Educational Research Mcqs

Chapter 1
Multiple Choice Questions
(The answers are provided after the last question.)

1. Mrs. Smith is writing her daily observations of a student and writes, without interpretation, that the student is not completing the class work and is constantly speaking out of turn. Which of the following objectives does she appear to be using?
   a. prediction  
   b. description  
   c. explanation  
   d. exploration

2. Which of the following is a form of research typically conducted by teachers, counselors, and other professionals to answer questions they have and to specifically help them solve local problems?
   a. action research  
   b. basic research  
   c. predictive research  
   d. orientational research

3. How much confidence should you place in a single research study?
   a. you should completely trust a single research study.  
   b. you should trust research findings after different researchers have found the same findings  
   c. neither a nor b  
   d. both a and b

4. The development of a solid foundation of reliable knowledge typically is built from which type of research?
   a. basic research  
   b. action research  
   c. evaluation research  
   d. orientational research

5. Which form of reasoning is the process of drawing a specific conclusion from a set of premises?
   a. rationalism  
   b. deductive reasoning  
   c. inductive reasoning  
   d. probabilistic

6. The idea that when selecting between two different theories with equal explanatory value, one should select the theory that is the most simple, concise, and succinct is known as ____________.
   a. criterion of falsifiability  
   b. critical theory  
   c. guide of simplicity  
   d. rule of parsimony
7. Research that is done to examine the findings of someone else using the "same variables but different people" is which of the following?
   a. exploration
   b. hypothesis
   c. replication
   d. empiricism

8. __________ is the idea that knowledge comes from experience.
   a. rationalism
   b. deductive reasoning
   c. logic
   d. empiricism

9. According to your text, what are the five key objectives of science?
   a. prediction, summary, conclusion, explanation, description
   b. influence, prediction, questions, exploration, answers
   c. exploration, description, explanation, prediction, influence
   d. questions, answers, prediction, explanation, summary

10. A researcher designs an experiment to test how variables interact to influence how well children learn spelling words. In this case, the main purpose of the study was:
    a. Explanation
    b. Description
    c. Influence
    d. Prediction

11. There is a set of churches in the U.S. where part of the service involves snake handling. The researcher wants to find out why the people attending these churches do this and how they feel and think about it. In this case, the primary purpose of the study is:
    a. Exploration
    b. Description
    c. Influence
    d. Prediction

12. Which of the following is not a characteristic of a good theory or explanation?
    a. It is parsimonious
    b. It is testable
    c. It is general enough to apply to more than one place, situation, or person
    d. All of the above are characteristics of good theories

13. Which of the following is not a basic assumption of science?
    a. Science cannot provide answers to all questions
    b. It is possible to distinguish between more and less plausible claims
    c. Researchers should follow certain agreed upon norms and practices
    d. Science is best at solving value conflicts, such as whether abortion is immoral

14. What general type of research is focused on collecting information to help a researcher advance an ideological or political position?
    a. Evaluation research
    b. Basic research
    c. Action research
    d. Orientational research

15. Which “scientific method” follows these steps: 1) observation/data, 2) patterns, 3) theory?
a. Inductive  
b. Deductive  
c. Imductive  
d. Top down

16. Rene Descartes is associated with which of the following approaches to knowledge generation?  
a. Empiricism  
b. Rationalism  
c. Expert opinion  
d. None of the above

17. Which scientific method is a top-down or confirmatory approach?  
a. Deductive method  
b. Inductive method  
c. Hypothesis method  
d. Pattern method

18. Which scientific method is a bottom-up or generative approach to research?  
a. Deductive method  
b. Inductive method  
c. Hypothesis method  
d. Pattern method

19. Which scientific method focuses on testing hypotheses developed from theories?  
a. Deductive method  
b. Inductive method  
c. Hypothesis method  
d. Pattern method

20. Which scientific method often focuses on generating new hypotheses and theories?  
a. Deductive method  
b. Inductive method  
c. Hypothesis method  
d. Pattern method

21. Which of the following statements is true of a theory?  
a. it most simply means “explanation”  
b. it answers the “how” and “why” questions  
c. it can be a well developed explanatory system  
d. all of the above are correct

Answers:  
1. b  
2. a  
3. b  
4. a  
5. b  
6. d  
7. c  
8. d  
9. c  
10. a
1. Which research paradigm is based on the pragmatic view of reality?
   a. quantitative research
   b. qualitative research
   c. mixed research
   d. none of the above

2. Which research paradigm is least concerned about generalizing its findings?
   a. quantitative research
   b. qualitative research
   c. mixed research
   d. none of the above

3. Which of the following best describes quantitative research?
   a. the collection of nonnumerical data
   b. an attempt to confirm the researcher’s hypotheses
   c. research that is exploratory
   d. research that attempts to generate a new theory

4. A condition or characteristic that can take on different values or categories is called ___.
   a. a constant
   b. a variable
   c. a cause-and-effect relationship
   d. a descriptive relationship

5. A variable that is presumed to cause a change in another variable is called a(n):
   a. categorical variable
   b. dependent variable
   c. independent variable
   d. intervening variable

6. All of the following are common characteristics of experimental research except:
   a. it relies primarily on the collection of numerical data
   b. it can produce important knowledge about cause and effect
   c. it uses the deductive scientific method
d. it rarely is conducted in a controlled setting or environment

7. Qualitative research is often exploratory and has all of the following characteristics except:
   a. it is typically used when a great deal is already known about the topic of interest
   b. it relies on the collection of nonnumerical data such as words and pictures
   c. it is used to generate hypotheses and develop theory about phenomena in the world
   d. it uses the inductive scientific method

8. Which type of research provides the strongest evidence about the existence of cause-and-effect relationships?
   a. nonexperimental Research
   b. experimental Research

9. What is the key defining characteristic of experimental research?
   a. extraneous variables are never present
   b. a positive correlation usually exists
   c. a negative correlation usually exists
   d. manipulation of the independent variable

10. In ____ , random assignment to groups is never possible and the researcher cannot manipulate the independent variable.
    a. basic research
    b. quantitative research
    c. experimental research
    d. causal-comparative and correlational research

11. What is the defining characteristic of experimental research?
    a. resistance to manipulation
    b. manipulation of the independent variable
    c. the use of open-ended questions
    d. focuses only on local problems

12. A positive correlation is present when ______.
    a. two variables move in opposite directions.
    b. two variables move in the same direction.
    c. one variable goes up and one goes down
    d. several variables never change.

13. Research in which the researcher uses the qualitative paradigm for one phase and the quantitative paradigm for another phase is known as ____.
    a. action research
    b. basic research
    c. quantitative research
    d. mixed method research
    e. mixed model research

14. Research in which the researcher uses both qualitative and quantitative research within a stage or across two of the stages in the research process is known as ____.
    a. action research
    b. basic research
    c. quantitative research
    d. mixed method research
    e. mixed model research

15. Research that is done to understand an event from the past is known as ____?
    a. experimental research
    b. historical research
    c. replication
    d. archival research

16. ____ research occurs when the researcher manipulates the independent
variable.
a. causal-comparative research  
b. experimental research  
c. ethnography  
d. correlational research  
17. Which of the following includes examples of quantitative variables?  
a. age, temperature, income, height  
b. grade point average, anxiety level, reading performance  
c. gender, religion, ethnic group  
d. both a and b  
18. What is the opposite of a variable?  
a. a constant  
b. an extraneous variable  
c. a dependent variable  
d. a data set  
19. Which of the following is the type of nonexperimental research in which the  
primary independent variable of interest is categorical?  
a. causal-comparative research  
b. experimental research  
c. qualitative research  
d. mixed research  
20. Which of the following can best be described as a categorical variable?  
a. age  
b. annual income  
c. grade point average  
d. religion  
21. In research, something that does not “vary” is called a __________.  
a. variable  
b. method  
c. constant  
d. control group  
22. When interpreting a correlation coefficient expressing the relationship between  
two variables, it is very important to avoid _______.  
a. checking the strength of relationship  
b. jumping to the conclusion of causality  
c. checking the direction of the relationship  
d. expressing a relationship with a correlation coefficient  
23. A researcher studies achievement by children in poorly funded elementary  
schools. She develops a model that posits parent involvement as an important  
variable. She believes that parent involvement has an impact on children by  
increasing their motivation to do school work. Thus, in her model, greater parent  
involvement leads to higher student motivation, which in turn creates higher student  
achievement. Student motivation is what kind of variable in this study?  
a. Manipulated variable  
b. Extraneous variable  
c. Confounding variable  
d. Mediating or intervening variable  
24. The strongest evidence for causality comes from which of the following research  
methods?  
a. Experimental  
b. Causal-comparative  
c. Correlational  
d. Ethnography
25. Which correlation is the strongest?
   a. +.10
   b. -.95
   c. +.90
   d. -1.00

26. The correlation between intelligence test scores and grades is:
   a. Positive
   b. Negative
   c. Perfect
   d. They are not correlated

Answers:
1. c
2. b
3. b
4. b
5. c
6. d
7. a
8. b
9. d
10. d
11. b
12. b
13. d
14. e
15. b
16. b
17. d
18. a
19. a
20. d
21. c
22. b
23. d
24. a
25. d
26. a

Chapter 3
Multiple Choice Questions
(The answers are provided after the last question.)

