

Chapter 02: Research Methods in Psychology

Multiple choice

1. Which of the following is most debatable as a true science?
- a) chemistry
 - b) physics
 - c) psychology
 - d) biology

Ans: c

Section Ref: The Scientific Method

Learning Objective: Demonstrate a good understanding of what makes psychological research 'scientific'.

Difficulty: Easy

True/False

2. Psychology, like other sciences, relies on the scientific method.

Ans: True

Section Ref: The Scientific Method

Learning Objective: Demonstrate a good understanding of what makes psychological research 'scientific'.

Difficulty: Easy

Fill-in-the-blank

3. Psychology research involves the collection of both _____ measurements and _____ descriptions of behaviour.

Ans: quantitative; qualitative

Section Ref: The Scientific Method

Learning Objective: Demonstrate a good understanding of what makes psychological research 'scientific'.

Difficulty: Medium

Short Answer

4. What is the meaning of the expression '*nullius in verba*', the motto of the Royal Society of London?

Ans: take nobody's word for it

Section Ref: The Scientific Method

Learning Objective: Demonstrate a good understanding of what makes psychological research 'scientific'.

Difficulty: Hard

Essay

5. Provide an example of scientific question and describe how it can be addressed scientifically.

Ans: Research question must address something tangible (it allows for the collection of empirical data). Concepts/variables/phenomena must be defined precisely. A congruent method of data collection must be proposed (e.g. questionnaires, experiment, interview).

Section Ref: The Scientific Method

Learning Objective: Demonstrate a good understanding of what makes psychological research 'scientific'.

Difficulty: Hard

Multiple Choice

6. According to your textbook, which of the following sequences CORRECTLY represents the stages in the process of conducting psychological research?

- a) Think of a testable question – design the study – data collection – choose a method – data analysis – dissemination of findings
- b) Think of a testable question – choose a method – design the study – data collection – data analysis – dissemination of findings
- c) Choose a method – think of a testable question – design the study – data collection – data analysis – dissemination of findings
- d) Choose a method – design the study – think of a testable question – data collection – data analysis – dissemination of findings

Ans: b

Section Ref: The Scientific Method

Learning Objective: Demonstrate a good understanding of what makes psychological research 'scientific'.

Difficulty: Medium

True/False

7. Decision based on intuition and anecdote must be avoided in psychology research practice as they are non-scientific approaches.

Ans: True

Section Ref: The Scientific Method

Learning Objective: Demonstrate a good understanding of what makes psychological research 'scientific'.

Difficulty: Easy

8. Looking for the prevalence of good people in the world is an example of non-scientific question.

Ans: True

Section Ref: The Scientific Method

Learning Objective: Demonstrate a good understanding of what makes psychological research 'scientific'.

Difficulty: Easy

Fill-in-the-blank

9. Ideas that psychologists develop about the laws that govern processes and behaviour are called _____.

Ans: theories

Section Ref: The Scientific Method

Learning Objective: Demonstrate a good understanding of what makes psychological research 'scientific'.

Difficulty: Medium

Essay

10. Define the term "hypothesis" and provide an example.

Ans: A hypothesis is a testable prediction that can objectively be proven false. Hypotheses are typically generated from a theory; applicable example must be provided.

Section Ref: The Scientific Method

Learning Objective: Demonstrate a good understanding of what makes psychological research 'scientific'.

Difficulty: Medium

Multiple Choice

11. A hypothesis is best defined as a(n):

- a) broad, general explanation of the phenomenon of interest
- b) specific prediction concerning the relationship between variables
- c) specification of a variable in terms of the procedures that will be used to measure it
- d) behaviour, event, or other characteristic that can assume different values

Ans: b

Section Ref: The Scientific Method

Learning Objective: Demonstrate a good understanding of what makes psychological research 'scientific'.

Difficulty: Medium

12. Observations of behaviours or any other events must be objectively testable. Which of the following does not meet this criterion?

- a) Pounds spent in a department store
- b) Number of students in a school
- c) Frequency of reported car accidents
- d) Number of caring people in the world

Ans: d

Section Ref: The Scientific Method

Learning Objective: Demonstrate a good understanding of what makes psychological research 'scientific'.

Difficulty: Easy

13. A given field of study is defined as a science by virtue of its:

- a) methods
- b) equipment
- c) subject matter
- d) findings

Ans: a

Section Ref: The Scientific Method

Learning Objective: Demonstrate a good understanding of what makes psychological research 'scientific'.

Difficulty: Medium

14. "Psychology is not a science," Adam argues. Which of the following is the BEST argument opposing this claim?

- a) Psychology is a science because it uses sophisticated technology in its research.
- b) Psychology is a science because some of its early contributors were physiologists.
- c) Psychology is a science because of the methods it uses.
- d) Psychology is a science because it studies the brain and the rest of the nervous system.

Ans: c

Section Ref: The Scientific Method

Learning Objective: Demonstrate a good understanding of what makes psychological research 'scientific'.

Difficulty: Medium

15. Dr Young is a meteorologist. Dr Bianchini is a psychologist. With which of the following statements would they most likely agree?

- a) Like the weather, human behaviour is inherently unpredictable.
- b) The weather is predictable. Human behaviour is not.
- c) While the weather is unpredictable, human behaviour is predictable.
- d) Both the weather and human behaviour are ultimately predictable.

Ans: d

Section Ref: The Scientific Method

Learning Objective: Demonstrate a good understanding of what makes psychological research 'scientific'.

Difficulty: Hard

16. A statement about the putative relationship between two variables is termed a(n) _____.

- a) anecdote
- b) law
- c) theory
- d) hypothesis

Ans: d

Section Ref: The Scientific Method

Learning Objective: Demonstrate a good understanding of what makes psychological research 'scientific'.

Difficulty: Hard

17. Which of the following is not a stage of the scientific research method?

- a) Comparing personal intuitions with observed data
- b) Obtaining ethical clearance
- c) Disseminating findings
- d) Design the study

Ans: a

Section Ref: The Scientific Method

Learning Objective: Demonstrate a good understanding of what makes psychological research 'scientific'.

