observation

    ANS: A DIF: Moderate
    KEY: Psychophysiological Assessment: Body/Brain Activity (III.B.5)
    NOT: Applied

84. Researchers have discovered neurons in the brain that respond during emotional arousal. The best approach to studying these neurons is through:
    a. experience sampling
    b. psychophysiological assessment
    c. participant observation
    d. reactivity

    ANS: B DIF: Easy
    KEY: Psychophysiological Assessment: Body/Brain Activity (III.B.5)
    NOT: Factual

85. A limitation of EEG recording in brain research is that:
    a. physiological recordings based on EEG are more useful for nonhuman animals than humans
    b. EEG recordings do not pick up electrical firing from individual areas of the brain
    c. EEG recordings only record changes in mood and arousal, but not how active the brain as a whole is
    d. EEG recordings require the use of radioactive glucose for picking up recordings from different areas of the brain

    ANS: B DIF: Moderate KEY: Electroencephalograph (EEG) (III.B.5.a.1)
    NOT: Factual

86. If a researcher applies scalp electrodes to get measurements of brain activity, the researcher is using:
    a. PET scans
    b. fMRIs
    c. EEG recordings
    d. transcranial magnetic stimulation

    ANS: C DIF: Easy KEY: Electroencephalograph (EEG) (III.B.5.a.1)
    NOT: Factual

87. A researcher that wants to get a sense of overall levels of electrical brain activity would use:
    a. PET scans
    b. MRI imaging
    c. transcranial magnetic stimulation
    d. EEG recordings

    ANS: D DIF: Easy KEY: Electroencephalograph (EEG) (III.B.5.a.1)
    NOT: Factual

88. Laticia is studying the use of glucose in the brain to see how certain areas of the brain respond to a visual tracking task. Her research is likely to use:
    a. a PET scan
    b. an fMRI
    c. transcranial magnetic stimulation
    d. event-related potential

    ANS: A DIF: Moderate KEY: Positron Emission Tomography (PET) (III.B.5.b.1)
    NOT: Applied

89. The most powerful imaging technique, which documents changes in magnetic forces in the brain, is:
    a. fMRI
    b. MRI
    c. psychophysiological assessment
    d. EEG recording

    ANS: B DIF: Easy KEY: Magnetic Resonance Imaging (MRI) (III.B.5.b.2)
    NOT: Factual

90. What approach have researchers used to document changes in glucose use in the brain during problem solving?
    a. EEG recording
    b. MRI
    c. fMRI
    d. PET scan

    ANS: D DIF: Easy KEY: Positron Emission Tomography (PET) (III.B.5.b.1)
    NOT: Applied

91. Researchers monitor changes in blood oxygen level when they record brain activity using:
    a. an EEG recording
    b. a PET scan
    c. transcranial magnetic stimulation
    d. fMRI

    ANS: D DIF: Easy
    KEY: Functional Magnetic Resonance Imaging (fMRI) (III.B.5.b.2.A)
    NOT: Factual

92. The approach that would be LEAST useful in identifying how a specific region of the brain functions with a person engaged in a given task would be:
    a. an EEG recording
    b. MRI
    c. fMRI
    d. a PET scan

    ANS: A DIF: Easy KEY: Electroencephalograph (III.B.5.a.1)
    NOT: Applied

93. Transcranial magnetic stimulation investigates the activity of a given region of the brain through the:
    a. monitoring of overall brain functioning and recording of increases in magnetic activity in the region of interest
    b. interruption of functioning of the brain in the region of interest by sending a magnetic pulse to that region
    c. recording of changing levels of oxygen flow in the area of interest in the brain
    d. monitoring of glucose use in the area of interest in the brain

    ANS: B DIF: Moderate KEY: Transcranial Magnetic Stimulation (III.B.5.b.3)
    NOT: Factual

94. Before psychologists can begin a research project, they must receive approval from:
    a. the American Psychological Association
    b. Canadian Psychiatric Association
    c. the National Science Foundation
    d. a research ethics board

    ANS: D DIF: Easy KEY: Research Ethics Boards (IV.B.1)
    NOT: Factual

95. If a researcher was denied permission to conduct a study because participants might suffer harm, that decision would have been made by:
    a. Health Canada
    b. a research ethics board
    c. the National Science Foundation
    d. Canadian Psychiatric Association

    ANS: B DIF: Easy KEY: Research Ethics Boards (IV.B.1)
    NOT: Applied

96. One issue that a research ethics board is likely to concern itself with is:
    a. systematic error
    b. directionality problems
    c. relative risk
    d. experimenter expectancy

    ANS: C DIF: Easy KEY: Relative Risk (IV.B.2.c)
    NOT: Applied

97. The matter of who has access to data collected in an experiment is associated with what ethical issue?
    a. deception
    b. informed consent
    c. anonymity
    d. confidentiality