1. A good qualitative problem statement:
   a. Defines the independent and dependent variables
   b. Conveys a sense of emerging design
c. Specifies a research hypothesis to be tested  
d. Specifies the relationship between variables that the researcher expects to find

2. The “tool” function of theory is to:  
a. Summarize existing knowledge  
b. Summarize existing hypotheses  
c. Suggest new relationships and make new predictions  
d. Suggest new theories

3. The statement of purpose in a research study should:  
a. Identify the design of the study  
b. Identify the intent or objective of the study  
c. Specify the type of people to be used in the study  
d. Describe the study

4. Why is the statement “What are the effects of extracurricular activities on cognitive development of school age children” not a good statement of a quantitative research question?  
a. Because there is no connection between extracurricular activities and cognitive development  
b. Because there are not enough school age children engaged in extracurricular activities to conduct the study  
c. Because the study would be too difficult to do given all the different extracurricular activities  
d. Because the statement was not specific enough to provide an understanding of the variables being investigated

5. A qualitative research question:  
a. Asks a question about some process, or phenomenon to be explored  
b. Is generally an open-ended question  
c. both a and b are correct  
d. None of the above

6. According to the text, which of the following orders is the recommended in the flowchart of the development of a research idea?  
a. Research topic, research problem, research purpose, research question, hypothesis  
b. Research topic, research purpose, research problem, research question, hypothesis  
c. Research topic, research problem, research purpose, research question, hypothesis  
d. Research topic, hypothesis, research problem, research question, research purpose

7. It is essential that you evaluate the quality of internet resources because information obtained via the internet ranges from very poor to very good.  
a. True  
b. False

8. One step that is not included in planning a research study is:  
a. Identifying a researchable problem  
b. A review of current research  
c. Statement of the research question  
d. Conducting a meta-analysis of the research  
e. Developing a research plan

9. Sources of researchable problems can include:
a. Researchers' own experiences as educators
b. Practical issues that require solutions
c. Theory and past research
d. All of the above

10. A key characteristic of past research that guides researchers in new research questions is that:
   a. Extensive research conclusively and definitively answers research questions
   b. Studies typically generate more research questions than they answer

11. Which of the following is a function of theory?
   a. Integrating and summarizing current knowledge
   b. Making predictions
   c. Explaining phenomena
   d. All of the above are important functions of theory

12. A review of the literature prior to formulating research questions allows the researcher to do which of the following?
   a. To become familiar with prior research on the phenomenon of interest
   b. To identify potential methodological problems in the research area
   c. To develop a list of pertinent problems relative to the phenomenon of interest
   d. All of the above

13. Sometimes a comprehensive review of the literature prior to data collection is not recommended by grounded theorists.
   a. True
   b. False

14. What kind of ideas can’t be empirically researched?
   a. Effectiveness of different methods of instruction
   b. Description of educational practices
   c. Issues of values and morality such as the correctness of having prayer in schools
   d. Factors helpful in predicting future drug use

15. Which of the following is not a database containing information to be used during the literature review?
   a. ERIC
   b. PsychINFO
   c. SocioFILE
   d. all of the above are potentially useful databases

16. Computer database searches can be done:
   a. With a computer with CD-ROM drive
   b. At the library
   c. Online
   d. All of the above

17. The feasibility of a research study should be considered in light of:
   a. Cost and time required to conduct the study
   b. Skills required of the researcher
   c. Potential ethical concerns
   d. All of the above
18. A formal statement of the research question or “purpose of research study” generally ______.
   a. Is made prior to the literature review
   b. Is made after the literature review
   c. Will help guide the research process
   d. All of the above
   e. b and c

19. Is the following qualitative research purpose statement “well stated” or “poorly stated”? “The focus of the present study was to explore distressing and nurturing encounters of patients with caregivers and to ascertain the meanings that are engendered by such encounters. The study was conducted on one of the surgical units and the obstetrical/gynecological unit of a 374-bed community hospital.”
   a. It is a well stated
   b. It is poorly stated

20. Which of the following quantitative research questions is superior?
   a. “What is the effect of participation in various extracurricular activities on academic performance?”
   b. “What effect does playing high school football have on students’ overall grade point average during the football season?”

21. A statement of the quantitative research question should:
   a. Extend the statement of purpose by specifying exactly the question(s) the researcher will address
   b. Help the research in selecting appropriate participants, research methods, measures, and materials
   c. Specify the variables of interest
   d. All of the above

22. The research participants are described in detail in which section of the research plan?
   a. Introduction
   b. Method
   c. Data analysis
   d. Discussion

23. Research hypotheses are ______.
   a. Formulated prior to a review of the literature
   b. Statements of predicted relationships between variables
   c. Stated such that they can be confirmed or refuted
   d. b and c

24. Hypotheses in qualitative research studies usually _____.
   a. Are very specific and stated prior to beginning the study
   b. Are often generated as the data are collected, interpreted, and analyzed
   c. Are never used
   d. Are always stated after the research study has been completed

25. A research plan _____.
   a. Should be detailed
   b. Should be given to others for review and comments
c. Sets out the rationale for a research study
d. All of the above

26. The Method section of the research plan typically specifies
a. The research participants
b. The results of prior studies that address the phenomena of interest
c. The apparatus, instruments, and materials for the research study
d. The planned research procedures
e. a, c and d

27. The Introduction section of the research plan
a. Gives an overview of prior relevant studies
b. Contains a statement of the purpose of the study
c. Concludes with a statement of the research questions and, for quantitative research, it includes
   the research hypothesis
d. All of the above

d. All of the above

28. According to your text, which of the following is not a source of research ideas?
a. Everyday life
b. Practical issues
c. Past research
d. Theory
e. All of the above ARE sources of research ideas

Answers:
1. b
2. c
3. b
4. d
5. c
6. a
7. a
8. d
9. d
10. b
11. d
12. d
13. a
14. c
15. d
16. d
17. d
18. e
19. a
20. b
21. d
22. b
23. d
24. b
25. d
26. e
27. d
28. e
Chapter 5
Multiple Choice Questions
(The answers are provided after the last question.)

1. Which of the following is not an assumption underlying testing and measurement?
   a. Various approaches to measuring aspects of the same thing can be useful
   b. Error is rarely present in the measurement process
   c. Present-day behavior predicts future behavior
   d. Testing and assessment benefit society

2. Systematic error is associated with:
   a. Reliability
   b. Validity

3. Which of the following is a type of criterion-related validity evidence?
   a. Concurrent evidence
   b. Predictive evidence
   c. Internal consistency
   d. Both a and b are correct answers

4. If a test measures a single construct then:
   a. The items should correlate with the total score
   b. The items should not correlate with the total score
   c. The test should not correlate with other measures of the same construct
   d. There must be a reliable alternative form.