Difficulty: Medium

18. Dr Foster wants to measure how the level of anxiety pre-exam influences exam performance in a sample of 134 university students. Dr Foster will likely conduct her research using:

- a) anecdotes
- b) quantitative measurements
- c) qualitative descriptions
- d) common sense

Ans: b

Section Ref: The Scientific Method

Learning Objective: Demonstrate a good understanding of what makes psychological research 'scientific'.

Difficulty: Medium

Short Answer

19. Provide an example of quantitative measurement.

Ans: any quantifiable object.

Section Ref: The Scientific Method

Learning Objective: Demonstrate a good understanding of what makes psychological research 'scientific'.

Difficulty: Easy

Multiple choice

20. Recall the levels of analysis described in Ch. 1 of your text. If you were sympathetic to the notion that psychology should limit itself to clearly observable phenomena, on which level of

analysis might you concentrate?

- a) the biological level
- b) the psychological level
- c) the environmental level
- d) all of the above

Ans: a

Section Ref: The Scientific Method

Learning Objective: Demonstrate a good understanding of what makes psychological research 'scientific'.

Difficulty: Easy

21. You are writing a history of psychology book, focusing on the major themes and perspectives that have dominated the field over the past 150 years. Which phrase below offers the most fitting completion to the partial title, *The Story of Psychology*: _____?

- a) *Observing the Unobservable*
- b) *Predicting the Unpredictable*
- c) *Explaining the Inexplicable*
- d) *Controlling the Uncontrollable*

Ans: a

Section Ref: The Scientific Method

Learning Objective: Demonstrate a good understanding of what makes psychological research 'scientific'.

Difficulty: Hard

22. Why is psychology so often misrepresented and misapplied?

- a) It is highly relevant to people's lives and people think it's simply common sense.
- b) It has made little real progress in understanding thought and behaviour.
- c) It focuses on unobservable phenomena.
- d) As a discipline, it has been hijacked by pseudopsychologists.

Ans: a

Section Ref: The Scientific Method

Learning Objective: Demonstrate a good understanding of what makes psychological research 'scientific'.

Difficulty: Medium

True/False

23. To be approved on a reliable scientific journal a study needs to go through a process of peer review.

Ans: True

Section Ref: The Dissemination of Scientific Ideas

Learning Objective: Describe the methods by which scientific findings and research can be disseminated.

Difficulty: Easy

Fill-in-the-blank

24. _____ is the process of evaluation of the soundness and quality of study carried out by a group of experts in the field. Only after this process a study can be published and its findings shared.

Ans: Peer review

Section Ref: The Dissemination of Scientific Ideas

Learning Objective: Describe the methods by which scientific findings and research can be disseminated.

Difficulty: Medium

Short Answer

25. List at least four ways thorough which scientific knowledge can be disseminated.

Ans: E.g. conferences, scientific journals, textbooks, media.

Section Ref: The Dissemination of Scientific Ideas

Learning Objective: Describe the methods by which scientific findings and research can be disseminated.

Difficulty: Medium

Essay

26. Describe the stages necessary for a study to be published on a scientific journal.

Ans: submission; peer review; reviewers' decision (accepted, with revisions, rejected); editor's decision; revision; publication.

Section Ref: The Dissemination of Scientific Ideas

Learning Objective: Describe the methods by which scientific findings and research can be disseminated.

Difficulty: Medium

Multiple Choice

27. What are the possible outcomes of a peer review?

- a) Accept, revise, reject
- b) Accept, reassess, reject
- c) Accept, reread, reject
- d) Accept, review, reject

Ans: a

Section Ref: The Dissemination of Scientific Ideas

Learning Objective: Describe the methods by which scientific findings and research can be disseminated.

Difficulty: Medium

True/False

28. A paper that has been published on a renowned journal is a sufficient proof that the study is flawless.

Ans: False

Section Ref: The Dissemination of Scientific Ideas

Learning Objective: Describe the methods by which scientific findings and research can be disseminated.

Difficulty: Medium

Fill-in-the-blank

29. It's always important to read a paper with a _____ mindset. In fact, even published papers can contain weaknesses and inaccuracies.

Ans: sceptical

Section Ref: The Dissemination of Scientific Ideas

Learning Objective: Describe the methods by which scientific findings and research can be disseminated.

Difficulty: Medium

Short Answer

30. Why it's always advised to read published papers with a sceptical mindset?

Ans: Because they can still contain weaknesses, errors or inaccuracies. Peer review is an imperfect process.

Section Ref: The Dissemination of Scientific Ideas

Learning Objective: Describe the methods by which scientific findings and research can be disseminated.

Difficulty: Medium

31. Why aren't media a reliable source of scientific information?

Ans: because they are prone to distortion and inaccuracies.

Section Ref: The Dissemination of Scientific Ideas

Learning Objective: Describe the methods by which scientific findings and research can be disseminated.

Difficulty: Easy

Multiple Choice

32. Observational methods allow to collect:

- a) anecdotes
- b) interviews
- c) numerical data
- d) qualitative descriptions

Ans: c

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Medium

33. What are the three key attributes for a good research?

- a) Reliability, interpretability, applicability
- b) Reliability, falsifiability, importance
- c) Interpretability, validity, applicability
- d) Reliability, validity, importance

Ans: d

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Medium

Fill-in-the-blank

34. The three attributes to consider for a good research are _____.

Ans: reliability, validity and importance.

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Medium

Short Answer

35. Which example of reliability without validity is reported in your textbook?

Ans: Methods of phrenology

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Hard

Essay

36. Discuss why phrenology is an example of discipline whose methods are now considered as highly reliable but surely not valid.

Ans: measurements were replicated over time, but they didn't measure what they sought to measure – there is not relationship between skull's shape/configuration and brain functions.

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Hard

True/False

37. It's difficult to know whether findings in psychology are replicable because for most of the scientific journals direct replications of existing studies are not as interesting as new research.