    ANS: D DIF: Easy KEY: Confidentiality (IV.A.2)
    NOT: Factual

98. If a researcher publicly discussed a participant's responses and named the participant, that researcher would be guilty of violating what specific ethical principle?
    a. confidentiality
    b. anonymity
    c. privacy
    d. deception

    ANS: A DIF: Easy KEY: Confidentiality (IV.A.2)
    NOT: Applied

99. A research ethics board is likely to conclude that there are no troublesome ethical issues associated with which of the following types of study?
    a. research in a controlled study in a laboratory
    b. surveys on topics like experiences of sexual abuse
    c. naturalistic observation of the conditions in which people are likely to litter in public
    d. experiments on learning simple lists of words when the experimenter has deceived participants about the purpose of the study

    ANS: C DIF: Moderate KEY: Ethical Concerns (IV.A)
    NOT: Applied

100. The process by which any deception used in a study is explained to a participant is called:
    a. debriefing
    b. informed consent
    c. relief of confidentiality
    d. relief from relative risk

    ANS: A DIF: Easy KEY: Debriefing (IV.B.2.b)
    NOT: Factual

101. The most basic principle of research set forth in the Nuremburg Code is:
    a. confidentiality
    b. informed consent
    c. debriefing
    d. deception

    ANS: B DIF: Easy KEY: Ethics and the Nuremberg Code (IV.C)
    NOT: Factual

102. If a seriously brain-damaged patient cannot give informed consent to participate in medical research, researchers:
    a. can include the person in research only if they provide complete debriefing at the conclusion of the study

b. can relax the requirements regarding the relative risk of participation in the study
c. can apply to the Canadian Mental Health Association to waive the requirement for informed consent
d. can obtain consent for the patient to take part in the research by getting permission from a legal guardian

ANS: D DIF: Moderate KEY: Informed Consent (IV.B.2)
NOT: Factual

103. Stanley Milgram's obedience studies in which participants thought they were delivering electrical shocks to another person have been criticized on ethical grounds because:
a. he used deception as part of the study
b. he failed to consider relative risk of harm
c. he violated participant confidentiality
d. he invaded participants' privacy

ANS: A DIF: Easy KEY: Deception (IV.B.2.a)
NOT: Factual

104. When data collected in research are not useful in addressing the issue that the investigator is studying, we say that the data are not:
a. reliable
b. valid
c. systematic
d. statistically significant

ANS: B DIF: Easy KEY: Validity (V.A.1)
NOT: Factual

105. Suppose a researcher intended to study people's level of happiness by monitoring how often they smile or laugh when watching a movie. If this measurement does not really indicate level of happiness, psychologists would say that the data are not:
a. systematic
b. reliable
c. valid
d. event-related

ANS: C DIF: Easy KEY: Validity (V.A.1)
NOT: Applied

106. If a researcher's data are reliable:
a. they still might involve a high level of systematic error
b. it is very likely that they are also valid
c. there will be little chance of participant reactivity
d. measurements were probably culturally sensitive

ANS: A DIF: Easy KEY: Accuracy (V.A.3)
NOT: Conceptual

107. If a researcher finds that a participant produces very different scores on a task each time the participant engages in that task, a researcher can conclude that:
a. the measurements are probably valid but not reliable
b. the measurements show a high level of random error
c. the data will show no central tendency
d. there will be a need to use inferential statistics

ANS: B DIF: Moderate KEY: Accuracy (V.A.3)

NOT: Conceptual

108. If a participant always shows fast reaction times on a visual task not because she is good at the task but because she can hear the experimenter start the presentation and can get ready for the stimulus, her data will show a high level of:
a. validity
b. reactivity
c. selection bias
d. systematic error

ANS: D DIF: Easy KEY: Accuracy (V.A.3)
NOT: Applied

109. When researchers study multiple groups and report means of each group, they are reporting:
a. descriptive statistics
b. median values
c. variability
d. standard deviations

ANS: A DIF: Easy KEY: Descriptive Statistics (V.B.1)
NOT: Factual

110. When researchers report a measure of central tendency, they might present:
a. the standard deviation
b. the median
c. inferential statistics
d. the correlation coefficient

ANS: B DIF: Easy KEY: Measures of Central Tendency (V.B.1.a)
NOT: Factual

111. If you list a set of scores from the lowest value to the highest, then take the middle value to indicate what is a typical score, you are using the:
a. mean
b. mode
c. median
d. range

ANS: C DIF: Easy KEY: Median (V.B.1.a.2)
NOT: Factual

112. If a researcher believes that participants in a single group will score very differently from one another on a task, that researcher can find out if that is true by looking at the:
a. mean
b. median
c. correlation coefficient
d. standard deviation