5. Professor X develops a test of emotional intelligence. Which of the following represent convergent and discriminant evidence?
   a. The test correlates highly with another test of emotional intelligence and is uncorrelated with self-efficacy
   b. The test correlates with highly with another test of emotional intelligence and is highly correlated with self-efficacy
   c. The test does not correlate with another test of emotional intelligence, but does correlate with self-efficacy
   d. The test does not correlate with other tests of emotional intelligence nor with self-efficacy

6. An ordinal scale is used to rank order people, objects, or characteristics.
   a. True
   b. False

7. Which scale is the simplest form of measurement?
   a. Nominal
   b. Ordinal
   c. Interval
   d. Ratio

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8. _____ tests focus on information acquired through the informal learning that goes on in life.
   a. Personality
   b. Achievement
   c. Aptitude
   d. Intelligence

9. Let’s say that a test accurately indicates participants' scores on a future criterion (e.g., the PSAT is used to indicate high-school GPA scores). This test would clearly have which of the following?
   a. Face validity
   b. Concurrent validity
   c. Predictive validity
   d. Content validity

10. If a baseball coach calculates batting averages, what scale would be used?
    a. Interval scale
    b. Ratio scale
    c. Nominal scale
    d. Ordinal scale

11. According to the text, most of the outcome/dependent variable characteristics and attributes measured in educational research probably exist at the ___________ level of measurement.
    a. Nominal
    b. Ordinal
    c. Interval
    d. Ratio

12. Which of the following is most clearly an example of a psychological trait?
    a. Anxiety enduring for months or years
    b. Anxiety over just seeing a spider
    c. Shyness when meeting a stranger for the first time
    d. Depression caused by the loss of a ball game

13. All of the following are examples of Intelligence Tests except ________:
    a. Wechsler Scales
    b. Stanford-Binet
    c. Minnesota Multiphasic Personality Inventory (MMPI)
    d. Slosson

14. Reliability is most simply known as which of the following?
    a. Consistency or stability
    b. Appropriateness of interpretations on the basis of test scores
    c. Ways in which people are the same
    d. A rank order of participants on some characteristic

15. An ordinal scale is:
    a. The simplest form of measurement
    b. A rank-order scale of measurement
    c. A scale with equal intervals between adjacent numbers
    d. A scale with an absolute zero point
    e. A categorical scale

16. Which of the following is not a type of reliability?
a. Test-retest
b. Split-half
c. Content
d. Internal consistency

17. Which of the following statements accurately describes test-retest reliability?
   a. Measure of consistency of test scores over time
   b. Measure of consistency of scores obtained from two equivalent halves of the same test
   c. Measure of consistency with which a test measures a single construct or concept
   d. Measure of degree of agreement between two or more scorers, judges, or raters

18. Which of the following types of reliability refers to the consistency of test scores over time?
   a. Equivalent forms reliability
   b. Split-half reliability
   c. Test-retest reliability
   d. Inter-scorer reliability

19. Identify the following term that most closely refers to a judgement of the extent to which scores from a test can be used to infer, or predict, the examinees' performance in some activity:
   a. Content reliability
   b. Face validity
   c. Criterion-related validity
   d. Inference validity

20. Which of the following is the correct order of Stevens’ four levels of measurement?
   a. Ordinal, nominal, ratio, interval
   b. Nominal, ordinal, interval, ratio
   c. Interval, nominal, ordinal, ratio
   d. Ratio, interval, nominal, ordinal

21. Which is the process of gathering evidence supporting inferences based test scores?
   a. Validation
   b. Validity
   c. Reliability
   d. Prediction

22. When evaluating tests and assessments, “reliability” refers to asking ourselves which of the following questions?
   a. Does it measure what it is supposed to measure?
   b. Are there ways to avoid subjective judgments when measuring something?
   c. Does it give consistent results?
   d. Does it measure multiple constructs?

23. Validity of a test designed to measure a construct such as self-esteem is best described by which of the following?
   a. Scores from the test correlate highly with most intelligence tests
   b. Scores from the test correlate highly with most tests of different constructs
   c. Scores from the test are not correlated with anything
   d. Scores from the test have a relatively strong and positive correlation with other tests of the
same construct (i.e., with other measures of self-esteem) but much lower correlations with tests of different constructs

24. Which type of reliability refers to the consistency of a group of individuals' scores on two equivalent forms of a test designed to measure the same characteristic?
   a. Split-half  
   b. Test-retest  
   c. Split-forms  
   d. Equivalent forms

25. Achievement tests are designed to measure the degree of learning that has taken place after a person has been exposed to a specific learning experience.
   a. True  
   b. False

26. ________ refers to how well the particular sample of behaviors used to measure a characteristic reflects the entire domain of behaviors that constitutes that characteristic.
   a. Construct validity evidence  
   b. Criterion-related validity evidence  
   c. Content validity evidence  
   d. Face validity evidence

Answers:
1. b
2. b
3. d
4. a
5. a
6. a
7. a
8. c
9. c
10. b
11. b
12. a
13. c
14. a
15. b
16. c
17. a
18. c
19. c
20. b
21. a
22. c
23. d
24. d
25. a
26. c

Chapter 6
Multiple Choice Questions
(The answers are provided after the last question.)

1. According to your text, how many points should a rating scale have?
   a. Five
   b. Four
   c. Ten
   d. Somewhere from 4 to 11 points

2. What is the problem(s) with this set of response categories to the question “What is your current age?”
   1-5
   5-10
   10-20
   20-30
   30-40
   a. The categories are not mutually exclusive
   b. The categories are not exhaustive
   c. Both a and b are problems
   d. There is no problem with the above set of response categories

3. You should mix methods in a way that provides complementary strengths and nonoverlapping weaknesses. This is known as the fundamental principle of mixed research.
   a. True
   b. False

4. According to the text, questionnaires can address events and characteristics taking place when?
   a. In the past (retrospective questions)
   b. In the present (current time questions)
   c. In the future (prospective questions)
   d. All of the above

5. Which of the following are principles of questionnaire construction?
   a. Consider using multiple methods when measuring abstract constructs
   b. Use multiple items to measure abstract constructs
   c. Avoid double-barreled questions
   d. All of the above
   e. Only b and c

6. Which of these is not a method of data collection.
   a. Questionnaires
   b. Interviews
   c. Experiments
   d. Observations

7. Secondary/existing data may include which of the following?
   a. Official documents
   b. Personal documents
   c. Archived research data
   d. All of the above
8. An item that directs participants to different follow-up questions depending on their response is called a _________.
   a. Response set
   b. Probe
   c. Semantic differential
   d. Contingency question

9. Which of the following terms best describes data that were originally collected at an earlier time by a different person for a different purpose?
   a. Primary data
   b. Secondary data
   c. Experimental data
   d. Field notes

10. Researchers use both open-ended and closed-ended questions to collect data. Which of the following statements is true?
    a. Open-ended questions directly provide quantitative data based on the researcher’s predetermined response categories
    b. Closed-ended questions provide quantitative data in the participant’s own words
    c. Open-ended questions provide qualitative data in the participant’s own words
    d. Closed-ended questions directly provide qualitative data in the participants’ own words

11. Open-ended questions provide primarily ______ data.
    a. Confirmatory data
    b. Qualitative data
    c. Predictive data
    d. None of the above

12. Which of the following is true concerning observation?
    a. It takes less time than self-report approaches
    b. It costs less money than self-report approaches
    c. It is often not possible to determine exactly why the people behave as they do
    d. All of the above

13. Qualitative observation is usually done for exploratory purposes; it is also called ________ observation.
    a. Structured
    b. Naturalistic
    c. Complete
    d. Probed

14. As discussed in chapter 6, when constructing a questionnaire it is important to do each of the following except ______.
    a. Use “leading” or “loaded” questions
    b. Use natural language
    c. Understand your research participants
    d. Pilot your test questionnaire

15. Another name for a Likert Scale is a(n):
    a. Interview protocol
    b. Event sampling
    c. Summated rating scale
    d. Ranking
16. Which of the following is not one of the six major methods of data collection that are used by educational researchers?
   a. Observation
   b. Interviews
   c. Questionnaires
   d. Checklists

17. The type of interview in which the specific topics are decided in advance but the sequence and wording can be modified during the interview is called:
   a. The interview guide approach
   b. The informal conversational interview
   c. A closed quantitative interview
   d. The standardized open-ended interview

18. Which one of the following is not a major method of data collection:
   a. Questionnaires
   b. Interviews
   c. Secondary data
   d. Focus groups
   e. All of the above are methods of data collection

19. A question during an interview such as “Why do you feel that way?” is known as a:
   a. Probe
   b. Filter question
   c. Response
   d. Pilot

20. A census taker often collects data through which of the following?
   a. Standardized tests
   b. Interviews
   c. Secondary data
   d. Observations

21. The researcher has secretly placed him or herself (as a member) in the group that is being studied. This researcher may be which of the following?
   a. A complete participant
   b. An observer-as-participant
   c. A participant-as-observer
   d. None of the above

22. Which of the following is not a major method of data collection?
   a. Questionnaires
   b. Focus groups
   c. Correlational method
   d. Secondary data

23. Which type of interview allows the questions to emerge from the immediate context or course of things?
   a. Interview guide approach
   b. Informal conversational interview
   c. Closed quantitative interview
   d. Standardized open-ended interview

24. When conducting an interview, asking “Anything else?, What do you mean?, Why
do you feel that way?, etc, are all forms of:
 a. Contingency questions
 b. Probes
 c. Protocols
 d. Response categories

25. When constructing a questionnaire, there are 15 principles to which you should adhere. Which of the following is not one of those principles?
 a. Do not use "leading" or "loaded" questions
 b. Avoid double-barreled questions
 c. Avoid double negatives
 d. Avoid using multiple items to measure a single construct

Answers:
1. d
2. c
3. a
4. d
5. d
6. c
7. d
8. d
9. b
10. c
11. b
12. c
13. b
14. a
15. c
16. d
17. a
18. e
19. a
20. b
21. a
22. c
23. b
24. b
25. d

Chapter 7
Multiple Choice Questions
(The answers are provided after the last question.)