Ans: True

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Easy

38. Which of the following factors does not influence reliability?

- a) sample size
- b) stability
- c) timescale
- d) systematic error

Ans: d

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Hard

Essay

39. What is referred to as the 'file-drawer problem' in scientific research?

Ans: only novel findings are reported and non-replications are put aside, causing the novel findings to exist largely unchallenged.

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Hard

Multiple choice

40. With respect to the factors that influence reliability, which of the following statements is CORRECT?

- a) A measure of trait anxiety is less reliable than a measure of state anxiety
- b) A measure of state anxiety is less reliable than a measure of trait anxiety

- c) A measure of state anxiety is highly reliable because it measures the anxious nature of people
- d) A measure of trait anxiety is not very reliable because it provides a measure of anxiety in a particular situation.

Ans: b

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Medium

41. Which of the following is the most reliable measure?

- a) A scale assessing post-surgery depression
- b) A scale assessing anxiety levels after witnessing a violent crime
- c) A scale assessing extroversion in young adults
- d) A scale assessing language skills immediately after a traumatic brain injury

Ans: c

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Medium

42. With respect to the factors that influence reliability, which of the following statements is INCORRECT?

- a) Larger samples may help improving reliability as they provide a better estimate of the characteristics of the general population.
- b) A researcher must always take into account the influence of extraneous factors.
- c) For a measure to be reliable it's better if the phenomenon being measured changes over time.
- d) Longer time-intervals between two consecutive measurements increase the risk of extraneous factors influencing the data.

Ans: c

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Medium

Essay

43. A political scientist wanted to study the prevalence of racism in the United States.

Unknowingly, her sample included a disproportionate number of racist individuals. Name a methodological criticism of her research?

Ans: Sampling bias occurred. Individuals in the sample were more likely to confirm her hypothesis which decreases the validity of her findings.

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Hard

44. Why is it important to draw a random sample when trying to predict the outcome of a political election?

Ans: Random sampling is the only true way of ensuring that a sample is representative of a population. Non-random samples are biased. Sampling bias can create a sample that is not closely representative of the population.

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Hard

True/False

45. To maintain the validity of the study, researchers must actively avoid exposure to sources of biases that may influence their data collection.

Ans: True

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Easy

46. Sampling bias creates a nonrepresentative sample.

Ans: True

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Medium

Short answer

47. Describe what replication means?

Ans: Replication means that the findings of a study are the same or very similar to those of previous studies performed on the same topic.

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Medium

Essay

48. Why is experimental replication necessary?

Ans: Replication ensures that experimental methodology is being used effectively and that findings are consistent across a variety of locations and time periods.

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Hard

Multiple choice

49. Redoing and expanding on a study to see if its results hold up in different conditions with new samples is termed _____.

- a) reproduction
- b) replication
- c) repetition
- d) restoration

Ans: b

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Easy

50. Split-half reliability consists of:

- a) Including only half of the scores randomly selected

- b) A common issue of reliability associated with most questionnaires
- c) An index of insufficient reliability for a certain measure
- d) Calculating two separate scores using even-numbered and odd-numbered items to measure reliability

Ans: d

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Medium

51. Dr Forster created a new questionnaire to measure customers' satisfaction towards a brand-new technological product. He is running some further analyses to make sure that his questionnaire is truly measuring what is intended. What is Dr Forster assessing?

- a) Construct validity
- b) Criterion validity
- c) Internal validity
- d) Ecological validity

Ans: c

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Medium

True/False

52. Ecological validity is also referred to as external validity.

Ans: True

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Easy

Fill-in-the-blank

53. If a measure has _____ criterion validity, it should correlate with other measures of the same attribute over time.

Ans: predictive

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Medium

54. An experiment with poor _____ validity will likely produce results which are not generalizable to real-life situations.

Ans: ecological/external

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Medium

Short answer

55. What is the weakest form of validity assessment? Why?

Ans: Face validity. Because it's subjective.

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Hard

56. Dr Murphy's latest experiment has high reliability but very poor ecological validity. What does it mean?

Ans: Results are reproducible but cannot be generalized to real-life situations.

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Medium

57. In 1977, the developmental psychologist Urie Bronfenbrenner famously pointed out that much of the developmental psychology of the time was "the science of the strange behaviour of children in strange situations with strange adults for the briefest possible periods of time". Which common problem of psychological research was Bronfenbrenner referring to?

Ans: the problem of the non-generalizability of results obtained from laboratory-based experiments.

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Hard

True/False

58. Observational methods can only be used by quantitative research.

Ans: False

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Medium

59. Time-sampling technique is used in observational research and consists of sampling participants at given time intervals.

Ans: False

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Easy

Multiple choice

60. Which of the following statements regarding observational methods is INACCUARTE?

- a) Observational methods are recommended if one wants to study the causal relationship between two variables.
- b) Observational methods are non-intrusive.
- c) Observational methods are good as 'exploratory' methods to generate new research questions.
- d) Observational methods can be used to observe both animal' and human's behaviour.

Ans: a

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Medium

61. Observer bias is a risk when employing observational methods. Which of the following practices is used to address this potential issue?

- a) Split-half reliability
- b) Time-sampling
- c) Cross-check
- d) Interobserver agreement

Ans: d

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Medium

62. “The process of observation is a challenging one for psychology, given its subject matter” offers John. “That’s why psychology should investigate only phenomena which are clearly observable,” Grady responds. “But psychologists can use observable behaviour to make reliable statements about internal processes that can’t be seen,” counters Holly. “Not to mention, technology continues to expand the range of psychological processes we can actually observe,” Indira notes. Which of these discussants is paired with the psychological perspective they most clearly reflect?

- a) Grady – psychodynamic perspective
- b) Holly – behaviourist perspective
- c) Indira – biological perspective
- d) Grady – cognitive perspective

Ans: c

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Hard

63. Karen is a primatologist interested in studying the grooming behaviour of baboon troops. To remain unobtrusive, she sat in a tree to watch the animals and counted the number of instances of grooming behaviour she observed. What research method did Karen use?