ANS: D DIF: Moderate KEY: Standard Deviation (V.B.1.b.1)
NOT: Applied

113. A store owner wants to make sure she has enough shirts in the right sizes in her inventory, so she buys a lot of shirts in the most popular size. In order to make this purchase, what type of statistic would she want to know?
a. mode
b. mean
c. standard deviation
d. range

ANS: A DIF: Moderate KEY: Mode (V.B.1.a.3)
NOT: Applied

114. The most frequently occurring score in a data set is known as the:
a. mean
b. mode
c. range
d. standard deviation

ANS: B DIF: Easy KEY: Mode (V.B.1.a.3)
NOT: Factual

115. The statistic that involves the basic arithmetic average of a set of scores is known as the:
a. mode
b. range
c. mean
d. median

ANS: C DIF: Easy KEY: Mean (V.B.1.a.1)
NOT: Factual

116. The values in a data set range from 60 to 90. If a researcher knows this, then the researcher is aware of the:
a. standard deviation
b. median
c. mode
d. range

ANS: D DIF: Easy KEY: Range (V.B.1.b.2)
NOT: Factual

117. If a person wants to determine the average weight of customers in a store, she could create a questionnaire where customers check a category that indicates their weight, like 110 to 119 pounds, 120 to 129 pounds, and so forth. What statistic would be useful so she can include enough weight categories on her questionnaire?
a. range
b. median
c. mode
d. mean

ANS: A DIF: Easy KEY: Range (V.B.1.b.2)
NOT: Applied

118. The mean, median, and mode are all examples of:
a. inferential statistics
b. measures of central tendency
c. types of variability
d. correlational measures

ANS: B DIF: Moderate KEY: Measures of Central Tendency (V.B.1.a)
NOT: Factual

119. The range and standard deviation are examples of:
a. inferential statistics
b. measures of central tendency
c. types of variability
d. correlational measures

ANS: C DIF: Easy KEY: Variability (V.B.1.b)
NOT: Factual

120. If you want to know how far apart scores in a data set tend to be, you could use the:
a. mean
b. median
c. mode
d. standard deviation

ANS: D DIF: Easy KEY: Standard Deviation (V.B.1.b.1)
NOT: Factual

121. When you pair two variables, and as one increases so does the other, your data will show:
a. a standardized range
b. a positive correlation
c. inferential statistics
d. validity

ANS: B DIF: Moderate KEY: Positive Correlation (V.B.1.c.2.A)

NOT: Factual

122. When you pair two variables, and as one increases the other decreases, your data will show:
a. a standardized range
b. a negative correlation
c. inferential statistics
d. validity

ANS: B DIF: Easy KEY: Negative Correlation (V.B.1.c.2.B)
NOT: Factual

123. Research has shown that some types of behavioural or psychiatric disorders show higher levels among people with low levels of education. This pattern of data is associated with:
a. inferential statistics
b. descriptive statistics
c. negative correlations
d. standard deviations

ANS: C DIF: Moderate KEY: Negative Correlation (V.B.1.c.2.B)
NOT: Applied

124. Students who study a little for tests tend to make more errors on tests; students who study a lot, tend to make fewer errors. If a researcher collected data on such test scores, she would likely spot:
a. an inferential statistic
b. a variable standard deviation
c. a positive correlation
d. a negative correlation

ANS: D DIF: Moderate KEY: Negative Correlation (V.B.1.c.2.B)
NOT: Applied

125. When a researcher cannot manipulate variables in a project on the relationship between level of education and income, she will be forced to collect naturally occurring data. The data analysis would probably involve:
a. a correlational analysis
b. descriptive, but not inferential, statistics
c. naturalistic observation
d. selection bias

ANS: A DIF: Moderate KEY: Correlation Coefficient (V.B.1.c.2)
NOT: Applied

126. Researchers have found that taller people tend to have higher levels of self-esteem than shorter people. This pattern of data reflects:
a. an inferential statistic
b. a positive correlation
c. measures of central tendency
d. measures of variability

ANS: B DIF: Easy KEY: Positive Correlation (V.B.1.c.2.A)
NOT: Factual

127. If a researcher wants to make a judgment as to whether the data from her sample would be like data in the population, she would use:
a. correlation coefficients
b. measures of central tendency
c. inferential statistics
d. meta-analysis

ANS: C DIF: Easy KEY: Inferential Statistics (V.B.2)
NOT: Factual

128. If the difference between two groups is statistically significant, it suggests that:
    a. there is a positive correlation among the data
    b. the data show low levels of systematic error
    c. the researcher has to use descriptive statistics to test for the validity of the results
    d. if the experiment were repeated, the same results would likely occur

    ANS: D DIF: Difficult KEY: Comparing Groups (V.B.2.a)
    NOT: Conceptual