1. When each member of a population has an equally likely chance of being selected, this is called:
 a. A nonrandom sampling method
 b. A quota sample
 c. A snowball sample
d. An Equal probability selection method

2. Which of the following techniques yields a simple random sample?
   a. Choosing volunteers from an introductory psychology class to participate
   b. Listing the individuals by ethnic group and choosing a proportion from within each ethnic group at random.
   c. Numbering all the elements of a sampling frame and then using a random number table to pick cases from the table.
   d. Randomly selecting schools, and then sampling everyone within the school.

3. Which of the following is not true about stratified random sampling?
   a. It involves a random selection process from identified subgroups
   b. Proportions of groups in the sample must always match their population proportions
   c. Disproportional stratified random sampling is especially helpful for getting large enough subgroup samples when subgroup comparisons are to be done
   d. Proportional stratified random sampling yields a representative sample

4. Which of the following statements are true?
   a. The larger the sample size, the greater the sampling error
   b. The more categories or breakdowns you want to make in your data analysis, the larger the sample needed
   c. The fewer categories or breakdowns you want to make in your data analysis, the larger the sample needed
   d. As sample size decreases, so does the size of the confidence interval

5. Which of the following formulae is used to determine how many people to include in the original sampling?
   a. Desired sample size/Desired sample size + 1
   b. Proportion likely to respond/desired sample size
   c. Proportion likely to respond/population size
   d. Desired sample size/Proportion likely to respond

6. Which of the following sampling techniques is an equal probability selection method (i.e., EPSEM) in which every individual in the population has an equal chance of being selected?
   a. Simple random sampling
   b. Systematic sampling
   c. Proportional stratified sampling
   d. Cluster sampling using the PPS technique
   e. All of the above are EPSEM

7. Which of the following is not a form of nonrandom sampling?
   a. Snowball sampling
   b. Convenience sampling
   c. Quota sampling
   d. Purposive sampling
   e. They are all forms of nonrandom sampling

8. Which of the following will give a more “accurate” representation of the population from which a sample has been taken?
a. A large sample based on the convenience sampling technique
b. A small sample based on simple random sampling
c. A large sample based on simple random sampling
d. A small cluster sample

9. Sampling in qualitative research is similar to which type of sampling in quantitative research?
   a. Simple random sampling
   b. Systematic sampling
   c. Quota sampling
   d. Purposive sampling

10. Which of the following would generally require the largest sample size?
    a. Cluster sampling
    b. Simple random sampling
    c. Systematic sampling
    d. Proportional stratified sampling

11. How often does the Census Bureau take a complete population count?
    a. Every year
    b. Every five years
    c. Every ten years
    d. Twice a year

12. People who are available, volunteer, or can be easily recruited are used in the sampling method called ______.
    a. Simple random sampling
    b. Cluster sampling
    c. Systematic sampling
    d. Convenience sampling

13. Which of the following types of sampling involves the researcher determining the appropriate sample sizes for the groups identified as important, and then taking convenience samples from those groups?
    a. Proportional stratified sampling
    b. Quota sampling
    c. One-stage cluster sampling
    d. Two-stage cluster sampling

14. A type of sampling used in qualitative research that involves selecting cases that disconfirm the researcher's expectations and generalizations is referred to as ________________.
    a. Extreme case sampling
    b. Typical-case sampling
    c. Critical-case sampling
    d. Negative-case sampling

15. Using Figure 6.6 (pg. 178), how many participants will you need for a research study with a population of 120,000?
    a. 242
    b. 331
    c. 377
    d. 384

16. In which of the following nonrandom sampling techniques does the researcher
ask the research participants to identify other potential research participants?

1. a. Snowball
   b. Convenience
   c. Purposive
   d. Quota

17. Which of the following is the most efficient random sampling technique discussed in your chapter?

   a. Simple random sampling
   b. Proportional stratified sampling
   c. Cluster random sampling
   d. Systematic sampling

18. If we took the 500 people attending a school in New York City, divided them by gender, and then took a random sample of the males and a random sampling of the females, the variable on which we would divide the population is called the _____.

   a. Independent variable
   b. Dependent variable
   c. Stratification variable
   d. Sampling variable

19. A number calculated with complete population data and quantifies a characteristic of the population is called which of the following?

   a. A datum
   b. A statistic
   c. A parameter
   d. A population

20. The type of sampling in which each member of the population selected for the sample is returned to the population before the next member is selected is called _________.

   a. Sampling without replacement
   b. Sampling with replacement
   c. Simple random sampling
   d. Systematic sampling

21. Which of the following is not a type of nonrandom sampling?

   a. Cluster sampling
   b. Convenience sampling
   c. Quota sampling
   d. Purposive sampling
   e. They are all type of nonrandom sampling

22. Which of the following would usually require the smallest sample size because of its efficiency?

   a. One stage cluster sampling
   b. Simple random sampling
   c. Two stage cluster sampling
   d. Quota sampling

23. A technique used when selecting clusters of different sizes is called _____.

   a. Cluster sampling
   b. One-stage sampling
   c. Two-stage sampling
   d. Probability proportional to size or PPS

24. The process of drawing a sample from a population is known as _________.
25. It is recommended to use the whole population rather than a sample when the population size is of what size?
   a. 500 or less
   b. 100 or less
   c. 1000 or less
   d. you should always use a sample

26. Which of the following is not an example of a nonrandom sampling technique?
   a. Purposive
   b. Quota
   c. Convenience
   d. Cluster

27. Which of the following sampling methods is the best way to select a group of people for a study if you are interested in making statements about the larger population?
   a. Convenience sampling
   b. Quota sampling
   c. Purposive sampling
   d. Random sampling

28. __________ is a set of elements taken from a larger population according to certain rules.
   a. Sample
   b. Population
   c. Statistic
   d. Element

29. Determining the sample interval (represented by k), randomly selecting a number between 1 and k, and including each kth element in your sample are the steps for which form of sampling?
   a. Simple Random Sampling
   b. Stratified Random Sampling
   c. Systematic Sampling
   d. Cluster sampling

30. The nonrandom sampling type that involves selecting a convenience sample from a population with a specific set of characteristics for your research study is called _____.
   a. Convenience sampling
   b. Quota sampling
   c. Purposive sampling
   d. Snowball sampling

Answers:
1. d
2. c
3. b
4. b
Chapter 8
Multiple Choice Questions
(The answers are provided after the last question.)

1. When a extraneous variable systematically varies with the independent variable and influences the dependent variable, it is called:
   a. Another dependent variable
   b. A confounding variable
   c. A moderating variable
   d. An unreliable variable

2. Which of the following statements is true?
   a. A statistical relationship is sufficient evidence to infer causality
   b. Temporal order of the cause and effect is not important in inferring causality
   c. A statistical relation of X and Y is insufficient evidence for inferring causality
   d. Temporal order of cause and effect variables and statistical relation are all that are needed to infer causality

3. A school district examines a program that uses mentors to help very poor readers improve their reading performance. The children in the program are at the 4th percentile at pretest. At posttest they are around the 20th percentile. While it is
possible that the program made the difference, another reason for the change in scores could be:
   a. History  
   b. Regression artifact  
   c. Multiple-treatment interference  
   d. Differential selection

4. A group of researchers do a study where children from particular classrooms are assigned to treatment or control conditions. After the study, the researcher finds out that the students in the control group are higher achievers than those in the experimental group. He found no treatment effect. The failure to find an effect may be due to:
   a. A treatment effect  
   b. A testing effect  
   c. A differential selection effect  
   d. A maturation effect

5. A researcher examines a program looking at the effects of mentoring on poor readers' reading achievement. He looks at two different schools. One serves as the control and the other the experimental group. Both schools had reading achievement that was around the 50th percentile. During the time that the mentoring program is in place in the experimental group, a statewide reading initiative is started in randomly selected schools. The experimental, but not the control school is involved in the initiative. At the end of the year, the experimental group does better than the control. From the information presented above, a likely threat to the internal validity of the study is:
   a. Selection by mortality interaction  
   b. Mortality  
   c. Selection-history effect  
   d. Selection-maturation effect

6. Which type of validity refers to the degree to which you can infer that the relationship between two variables is causal?
   a. Internal validity  
   b. Population validity  
   c. Ecological validity  
   d. Statistical conclusion validity