- a) observational
- b) longitudinal
- c) survey
- d) experiment

Ans: a

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Medium

64. Dr Yu is recording the number of violent scenes appearing in a random sample of 50 movies from 1970 to 1979. What type of methodology is Dr Yu using?

- a) observational quantitative
- b) observational qualitative
- c) predictive
- d) experimental

Ans: a

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Medium

Short answer

65. Describe a limitation associated with the use of observational methodology.

Ans: One of the following - they can be time-consuming; it's difficult to establish cause-and-effect relationships; it's prone to observer bias.

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Medium

True/False

66. Researcher bias is not an issue when observational methods are used.

Ans: False

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Easy

Multiple choice

67. Observational methods entail:

- a) manipulating more variables to study the effect on a variable of interest
- b) examining existing records, such as census documents
- c) asking a sample of individuals a set of questions
- d) examining behaviour in the setting in which it typically occurs

Ans: d

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Medium

68. DeAndre is recording instances of physical aggression among children in a schoolyard at recess. DeAndre is undertaking:

- a) observational research
- b) experimental research
- c) survey research
- d) longitudinal research

Ans: a

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Medium

69. Which of the following alternatives correctly identifies BOTH an advantage AND a disadvantage of observational methods?

- a) Observational methods are highly reflective of actual behaviour, but they can only be applied to the study of animals.
- b) Observational methods are highly reflective of actual behaviour, but they are prone to biases.
- c) Observational methods allow cause-and-effect conclusions, but they can be highly artificial.
- d) Observational methods allow control over variables, but they are prone to biases.

Ans: b

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Hard

70. Which of the following research methods is CORRECTLY matched with a description?
- a) observational methods – a behaviour is investigated in the environment in which it typically occurs
 - b) cross-sectional designs– a large sample is asked a set of questions
 - c) survey research – at least one variable is deliberately manipulated by the researcher
 - d) experimental research – a single individual is examined in detail

Ans: a

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Easy

Essay

71. Describe the main differences between longitudinal and cross-sectional designs.

Ans: Longitudinal designs study the same individuals repeatedly over the course of time, provide information about developmental change, but are time-consuming and expensive. Cross-sectional studies use different groups of individuals for a different length of time, are quicker and cheaper, but they are prone to cohort effects.

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Medium

True/False

72. Cohort effects are a common risk in longitudinal studies.

Ans: False

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Medium

Fill-in-the-blank

73. Lara wants to study the influence of cognitive stimulation on language development in a group of infants who were adopted at the age of 2. She chooses to use a _____ design.

Ans: longitudinal

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Medium

Short Answer

74. What are 'cohort effects' in cross-sectional designs?

Ans: Systematical differences between groups.

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Medium

75. Provide an example of something that can be investigated using a questionnaire.

Ans: a concrete example about people's behaviours/attitudes/attributes.

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Easy

Multiple Choice

76. With respect to 'sampling bias', which of the following statements is INCORRECT?

- a) Sampling bias is associated with questionnaire's response rate.
- b) Sampling bias indicates that respondents may not be representative of the studied population.
- c) Questionnaires are particularly prone to 'sampling bias'.
- d) Sampling bias is particularly evident in face-to-face surveys.

Ans: d

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Medium

77. Carol administered a survey about child abuse to 1000 anonymous new parents and found no reports of a parent exhibiting this type of behaviour. Knowing the number of incidences of child abuse reported each year, Carol suspected some type of bias attributed to the erroneous results. Which type of bias most likely affected this study?

- a) researcher bias
- b) self-presentational bias
- c) sampling bias
- d) experimental bias

Ans: b

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Medium

78. Philip is conducting a survey of dating attitudes and behaviours among young adults as part of his masters' thesis work. Philip distributes questionnaires to 300 randomly selected students enrolled in an introductory psychology course at his university. The 300 students constitute Philip's _____. The people to whom he assumes his results will generalize are termed the _____.

- a) control group; population
- b) experimental group; population
- c) population; sample
- d) sample; population

Ans: d

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Hard

79. Tiffany is conducting a survey about personality traits and binge drinking among university students as part of her masters' thesis work. Tiffany distributes questionnaires to students enrolled in her own introductory psychology course, as well as those taught by her thesis supervisor. Based on this information, it appears that Tiffany has failed to:

- a) randomly select the participants
- b) operationalize the variables
- c) randomly assign the participants
- d) debrief the participants

Ans: a

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Hard

80. Many people were surprised by the results of the 'Brexit' referendum because the 'remain' outcome was the favoured in many polls preceding the vote. Which of the following research methodology flaws may have led to this inaccurate prediction?

- a) The estimates may have been based on data from a sample that was not representative of the population
- b) The wording of the questionnaire items may have been vague and biased
- c) Self-presenting bias may have prevented respondents from voicing their honest opinions
- d) All of the above

Ans: d

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Medium

Essay

81. Describe 3 different means by which surveys can be conducted.

Ans: Face-to-face, telephone, electronic (email), written questionnaire dissemination, web-based etc.

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Medium

True/False

82. Surveys can provide numerical data that researchers can use to measure the strength of the relationship between variables.

Ans: True

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.
Difficulty: Medium

83. Questionnaires are an excellent technique as they can provide information about every type of phenomenon because people very generally very good at introspection and self-report.

Ans: False

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Medium

Short answer

84. A journalist at a local newspaper is writing an article on the next election for mayor. She develops a survey asking people who they will vote for in the next election and then e-mails it to local schools and businesses. On the basis of her survey she concludes that 65% of the voters will vote for candidate Emma Huffington and publishes her prediction in the newspaper. On election day, she is completely bewildered as only 35% of the people voted for Emma Huffington. What type of bias has likely affected the journalist's predictions and how?

Ans: Sampling bias. The journalist drew her sample from local schools and businesses. The journalists sample was biased and therefore the sample did not accurately reflect the entire population of voters.