7. Which type of validity refers to the ability to infer that the independent and dependent variables are related and that the measured strength of the relationship is accurate?
   a. Internal validity  
   b. Population validity  
   c. Ecological validity  
   d. Statistical conclusion validity

8. An extraneous variable that systematically varies with the independent variable and also influences the dependent variable is known as a _______________.
   a  Confounding variable  
   b. Third variable  
   c. Second variable  
   d. Both a and b are correct

9. The use of multiple observers to allow cross-checking of observations to make sure that the investigators agree with what took place is known as _______.
   a. Interpretive validity
b. Researcher bias
c. Multiple operationalism
d. Investigator triangulation

10. ___________ is the lowest inference descriptor of all because it uses the participant’s own words.
a. Participant feedback
b. A verbatim
c. Data triangulation
d. Investigator triangulation

11. ___________ refers to physical or mental changes that may occur within individuals over time, such as aging, learning, boredom, hunger, and fatigue.
a. Instrumentation
b. History
c. Maturation
d. Testing

12. What type of validity refers to the extent to which the results of a study can be generalized across time?
a. Ecological validity
b. External validity
c. Internal validity
d. Temporal validity

13. Which of the following best describes interpretive validity?
a. Factual accuracy of an account as reported by the researcher
b. Accurately portraying the meanings given by the participants to what is being studied
c. Degree to which a theoretical explanation fits the data
d. Ability to generalize the study results across settings

14. Which of the following terms is a strategy where the researcher actively engages in critical self-reflection about his or her potential biases and predispositions.
a. Experimenter effect
b. Reactivity
c. Investigator triangulation
d. Reflexivity

15. Which of the following is not considered one of the criteria for inferring causality?
a. Evidence that the independent and dependent variables are related
b. Evidence that the relationship between the variables being investigated is not due to a confounding extraneous variable
c. Evidence that changes in variable A occur before changes in variable B
d. The temporal ordering of the variables being investigated does not matter because a relationship is all that is really needed

16. The use of multiple data sources to help understand a phenomenon is one strategy that is used to promote qualitative research validity. Which of the following terms describes this strategy?
a. Data matching
b. Pattern matching
c. Data triangulation  
d. Data feedback  

17. What may happen when different comparison groups experience a different history event?  
a. History effect  
b. Selection-history effect  
c. Selection effect  
d. Group effect  

18. What is another term that refers to a confounding extraneous variable?  
a. Last variable  
b. First variable  
c. Third variable  
d. Fourth variable  

19. Which of the following refers to any systematic change that occurs over time in the way in which the dependent variable is assessed?  
a. Instrumentation  
b. Maturation  
c. Testing  
d. Selection  

20. Which of the following terms describes the ability to generalize from the sample of individuals on which a study was conducted to the larger target population of individuals and across different subpopulations within the larger target population?  
a. External validity  
b. Population validity  
c. Ecological validity  
d. Temporal validity  

21. Which of the following is not a strategy used to promote qualitative research validity?  
a. Peer review  
b. Theory triangulation  
c. Extended fieldwork  
d. Random assignment  

22. The use of several measures of a construct is called:  
a. Multiple operationalism  
b. Multiple construct measurement  
c. Operationalism  
d. Methods triangulation  

23. A physical or mental change that occurs in participants over time that affects their performance on the dependent variable is called _______.  
a. Instrumentation  
b. Maturation  
c. Regression  
d. None of above  

24. Attrition generally occurs in research where _____.  
a. You do demographic research  
b. The study fails
c. Some participants do not complete the study  
d. The study is very brief

25. Differential attrition occurs when the people dropping out from one group are different from the others in their group or from the people in the comparison group.  
a. True  
b. False

26. Internal validity refers to which of the following?  
a. The ability to infer that a casual relationship exists between 2 variables  
b. The extent to which study results can be generalized to and across populations of persons, settings, and times  
c. The use of effective measurement instruments in the study  
d. The ability to generalize the study results to individuals not included in the study

27. Which strategy used to promote qualitative research validity uses multiple research methods to study a phenomenon?  
a. Data triangulation  
b. Methods triangulation  
c. Theory triangulation  
d. Member checking

28. Which type of validity refers to the factual accuracy of an account as reported by the researcher?  
a. Ecological validity  
b. Temporal validity  
c. Descriptive validity  
d. None of the above

29. Which of the following in not one of the key threats to internal validity?  
a. Maturation  
b. Instrumentation  
c. Temporal change  
d. History

30. This type of validity refers to the ability to generalize the results of a study across settings.  
a. Temporal validity  
b. Internal validity  
c. Ecological validity  
d. External validity

31. Which is not a direct threat to the internal validity of a research design?  
a. History  
b. Testing  
c. Sampling error  
d. Differential selection

32. Alteration in performance due to being aware that one is participating in a study is known as ____.  
a. Operationalism  
b. Reactivity  
c. Temporal validity  
d. Mortality
33. The idea that the more times a research finding is shown with different sets of people, the more confidence we can place in the finding and in generalizing beyond the original participants is known as _________.
   a. Naturalistic generalization
   b. Methods generalization
   c. Data triangulation
   d. Replication logic

Answers:
1. b
2. c
3. b
4. c
5. c
6. a
7. d
8. d
9. d
10. b
11. c
12. d
13. b
14. d
15. d
16. c
17. b
18. c
19. a
20. b
21. d
22. a
23. b
24. c
25. a
26. a
27. b
28. c
29. c
30. c
31. c
32. b
33. d

Chapter 9
Multiple Choice Questions
(The answers are provided after the last question.)

1. Analysis of covariance is:
   a. A statistical technique that can be used to help equate groups on specific
variables
b. A statistical technique that can be used to control sequencing effects
c. A statistical technique that substitutes for random assignment to groups
d. Adjusts scores on the independent variable to control for extraneous variables

2. To determine whether noise affects the ability to solve math problems, a researcher has one group solve math problems in a quiet room and another group solve math problems in a noisy room. The group solving problems in the noisy room completes 15 problems in one hour and the group solving problems in the quiet room completes 22 problems in one hour. In this experiment, the independent variable is __________ and the dependent variable is __________.
a. The number of problems solves; the difficulty of the problems
b. The number of problems solved; the noise level in the room
c. The noise level in the room; the number of problems solved
d. The noise level in the room; the difficulty of the problems

3. The posttest-only design with nonequivalent groups is likely to control for which of the following threats to internal validity:
a. History
b. Differential selection
c. Additive and interactive effects
d. Differential attrition

4. When all participants receive all treatment conditions, the study is susceptible to:
a. Order effects
b. Carryover effects
c. Analysis of covariance
d. a and b

5. A researcher is interested in the effects of a preschool program on later school performance. Because she is concerned that socio-economic-status (SES) is a potential extraneous variable in her study, she picks children to study who are only from low SES homes. The control technique she used in this study was:
a. Matching
b. Random assignment
c. Holding the extraneous variable constant
d. Statistically controlling the extraneous variable

6. Which of the following terms best describes an interaction effect?
a. The effect of one independent variable (on a DV) depends on the level of another independent variable
b. Eliminating any differential influence of extraneous variables
c. Sequencing effect that occurs from the order in which the treatment conditions are administered
d. The effect of one independent variable on the dependent variable

7. Which of the following terms refers to a statistical method that can be used to statistically equate groups on a pretest or some other variable?
a. Experimental control
b. Differential influence
c. Matching
d. Analysis of covariance
8. Which of the following is not a way to manipulate an independent variable?
a. Presence technique
b. Amount technique
c. Type technique
d. Random technique

9. Which of the following designs permits a comparison of pretest scores to determine the initial equivalence of groups on the pretest before the treatment variable is introduced into the research setting.
a. One-group pretest-posttest design
b. Pretest-posttest control group design
c. Posttest-only design with nonequivalent groups
d. Both b and c

10. Counterbalancing is ________.
    a. Usually based on random selection of participants
    b. Only used when one pretest variable needs to be controlled
    c. Chosen to control for such things as order and carryover effects*
    d. All of the above

11. The group that receives the experimental treatment condition is the _____.
a. Experimental group
b. Control group
c. Participant group
d. Independent group

12. Which of the following control techniques available to the researcher controls for both known and unknown variables?
a. Building the extraneous variable into the design
b. Matching
c. Random assignment
d. Analysis of covariance

13. The group that does not receive the experimental treatment condition is the _______.
a. Experimental group
b. Control group
c. Treatment group
d. Independent group

14. There are a number of ways in which confounding extraneous variables can be controlled. Which control technique is considered to be the best?
a. Random assignment
b. Matching
c. Counterbalancing
d. None of the above

15. Which of the following could be used for randomly assigning participants to groups in an experimental study?
a. Split-half (e.g., first half versus second half of a school directory)
b. Even versus odd numbers
c. Use a list of random numbers or a computer randomization program
d. Let the researcher decide which group will be the best
16. Which term is not related to counterbalancing?
   a. Carryover effect
   b. Order effect
   c. Sequencing effects
   d. Matching

17. A cell is a combination of two or more ____ in a factorial design.
   a. Research designs
   b. Research measurements
   c. Dependent variables
   d. Independent variables

18. Which of the following designs does an excellent job of controlling for rival hypotheses that threaten the internal validity of an experiment?
   a. Posttest-only design with nonequivalent groups
   b. Posttest-only control-group design
   c. Pretest-posttest control-group design
   d. Both b and c are excellent designs

19. Manipulating the independent variable by varying the type on the independent variable that is presented to the different comparison groups is known as ____.
   a. Amount technique
   b. Absence technique
   c. Type technique
   d. Presence technique

20. Which of the following terms is a sequencing effect that occurs from the order in which the treatment conditions are administered?
   a. Carry-over effect
   b. Order effect
   c. Sequencing effects
   d. None of the above

21. When manipulating the independent variable in an educational experiment, which of the following describes this method?
   a. An independent variable is manipulated using the presence or absence technique
   b. The researchers vary the amount of the independent variable that is administered
   c. The researcher varies the type of the independent variable
   d. All of the above are possible

22. Which method of controlling confounding extraneous variables takes precedence over all other methods?
   a. Matching individual participants
   b. Holding extraneous variables
   c. Building the extraneous variable into the research design
   d. Counterbalancing
   e. Randomly assign research participants to the groups

23. In an experimental research study, the primary goal is to isolate and identify the effect produced by the ____.
   a. Dependent variable
   b. Extraneous variable
   c. Independent variable
   d. Confounding variable
24. This type of design is one where all participants participate in all experimental treatment conditions.
   a. Factorial design
   b. Repeated measures design
   c. Replicated design
   d. Pretest-posttest control-group design

25. A factorial design is one in which ____.
   a. Only one independent variable is studied to determine its effect on the dependent variable
   b. Only two independent variables are simultaneously studied to determine their independent and interactive effects on the dependent variable
   c. Two or more independent variables are simultaneously studied to determine their independent and interactive effects on the dependent variable
   d. Two dependent variables are studied to determine their interactive effects

26. The design in which one group of research participants is administered a treatment and is then compared, on the dependent variable, with another group of research participants who did not receive the experimental treatment is ____.
   a. One-group posttest-only design
   b. One-group pretest-posttest design
   c. Posttest-only design with nonequivalent groups
   d. time series design

27. ____ refers to the influence of a single independent variable.
   a. Interaction effect
   b. Reactive effect
   c. Main effect
   d. Proactive effect

28. A sequencing effect that occurs when performance in one treatment condition is influenced by participation in a prior treatment condition is known as ____.
   a. Counterbalancing effect
   b. Carryover effect
   c. Treatment effect
   d. Order effect

29. Which of the following is possible in a factorial design with two independent variables?
   a. There is only one main effect present
   b. There are two main effects present
   c. There are two main effects and an interaction effect present
   d. All of the above are possible

30. Which of the following is a factorial design where different participants are randomly assigned to the levels of one independent variable but participants take all levels on another independent variable?
   a. One-group pretest-posttest
   b. Pretest-posttest control-group design
   c. Factorial design
   d. Factorial design based on a mixed model

Answers:
Chapter 10
Multiple Choice Questions
(The answers are provided after the last question.)

1. A researcher does a study examining the effects of a preschool program. He uses a nonequivalent comparison group design. He finds that the cognitive growth of his experimental group is greater than that of his control. Unfortunately, he later finds that in general children who live in the area where he drew his experimental group tend to grow faster cognitively than children who were from the area where he drew his control group. When he discovered this problem, he discovered what threat to the internal validity of his study?
   a. Selection-maturation effect
   b. History effect
   c. Selection-instrumentation effect
   d. Testing effect

2. For a treatment to be deemed effective when used in the context of an A-B-A single case design, what has to occur?
a. Behavior should change as the treatment is implemented
b. Behavior should return to baseline levels when the treatment is removed
c. When the treatment is removed, behavior should stay at the level that was created by the
treatment rather than revert back to the baseline
d. Both a and b

3. In a changing-criterion design, changes in criterion are best done:
a. As soon as the prior criterion is met
b. When the previous criterion is met and the behavior has stabilized
c. Regardless of the previous criteria
d. After a fixed number of trials

4. The non-equivalent comparison group design is a quasi-experimental design in which, for reasons of practicality, we cannot insure that the control and experimental groups are equivalent to each other when the experiment begins. The major interpretational difficulty imposed by this design is:
a. Measuring whether the two groups are different from each other on the posttest
b. Deciding how much each group has gained
c. Determining when enough data points are collected
d. Being sure that any differences between groups at the end of the experiment are due to the independent variable’s influence and not due to preexisting group differences

5. A treatment effect is demonstrated in the regression discontinuity design by:
a. A discontinuity in the regression line
b. A significant difference in the pretest and posttest scores
c. Analysis of covariance
d. The demonstration of an interaction

6. Which of the following is a primary threat to the interrupted time-series design?
a. History effect
b. Selection-history
c. Selection-maturation
d. All of the above

7. A design consisting of an experimental and a control group but participants are not randomly assigned to the groups is which of the following?
a. Interrupted time-series design
b. Nonequivalent comparison-group design
c. Single case design
d. A-B-A-B design

8. A form of the nonequivalent comparison-group design is recommended when ____.
a. It is not possible to control for a basic history effect
b. It is not possible to randomly assign participants to groups
c. It is not possible to identify two groups
d. All of the above

9. A threat to internal validity in the nonequivalent comparison-group design is the _____ effect.
a. Selection-maturation effect
b. Selection-history effect
c. Selection-regression

d. All of the above are threats

10. A threat to internal validity in the nonequivalent comparison-group design is the _____ effect.
   a. Maturation effect
   b. Selection-history effect
   c. Failure to revert to baseline
   d. All of the above

11. How many variables should be changed at a time when conducting a single-case design?
   A. 4
   B. 3
   C. 2
   D. 1

12. In quasi-experimental research designs, causal interpretations can be made _________.
   a. Only when rival explanations have been shown to be plausible
   b. Only when rival explanations have been shown to be implausible
   c. Only when the participants have been randomly selected
   d. Only when there is a single participant in the experiment

13. In single-case research, “baseline” refers to ________.
   a. The beginning point of the treatment condition
   b. The end point of the treatment condition
   c. The rate of response established prior to the experimental intervention
   d. The time during which a treatment condition is administered

14. Which type of design can be used when the goal is to create a step-by-step increase (or decrease) in the amount, accuracy, or frequency of some behavior over a period of time?
   a. Nonequivalent comparison-group design
   b. A-B-A-B
   c. Changing-criterion design
   d. A-B design

15. Which of the following occurs in a comparison group design when one of the two groups of participants grows or naturally develops faster than the other group?
   a. Main effect
   b. Sequencing effect
   c. Order effect
   d. Selection-maturation effect

16. An observation of a dependent variable response prior to any attempt to change this response is known as the _________.
   a. Flat line
   b. Baseline
   c. Variance
   d. Reverse

17. The most frequently used quasi-experimental design is the ________ design.
   a. Nonequivalent comparison-group
b. Interrupted time-series
c. Changing-criterion
d. Regression discontinuity

18. A baseline ___________.
a. Is used as the standard against which change induced by the treatment is assessed
b. Is the occurrence of a response in its freely occurring or natural state
c. Is first obtained prior to the administration of a treatment
d. All of the above are true

19. A single-case experimental design in which the response to a treatment is compared to baseline occurring before and after the treatment is called what?
a. A-B-A design
b. Single-case design
c. Multiple-baseline
d. Changing-criterion

20. In a single-case design, you hope that the behavior of the participants prior to the administration of a treatment condition is _______.
a. Not highly variable
b. Highly variable
c. Moving at a steep rate of change
d. None of the above

21. The ___________ design rules out history by demonstrating that the dependent variable response reverts back to the baseline when the treatment is withdrawn.
a. Changing-criterion design
b. A-B
c. A-B-A design
d. Interrupted time-series design

22. Which design would use analysis of covariance during data analysis?
a. Nonequivalent comparison-group design
b. Interrupted time-series design
c. Changing criterion design
d. A-B-A-B design

23. The interrupted time-series design can also be viewed as a(n):
a. A-B design
b. A-B-A design
c. A-B-A-B design
d. Control-group design