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Hard

Multiple choice

85. Dr Estefan prepares a set of questions to ask university students about their drinking behaviour and their attitudes toward alcohol. Dr Estefan is undertaking:

- a) a survey
- b) a longitudinal study
- c) an observational study
- d) an experimental research

Ans: a

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Easy

86. Which of the following research methods is CORRECTLY matched with an advantage?

- a) observational research – rich source of information to establish cause-and-effect relationships.
- b) observational research – allows control over variables
- c) survey research – allows researchers to measure the strength of the relationship between variables
- d) experimental research – highly reflective of actual human behaviour

Ans: c

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Hard

Fill-in-the-blank

87. The research methodology that asks participants to answer a series of questions is called a(n) _____.

Ans: survey

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Easy

True/False

88. In experimental designs a researcher has control over one or more variables.

Ans: True

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Easy

Fill-in-the-blank

89. The variable that is manipulated by the experimenter is called _____. The variable that is measured by the experimenter is called _____.

Ans: independent variable; dependent variable

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Medium

Multiple choice

90. Which of the following research methods is the best way to establish causal relationship between variables?

- a) Observational methods
- b) Surveys
- c) Experiments
- d) Interviews

Ans: c

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Medium

91. Dr Foster is studying whether a change in oxygen levels delivered to patients with anxiety disorder can increase the likelihood of experiencing panic-attack-like symptoms. 'Oxygen levels' is:

- a) the dependent variable
- b) the pre-test
- c) the independent variable
- d) the post-test

Ans: c

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Medium

92. A behaviour, event, or other characteristic that can take on different values is termed a(n)

- _____.
- a) variable
 - b) theory
 - c) operational definition
 - d) hypothesis

Ans: a

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Easy

Short answer

93. In an experiment, what names are given to the variable that is manipulated and the variable that is measured?

Ans: Independent variables are manipulated and dependent variables are measured.

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Medium

94. John wanted to determine whether hunger influenced his performance on his history exams. For the first exam, he ate 1 hour before the exam. For the second exam, he ate immediately after the exam. Identify the independent and dependent variables in this study.

Ans: The independent variable is the manipulation of when he ate (before/after the exam). The dependent variable is his performance on the test.

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Medium

True/False

95. Experiments have high ecological validity as they show people's natural behaviour.

Ans: False

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Medium

Fill-in-the-blank

96. In an experimental setting, the variable that is not manipulated is called the _____ variable.

Ans: dependent

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Medium

97. A subset of a population is known as a(n) _____.

Ans: sample

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Easy

Multiple Choice

98. A researcher observed the eating patterns of laboratory rats while manipulating the amount of sleep they received during a week-long study. In this example, what type of variable is “sleep”?

- a) observable
- b) dependent
- c) independent
- d) extraneous

Ans: c

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Medium

99. Which of the following research methods allows the manipulation of one or more variables?

- a) time-sampling
- b) experiment
- c) observational
- d) survey

Ans: b

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Medium

Short answer

100. Define random selection.

Ans: All members of an identified population have an equal chance of being selected as part of the sample.

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Medium

101. In an experiment, how does an experimental group vary from a control group?

Ans: Control group is not exposed to the independent variable or treatment; experimental group is.

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Medium

102. What term is used to describe the process in which everyone in a sample has an equal chance of being placed in either the control or experimental group?

Ans: Random allocation

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by

psychologists.
Difficulty: Medium

True/False

103. People in the control group of an experiment are not exposed to the independent variable.

Ans: True
Section Ref: Quantitative Research Methods
Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.
Difficulty: Easy

Multiple choice

104. Louise proposes that the more impulsive a student is, the less likely he or she will be to change answers on a multiple-choice test. The variable(s) in this statement is/are:

- a) impulsivity
- b) answer-changing
- c) both impulsivity and answer-changing
- d) the student, impulsivity, and answer-changing

Ans: c
Section Ref: Quantitative Research Methods
Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.
Difficulty: Easy

105. In a typical _____, psychologists manipulate the _____ to study the effect on a _____.

- a) experiment; dependent variable; independent variable
- b) experiment; independent variable; dependent variable
- c) survey; independent variable; dependent variable
- d) survey; dependent variable; independent variable

Ans: b
Section Ref: Quantitative Research Methods
Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.
Difficulty: Medium

106. In an experiment, the researcher deliberately manipulates the _____ variable and measures the _____ variable.

- a) experimental; control
- b) control; experimental
- c) dependent; independent
- d) independent; dependent

Ans: d

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Medium

107. In experimental research, presumed cause is to potential effect as _____ is to _____.

- a) dependent variable; independent variable
- b) independent variable; dependent variable
- c) experimental group; control group
- d) control group; experimental group

Ans: b

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Hard

108. Drs Chase and Sanborn are conducting an experiment on the effects of caffeine on memory. Participants are randomly assigned to a caffeine or a no-caffeine group; their recall of items on a word list is later assessed. Which pair below correctly identifies a variable in this experiment?

- a) caffeine – dependent variable
- b) caffeine – independent variable
- c) word recall – independent variable
- d) word recall – experimental variable

Ans: b

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Medium

109. Drs Chase and Sanborn are conducting an experiment on the effects of caffeine on memory. Participants are randomly assigned to a caffeine or a no caffeine group; their recall of items on a word list is later assessed. Which pair below correctly names and identifies the variables in this experiment?

- a) word recall – control variable; caffeine – experimental variable
- b) word recall – independent variable; caffeine – dependent variable
- c) word recall – dependent variable; caffeine – independent variable
- d) word recall – experimental variable; caffeine – control variable

Ans: c

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Hard

110. _____ is a technique that helps researchers ensure their sample is representative of the population.

- a) Random assignment
- b) Random allocation
- c) Convenience sampling
- d) Geographic sampling

Ans: b

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Medium

111. _____ allows to create two groups of participants that are not consistently different from one another.

- a) Random allocation
- b) Random assignment
- c) Convenience sampling
- d) Geographic sampling

Ans: a

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by

psychologists.
Difficulty: Medium

112. Which of the following sequences is the correct sequential process of an experiment?
- a) Manipulation of the independent variable; random allocation; measurement of the dependent variable.
 - b) Random allocation; manipulation of the dependent variable; measurement of the independent variable.
 - c) Random allocation; manipulation of the independent variable; measurement of the dependent variable.
 - d) Manipulation of the dependent variable; random allocation; measurement of the independent variable.