24. Why is it important to change one variable at a time in single case designs?
a. Changing one variable allows isolation of the cause of the change
b. Changing more than one variable at a time confounds those independent variables
c. Both a and b are true
d. None of the above

25. What is the difference between A-B-A design and A-B-A-B design?
a. Both designs end on the treatment condition
b. Neither design ends on a treatment condition
c. Baseline conditions are only established in the A-B-A-B design
d. A-B-A-B allows the reintroduction of the treatment condition during the last phase
26. Which of the following is not a phase in the A-B-A design?
a. Baseline measurement
b. Introduction of treatment
c. Introduction of a second treatment
d. Removal of treatment

27. Researchers can attempt to eliminate the threat of bias from the selection-maturation effect in the nonequivalent comparison-group design by matching experimental and control participants on important variables.
   a. True
   b. False

28. Group comparison designs are always superior to single-case designs.
   a. True
   b. False

Answers:
1. a
2. d
3. b
4. d
5. a
6. a
7. b
8. b
9. d
10. b
11. d
12. b
13. c
14. c
15. d
16. b
17. a
18. d
19. a
20. a
21. c
22. a
23. a
24. c
25. d
26. c
27. a
28. b

Chapter 11
Multiple Choice Questions
(The answers are provided after the last question.)
1. The number of police officers and the number of crimes are positively related. This relationship is:
   a. A causal relationship
   b. A direct relationship
   c. A probabilistic causal relation
   d. A spurious relationship

2. A research studies the relation between early reading and later school achievement. She decides that a potentially extraneous variable in the relationship is IQ. In developing her groups for her study, she pairs each child who was an early reader with a child of the same IQ level who was not an early reader. The control technique she used was:
   a. Holding the extraneous variable constant
   b. Statistical control
   c. Matching
   d. Random assignment

3. Partial correlation analysis involves:
   a. Examining the relationship between two or more variables controlling for additional variables statistically
   b. Including only one group in a correlational analysis
   c. Matching participants on potential confounding variables
   d. Limiting the sample to individuals at a constant level of an extraneous variable

4. The directors of a graduate program in educational research wish to see what types of jobs their graduates take after they finish their program. They randomly sample students from the program and have them fill out questionnaires with items asking about the types of jobs they have had. They also are asked to describe the roles they play in their current positions. This project is best described as having what kind of objective:
   a. Descriptive
   b. Predictive
   c. Explanatory

5. When research is done to test hypotheses and theories about how and why phenomena operate as they do, then the primary purpose of such research is:
   a. Descriptive
   b. Predictive
   c. Explanatory

6. The variable the researcher matches to eliminate it as an alternative explanation is called a(n) ______ variable.
   a. Matching
   b. Independent
   c. Dependent
   d. Partial

7. Which of the following is not a longitudinal design?
   a. Panel
   b. Cross-sectional
   c. Trend
   d. Both a and c are longitudinal designs
8. The positive correlation between teachers’ salaries and the price of liquor is
   ______.
   a. Spurious
   b. Due to a third-variable
   c. Nonspurious
   d. Both a and b

9. Which of the following is considered a special case of the general linear model?
   a. A variable
   b. Partial correlation
   c. Analysis of covariance
   d. Both b and c

10. When a researcher starts with the dependent variable and moves backwards, it is
called ______.
   a. Predictive research
   b. Retrospective research
   c. Exploratory research
   d. Descriptive research

11. The method of working multiple hypotheses refers to a technique for identifying
rival explanations.
   a. True
   b. False

12. GLM refers to which of the following?
   a. General Logit Model
   b. General Limited Model
   c. General Lab Model
   d. General Linear Model

13. The post hoc fallacy is ____.
   a. Making the argument that because A preceded B, A must have caused B
   b. Making the argument that because A preceded B, A and B must be correlated
   c. Making the argument that because A preceded B, they cannot be correlated
   d. None of the above

14. Which one of the following is not a step in nonexperimental research?
   a. Determine research problem and hypotheses
   b. Analyze data
   c. Interpret results
   d. All are steps

15. If a research finding is statistically significant, then ____.
   a. The observed result is probably not due to chance
   b. The observed result cannot possibly be due to chance
   c. The observed result is probably a chance result
   d. The null hypothesis of “no relationship” is probably true

16. Which of the following is/are necessary condition(s) for causation?
   a. The relationship condition
   b. The temporal antecedence condition
c. The lack of alternative explanation condition
d. All of the above

17. Which of the following independent variables cannot be manipulated in a research study?
a. Gender
b. Ethnicity
c. Intelligence and other traits
d. None of ht above can be manipulated in a research study

18. ________ is a form of explanatory research in which the researcher develops a theoretical model and empirically tests the model to determine how well the model fits the data.
a. Causal modeling
b. Predictive research
c. Descriptive research
d. Exploratory research

19. Nonexperimental research in which the primary independent variable of interest is categorical is sometimes called__________.
a. Causal-comparative research
b. Correlational research

20. Which approach is the strongest for establishing that a relationship is causal?
a. Causal-comparative
b. Correlational
c. Experimental
d. Historical

21. Which approach is the strongest for establishing that a relationship is causal?
a. Causal-comparative
b. Correlational
c. One CANNOT say without additional information (i.e., it could be either depending on how well the researcher established the three necessary conditions for cause and effect)

22. ________ is the most commonly used technique for controlling for extraneous variables in nonexperimental research.
a. Matching
b. Holding extraneous variables constant
c. Statistical control
d. Static control

23. It is best to use the method of working multiple hypotheses when _____.
a. You are finished with your research
b. You are planning your research study
c. You are hoping to publish your already obtained research results
d. None of the above

24. Matching can be done when your independent variable is categorical or quantitative.
a. True
25. If a correlation coefficient is .96, we would probably be able to say that the relationship is ____.
   a. Weak
   b. Strong
   c. Statistically significant
   d. b is true and c is probably true

26. What happens in a completely spurious relationship once the researcher controls for a confounding third-variable?
   a. The relationship between the original variables will get stronger
   b. The relationship between the original variables will remain unchanged
   c. The correlation coefficient will get closer to 1.0
   d. The relationship between the original variables will get weaker or, if the original relationship is fully spurious, it will disappear (i.e., the original relationship will become zero as measured by a correlation coefficient)

27. Which of the three necessary conditions for cause and effect is almost always problematic in nonexperimental research?
   a. Condition 1: Variable A and Variable B must be related (the relationship condition).
   b. Condition 2: Proper time order must be established (the temporal antecedence condition).
   c. Condition 3: The relationship between variable A and Variable B must not be due to some confounding extraneous variable
   d. Nonexperimental research is always weak on all three of the conditions

28. Which of the following is NOT a form of longitudinal research?
   a. Trend study
   b. Panel study
   c. Cross-sectional study

29. Observing a relationship between two variables is NOT sufficient grounds for concluding that the relationship is a causal relationship.
   a. True
   b. False

30. This type of longitudinal research studies the same individuals over an extended period of time.
   a. Trend study
   b. Panel study
   c. Both a and b
   d. Neither a nor b

31. This type of research tests hypotheses and theories in order to explain how and why a phenomenon operates as it does.
   a. Descriptive research
   b. Predictive research
   c. Explanatory research
   d. None of the above
32. The Pearson product moment correlation measures the degree of _______ relationship present between two variables.
   a. Curvilinear
   b. Nonlinear
   c. Linear and quadratic
   d. Linear

Answers:
1. d
2. c
3. a
4. a
5. c
6. a
7. d
8. d
9. d
10. b
11. a
12. d
13. a
14. d
15. a
16. d
17. d
18. a
19. a
20. c
21. c
22. c
23. b
24. a
25. d
26. d
27. c
28. c
29. a
30. b
31. c
32. d

Chapter 12
Multiple Choice Questions
(The answers are provided after the last question.)