Ans: c
Section Ref: Quantitative Research Methods
Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.
Difficulty: Medium

113. With respect to a basic experimental design, which of the following statement is correct?
- a) The control group receives a treatment. The experimental group doesn't.
 - b) Both the control group and the experimental group receive the treatment, but at different times.
 - c) The experimental group receives the treatment. The control group doesn't.
 - d) There is only one group known as the 'experimental group'.

Ans: c
Section Ref: Quantitative Research Methods
Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.
Difficulty: Medium

114. Dr Murphy is investigating the effect of caffeine on students' performance on a memory task. She randomly allocates 200 university students into two groups. She asks Group A to drink 30ml of black coffee 30 minutes before the memory task, whilst Group B is asked to drink 30ml of water instead. Group B is:
- a) the experimental group
 - b) the basic group
 - c) the control group
 - d) the independent group

Ans: c

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Medium

115. Dr Murphy is investigating the effect of caffeine on students' performance on a memory task. She randomly allocates 200 university students into three groups. Thirty minutes before the task, she asks Group A to drink 30ml of black coffee, Group B to drink 50ml and Group C to drink 100ml. Group B is:

- a) the control group
- b) the experimental group
- c) a condition that varies quantitatively from the others
- d) a condition that varies qualitatively from the others

Ans: c

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Medium

116. Dr Brown is investigating the effect of different types of beverages on students' performance on a memory task. She randomly allocates 200 university students into three groups. Thirty minutes before the task, she asks Group A to drink 30ml of black coffee, Group B to drink 30ml of orange juice and Group C to drink 30ml of Coke. Group B is:

- a) the control group
- b) the experimental group
- c) a condition that varies quantitatively from the others
- d) a condition that varies qualitatively from the others

Ans: d

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Medium

117. Dr Brown is interested in finding out whether different types of beverages and nicotine influence students' performance on a memory task. She randomly allocates 200 university students into three groups. Thirty minutes before the task, she asks Group A to drink 30ml of

black coffee, Group B to drink 30ml of orange juice and Group C to drink 30ml of Coke. In addition, she makes sure that in each group half of the participants are regular cigarette smokers and smoke one cigarette 10 minutes before the memory task. How many independent variables are used in Dr Brown's experiment?

- a) 1
- b) 2
- c) 3
- d) 5

Ans: b

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Hard

Short answer

Dr Brown is interested in finding out whether different types of beverages and nicotine influence students' performance on a memory task. She randomly allocates 200 university students into three groups. Thirty minutes before the task, she asks Group A to drink 30ml of black coffee, Group B to drink 30ml of orange juice and Group C to drink 30ml of Coke. In addition, she makes sure that in each group half of the participants are regular cigarette smokers and smoke one cigarette 10 minutes before the memory task.

118. What are the independent variables in this experiment?

Ans: type of beverage and nicotine

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Medium

119. What type of experimental design is Dr Brown using?

Ans: a 3×2 factorial design

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Hard

Fill-in-the-blank

120. One of the advantages of factorial designs is that by adding more conditions to an experiment is possible to look at possible _____ between variables.

Ans: interactions

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Medium

121. In a factorial design different conditions can vary either _____ or _____ from each other.

Ans: qualitatively; quantitatively (any order)

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Hard

Multiple choice

122. Description is to explanation as _____ is to _____.

- a) observational research; survey research
- b) survey research; observational research
- c) observational research; experimental research
- d) experimental research; survey research

Ans: c

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Hard

123. In which of the following alternatives is a scientific goals matched with an appropriate research method?

- a) description – experimental research
- b) explanation – survey research
- c) explanation – experimental research
- d) explanation – observational research

Ans: c

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Hard

124. Georgina is trying to decide whether to study the relationship between alcohol consumption using survey research techniques on the one hand, or experimental research methods on the other. Which of the following alternatives most accurately identifies considerations Georgina should keep in mind as she plans her research?

- a) Survey responses are prone to biases, but survey research allows you to identify causes and effects. Experimental research is more artificial, but allows you to control variables.
- b) Both survey research and experimental methodology involve somewhat artificial conditions. However, both survey research and experimental research are easy to conduct.
- c) Both survey research and experimental methodology allow you to identify causes and effects. However, experimental research usually involves artificial laboratory conditions, while survey responses may reflect biases.
- d) Experimental research usually involves artificial laboratory conditions, but it would allow you to identify causes and effects. Survey research does not allow cause-effect-conclusions, and survey responses may reflect biases.

Ans: d

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Hard

125. Dr Bird is conducting a detailed examination on the effects of different types of psychotherapy either in combination or without pharmacological treatment on the manifestation of negative symptoms in schizophrenia. Dr Bird is undertaking:

- a) a survey
- b) a factorial design experiment
- c) an observational study
- d) a correlational study

Ans: b

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Medium

126. Dr Hayes deliberately varied the imageability of items on a list and later measured participants' recall of the items. Dr Hayes conducted a(n) _____ study.

- a) naturalistic
- b) correlational
- c) observational
- d) experimental

Ans: d

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Medium

127. Experimental research requires that the responses of _____ group(s) be examined.

- a) at least 1
- b) 2
- c) at least 2
- d) 3 or more

Ans: c

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Easy

128. Experimental group is to control group as _____ is to _____.

- a) independent variable; no independent variable
- b) dependent variable; no dependent variable
- c) independent variable; dependent variable
- d) dependent variable; independent variable

Ans: a

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Medium

129. In an industrial psychology experiment, one group of participants is exposed to heat stress;

another is not. All participants' performance on a manual dexterity task is then examined.
Which set below contains equivalent items?