1. Which of the following is characteristic of qualitative research?
   a. Generalization to the population
   b. Random sampling
c. Unique case orientation  
d. Standardized tests and measures

2. Phenomenology has its disciplinary origins in:  
a. Philosophy  
b. Anthropology  
c. Sociology  
d. Many disciplines

3. The primary data analysis approach in ethnography is:  
a. Open, axial, and selective coding  
b. Holistic description and search for cultural themes  
c. Cross-case analysis  
d. Identifying essences of a phenomenon

4. The term used to describe suspending preconceptions and learned feelings about a phenomenon is called:  
a. Axial coding  
b. Design flexibility  
c. Bracketing  
d. Ethnography

5. A researcher studies how students who flunk out of high school experienced high school. She found that it was common for such students to report that they felt like they had little control of their destiny. Her report that this lack of control was an invariant part of the students' experiences suggests that lack of control is _____ of the “flunking out” experience.  
a. A narrative  
b. A grounded theory  
c. An essence  
d. A probabilistic cause

6. The specific cultural conventions or statements that people who share a culture hold to be true or false are called ____.  
a. Shared attitudes  
b. Shared beliefs  
c. Shared values  
d. Norms

7. The written and unwritten rules that specify appropriate group behavior are called ____.  
a. Shared attitudes  
b. Shared beliefs  
c. Shared values  
d. Norms

8. Which of the following is not an advantage of studying multiple cases?  
a. Multiple cases can be compared for similarities and differences  
b. Multiple cases can more effectively test a theory than a single case  
c. Generalizations about population are usually better when based on multiple cases.  
d. Cost is lower and depth of analysis is easier when you study multiple cases in a single research study

9. _____ are the standards of a culture about what is good or bad or desirable or
undesirable.
  a. Shared attitudes
  b. Shared beliefs
  c. Shared values
  d. Norms

10. ________ is the study of human consciousness and individuals' experience of some phenomenon.
   a. Phenomenology
   b. Ethnography
   c. Grounded theory
   d. Case study research

11. Which of the following is a characteristic of qualitative research?
   a. Design flexibility
   b. Inductive analysis
   c. Context sensitivity
   d. All of the above

12. ________ is a general methodology for developing theory that is based on data systematically gathered and analyzed.
   a. Theory confirmation
   b. Grounded theory
   c. Theory deduction
   d. All of the above

13. The final stage in grounded theory data analysis is called ________.
   a. Axial coding
   b. Theoretical saturation
   c. Constant comparative method
   d. Selective coding

14. Which major characteristic of qualitative research refers to studying real world situations as they unfold naturally?
   a. Holistic perspective
   b. Naturalistic inquiry
   c. Dynamic systems
   d. Inductive analysis

15. In which qualitative research approach is the primary goal to gain access to individuals' inner worlds of experience?
   a. Phenomenology
   b. Ethnography
   c. Grounded theory
   d. Case study

16. The type of qualitative research that describes the culture of a group of people is called ____.
   a. Phenomenology
   b. Grounded theory
   c. Ethnography
   d. Case study

17. The grounded theorist is finished analyzing data when theoretical saturation occurs.
18. In which of the following case study designs does the researcher focus her primary interest on understanding something more general than the particular case?
   a. Intrinsic case study
   b. Instrumental case study
   c. Collective case study
   d. It could be b or c

19. Which of the following phrases best describes "ethnocentrism"?
   a. Special words or terms used by the people in a group
   b. An external, social scientific view of reality
   c. The study of the cultural past of a group of people
   d. Judging people from a different culture according to the standards of your own culture

20. Which of the following is usually not a characteristic of qualitative research?
   a. Design flexibility
   b. Dynamic systems
   c. Naturalistic inquiry
   d. Deductive design

21. Which of the following involves the studying of multiple cases in one research study?
   a. Intrinsic case study
   b. Single case study
   c. Instrumental case study
   d. Collective case study

22. Which of the following does not apply to qualitative research?
   a. Data are often words and pictures
   b. Uses the inductive scientific method
   c. Ends with a statistical report
   d. Involves direct and personal contact with participants

23. The difference between ethnographic research and other types of qualitative research is that ethnographers specifically use the concept of “culture” to help understand the results.
   a. True
   b. False

24. What term refers to the insider's perspective?
   A. Ethnocentrism
   B. Emic perspective
   C. Etic perspective
   D. Holism

25. In data analysis of the grounded theory approach, the step which focuses on the main idea, developing the story line, and finalizing the theory is called ________.
   a. Open coding
   b. Axial coding
   c. Selective coding
   d. Theoretical saturation
26. Which of the following is not one of the 4 major approaches to qualitative research.
   a. Ethnography
   b. Phenomenology
   c. Case study
   d. Grounded theory
   e. Nonexperimental

27. In "phenomenology," a well written report will be highly descriptive of the participants’ experiences and will often elicit in the reader a feeling that they feel as though they are experiencing the phenomenon themselves. This experience is called
   a. A phenomenal experience
   b. A vicarious experience
   c. A significant experience
   d. A dream

28. You want to study a Native American group in New Mexico for a six month period to learn all you can about them so you can write a book about that particular tribe. You want the book to be accurate and authentic as well as informative and inspiring. What type of research will you likely be conducting when you get to New Mexico?
   a. Ethnography
   b. Phenomenology
   c. Grounded theory
   d. Collective case study

29. The emic perspective refers to an external, social scientific view of reality.
   a. True
   b. False

30. ________ is used to describe cultural scenes or the cultural characteristics of a group of people.
   a. Phenomenology
   b. Ethnography
   c. Grounded theory
   d. Instrumental case study

31. Terms such as “geeks,” “book worms,” “preps,” are known as _____ terms.
   a. Emic
   b. Etic

32. When a researcher identifies so completely with the group being studied that he or she can no longer remain objective you have what is called ________.
   a. Culture shock
   b. Going native
   c. Regression
   d. Cultural relativism

Answers:
1. c
2. a
3. b
4. c
History Of Learning Theories

e Perspective Division of Learning Theory Variables of Concern Key Theorists Main Theories
Behaviorist Classical Conditioning Stimulus Response Pavlov 1849-1936 Classical Conditioning
Behaviorist Behaviorism Stimulus Response Watson 1878-1958
Thorndike 1874-1949
Guthrie 1886-1959
Skinner 1904-1990
Estes 1919 - Behaviorism
Connectionism
Contiguity Theory
Operant Conditioning
Stimulus Sampling Theory
Behaviorist Neobehaviorism Stimulus-Response
Intervening internal variables-
Purposive behavior Tolman 1886-1959
Hull 1884-1952
Spence 1907-1967 Sign-Theory&Latent-Learning
Drive Reduction Theory
Discrimination Learning
Cognitive Gestalt Learning Theory Perception
Decision making
Attention
Memory
Problem solving Wertheimer 1880-1943
Lewin 1890-1947
Kohler 1887 - 1967
Koffka 1887 - 1941
Festinger 1919-1989 Gestalt Learning Theory
Field Theoretical Approach
Insight Learning
Gestalt Theory
Cognitive Dissonance
Cognitive Information Processing Information Processing
Computer models Hebb 1904 - 1985
Miller Newell 1927 - 1992
Craik & Lockhart Paivio Rumelhart Neurophysiologic Theory
Information-Processing-Theory
General Problem Solver
Levels of Processing
Dual Coding Theory
Interactive Activation Compet.
Cognitive Constructivism Knowledge construction
Learner as active creator Ausubel 1918 -
Bruner 1915 -
Piaget (1896-1990)
Lave
Argyris
Spiro
Flavell
Schank Subsumption Theory
Constructivism
Genetic Epistemology
Situated Cognition
Double Loop Learning
Cognitive Flexibility Theory
Metacognition
Script Theory
Cognitive Psychoanalytic
Learning Theory Unconscious processes Freud 1856-1939
Psychoanalytic Learning
Humanist Humanistic Learning Emotional factors
and Affect Maslow 1908-1970
Rogers 1902-1987
Mezirow Humanistic Theory of Learning
Experiential Learning
Transformational Learning
Social Social Learning Interactions with
other Participants Vygotsky
Bandura
Brown Social Constructivism
Observational Learning Theory
Cognitive Apprenticeship...

General Theories
of Memory and
Intelligence

Anderson 1947 -
Guilford
Gardner
Sternberg ACT*

Multiple Intelligences

Triarchic Theory

Instructional Theories-
Applications of learning
type for classroom

and instructional use Pedagogy and theories

of Adult Learning Bransford

Cronbach
Cros
Gagne 1916-2002

Knowles
Landa
Mager
Merrill

Reigeluth Anchored Instruction

Aptitude Treatment Interaction
CAL-Char. of Adult Learners

Conditions of Learning

Andragogy
Algo-Heuristic
Criterion-Referenced-Instruction

Component Display Theory

Elaboration Theory

Cognitive

Affective

Psychomotor

knowledge

attitude

skills

1. Recall data
1. Receive (awareness)
1. Imitation (copy)
2. Understand
2. Respond (react)
2. Manipulation (follow instructions)
3. Apply (use)
3. Value (understand and act)
3. Develop Precision
4. Analyse (structure/elements)
4. Organise personal value system
4. Articulation (combine, integrate related skills)
5. Synthesize (create/build)
5. Internalize value system (adopt behaviour)
5. Naturalization (automate, become expert)
6. Evaluate (assess, judge in relational terms)