- a) independent variable; experimental group; no stress group
- b) independent variable; experimental group; heat stress group
- c) no independent variable; control group; heat stress group.
- d) no independent variable; experimental group; no stress group

Ans: b

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Hard

130. Why are control groups included in experiments?

- a) to determine whether two variables are related
- b) to ascertain cause-and-effect relationships
- c) to ensure that participant characteristics are essentially the same in each group
- d) to ensure that the results may be generalized to the population

Ans: b

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Hard

131. Random allocation:

- a) guarantees the elimination of all the differences between the control and experimental groups
- b) may not entirely eliminate differences between the control and experimental groups
- c) does little to minimize differences between the control and experimental groups
- d) is discouraged as individual differences may be informative

Ans: b

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Hard

132. In which of the following alternatives is an advantage matched with an appropriate study design?

- a) Straightforward design – repeated measures

- b) Fewer participants required – independent measures
- c) No carry-over effects – repeated measures
- d) No carry-over effects – independent measures

Ans: d

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Medium

133. Repeated measures designs:

- a) require more participants than independent measures
- b) reduce the amount of data variability
- c) aren't as sensitive as independent measures
- d) lead to more noise in the data compared to independent measures

Ans: b

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Medium

Fill-in-the-blank

134. _____ designs are more sensitive than independent measures designs but they are prone to _____ effects.

Ans: Repeated measures; carry-over

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Medium

135. One of the ways to minimize order effects in repeated measures designs is _____ the order in which conditions are given.

Ans: counterbalancing

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Medium

Short answer

136. What are carry-over effects in a repeated measures design?

Ans: One condition will have irreversible effects on the subsequent condition.

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Medium

Essay

137. Describe the advantages of a pre-test/post-test design compared to a post-test-only design.

Ans: Post-test-only designs assume that the random allocation is sufficient to render the two groups comparable before the manipulation of the IV. A pre-test/post-test allows to check that the groups are initially comparable.

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Hard

True/False

138. In pre-test/post-test designs there is no need for random allocation of the participants.

Ans: False

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Medium

139. Post-test-only designs assume that participants are comparable before the experimental manipulation, thanks to randomization.

Ans: True

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Medium

Essay

140. Describe the experimental design known as 'Solomon's four-group'.

Ans: There are at least four groups: two experimental and two control groups. One of the experimental and one of the control groups receive a pre-test; the other groups don't. All groups receive a post-test.

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Hard

141. Which of the following is not a disadvantage of Solomon four-group design?

- a) It doesn't allow to check the influence of a pre-test on the performance
- b) It's time consuming
- c) It's effortful
- d) It's expensive

Ans: a

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Easy

142. Which term is most nearly synonymous with the term 'correlation'?

- a) relationship
- b) explanation
- c) observation
- d) influence

Ans: a

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Easy

143. Relationship is to effect as _____ is to _____.

- a) experiment; correlation
- b) correlation; experiment
- c) experiment; survey
- d) correlation; survey

Ans: b

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Medium

144. Dr Law wants to study whether caffeine consumption is positively associated to exams' performance. Dr Law is undertaking a(n):

- a) Factorial experiment
- b) Observational study
- c) Correlational study
- d) Interrupted time-series experiment

Ans: c

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Medium

145. With respect to correlational designs, which of the following statements is INACCURATE?

- a) Alike experiments, correlational designs are normally non-intrusive
- b) Correlational designs help researchers to establish causal relationships between variables
- c) Correlational designs do not require any experimental manipulations
- d) In correlational designs the experimenter looks at the relationship between two variables only

Ans: b

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Medium

146. Dr Phen is conducting a study of happiness among employees who work in various types of jobs. He surveys people about the type of work they do and measures how happy they are. He finds that individuals who have white-collar occupations report higher levels of happiness than people who have blue-collar occupations. What should Dr Phen conclude about the results of this correlational study?

- a) Blue-collar occupations cause unhappiness
- b) White-collar occupations cause happiness
- c) Unhappiness causes people to pursue blue-collar occupations
- d) It is possible to predict how happy a person is if you know whether they have a white-collar or blue-collar job

Ans: d

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Hard

Fill-in-the-blank

147. In more complex experiments, multiple experimental groups are exposed to varying amounts of the _____ variable.

Ans: independent

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Medium

True/False

148. The correlational method provides clear scientific evidence of cause and effect relationships.

Ans: False

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Medium

Essay

149. Dr Jasper found a strong positive correlation between happiness and job type. Explain why Dr Jasper cannot conclude a cause and effect relationship between these two variables.

Ans: This correlation can be explained in at least three different ways. First, certain jobs may indeed cause more happiness. In this example, job type is the cause and happiness is the effect. Second, happiness may cause people to seek particular types of jobs. In this example, happiness is the cause and job type is the effect. Finally, it is also possible that job choice and level of happiness may be caused by a third variable, such as financial stability. In this example, job type and happiness are not causally related. The association between job type and happiness can be explained by financial stability.

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Hard

True/False

150. Applied research often uses quasi-experimental designs as the researcher doesn't always have full control over the independent variables in natural settings.

Ans: True

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Easy

151. The static group comparison design is prone to sample selection biases.

Ans: True

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Easy

Multiple choice

152. Transport for London (TfL) recently conducted a study to decide whether introducing a new rule imposing passengers to stand on the escalators was the best way to decongest passengers' traffic in some of the busiest underground stations during peak hours. Measurements of traffic

were taken in Holborn and Bank stations for 6 months before introducing the new rule and for 6 months afterwards. Results showed a difference in capacity between pre- and post-intervention: the 'standing-only' escalators were able to carry an average of 151 passengers per minute, compared to 115 on the 'walking' escalator, where people were both walking and standing. TfL used a(n):

- a) Factorial design
- b) Static group comparison design
- c) Correlational design
- d) Interrupted time-series design

Ans: d

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Medium

153. With respect to quasi-experimental studies, which of the following statements is INCORRECT?

- a) Quasi-experimental designs are more ecologically valid than other experimental designs
- b) In quasi-experimental designs the experimenter doesn't have complete control over the independent variables
- c) Quasi-experimental designs are prone to sampling biases
- d) None of the above

Ans: d

Section Ref: Quantitative Research Methods

Learning Objective: Demonstrate understanding of some of the quantitative methods used by psychologists.

Difficulty: Medium

154. Correlational analysis is to experimental analysis as _____ is to _____.

- a) inferential statistics; descriptive statistics
- b) t-test; analysis of variance
- c) relationship; cause-and-effect
- d) cause-and-effect; relationship

Ans: c

Section Ref: Analysing and Interpreting Quantitative Data

Learning Objective: Describe the various statistical techniques used to analyse and interpret quantitative data.

Difficulty: Medium

True/False

155. Descriptive research methods allow psychologists to determine the relationship between variables.

Ans: False

Section Ref: Analysing and Interpreting Quantitative Data

Learning Objective: Describe the various statistical techniques used to analyse and interpret quantitative data.

Difficulty: Easy

156. Both spread and standard deviation are considered measures of dispersion.

Ans: True

Section Ref: Analysing and Interpreting Quantitative Data

Learning Objective: Describe the various statistical techniques used to analyse and interpret quantitative data.

Difficulty: Easy

Multiple choice

157. What method do psychologists use to analyse study data?

- a) logic
- b) induction
- c) statistics
- d) deduction

Ans: c

Section Ref: Analysing and Interpreting Quantitative Data

Learning Objective: Describe the various statistical techniques used to analyse and interpret quantitative data.

Difficulty: Easy

True/False

158. Without statistics, researchers would not know if their original hypotheses were valid.

Ans: True

Section Ref: Analysing and Interpreting Quantitative Data

Learning Objective: Describe the various statistical techniques used to analyse and interpret quantitative data.

Difficulty: Easy

Fill-in-the-blank

159. Analysing data through the use of _____ allows researchers to describe and measure relationships between variables.

Ans: statistics

Section Ref: Analysing and Interpreting Quantitative Data

Learning Objective: Describe the various statistical techniques used to analyse and interpret quantitative data.

Difficulty: Medium

Short answer

160. What is the mean of a data set?

Ans: The mean is a calculation of the arithmetic average of the numerical data in the data set.

Section Ref: Analysing and Interpreting Quantitative Data

Learning Objective: Describe the various statistical techniques used to analyse and interpret quantitative data.

Difficulty: Medium

Multiple choice

161. Which of the following statistical procedures can be used to determine to what degree participants' scores within a group vary?

- a) standard deviation
- b) mean
- c) effect size
- d) analysis of variance

Ans: a

Section Ref: Analysing and Interpreting Quantitative Data

Learning Objective: Describe the various statistical techniques used to analyse and interpret quantitative data.

Difficulty: Medium

162. The correlation coefficient ranges from:

- a) 1 to 100
- b) -1.00 to 1.00
- c) 0 to 1
- d) -100 to 100

Ans: b

Section Ref: Analysing and Interpreting Quantitative Data

Learning Objective: Describe the various statistical techniques used to analyse and interpret quantitative data.

Difficulty: Medium

163. “Okay. What does a correlation coefficient tell us?” Zoe asks the members of her psychology study group. “The strength of a relationship between two variables,” answers Yvonne. “The direction of the relationship between two variables,” puts in Will. Who is right?

- a) Only Yvonne is right.
- b) Only Will is right.
- c) Both Yvonne and Will are right.
- d) Neither Yvonne nor Will is right.

Ans: c

Section Ref: Analysing and Interpreting Quantitative Data

Learning Objective: Describe the various statistical techniques used to analyse and interpret quantitative data.

Difficulty: Hard

164. Which of the following correlation coefficients represents the strongest relationship between two variables?

- a) -.75
- b) .60
- c) .00
- d) .30

Ans: a

Section Ref: Analysing and Interpreting Quantitative Data

Learning Objective: Describe the various statistical techniques used to analyse and interpret quantitative data.

Difficulty: Hard

165. A _____ correlation results when there is no relationship between two variables.

- a) negative
- b) inverse
- c) zero
- d) infinite

Ans: c

Section Ref: Analysing and Interpreting Quantitative Data

Learning Objective: Describe the various statistical techniques used to analyse and interpret quantitative data.

Difficulty: Easy

166. In a survey project, Dr Cook finds a correlation of .60 between attachment security and the likelihood with which participants say they would engage in various prosocial behaviours at work. Each of the following is consistent with this data EXCEPT:

- a) Attachment security leads people to behave prosocially at work.
- b) Behaving prosocially at work can produce a feeling of attachment security.
- c) Lower attachment security is associated with less prosocial work behaviour.
- d) There is a perfect positive relationship between attachment security and prosocial work behaviour.

Ans: d

Section Ref: Analysing and Interpreting Quantitative Data

Learning Objective: Describe the various statistical techniques used to analyse and interpret quantitative data.

Difficulty: Medium

167. In a small study, a group of students in an Experimental Psychology course collected scores on two variables (Variables A and B) from five participants as follows: Participant 1: A = 3, B = 10; Participant 2: A = 3, B = 9; Participant 3: A = 8, B = 4; Participant 4: A = 6, B = 6; Participant 5: A = 10, B = 1. "The mean score on Variable A is 6, and the variables are not correlated", Ivy notes. "The mean Variable B score is 5, and the variables are negatively correlated," John states. "No, the mean score on B is 6; but, yes, A and B are negatively correlated," Kenya remarks. "Wait. The mean score on A is 5," Lara adds. Which of these students is correct?

- a) Only John is correct.
- b) Kenya and Lara are correct.
- c) John and Lara are correct.
- d) Only Kenya is correct.

Ans: d

Section Ref: Analysing and Interpreting Quantitative Data

Learning Objective: Describe the various statistical techniques used to analyse and interpret quantitative data.

Difficulty: Hard

168. “The average was 75”, explains Dr Morales, handing back the first part of the exam. “The lowest score was 32, and there were several in the 40s. But I had some 95s, 96s, and even a 98 – so it’s not like it’s impossible to do well.” Handing back the second part of the exam, Dr Morales notes: “The average was 75 again. There were a few in the low 60s, but I got a bunch in the high 80s and into the 90s. It’s looking better!” Which of the following statements is TRUE?

- a) The means were the same on the two tests, but the standard deviation was lower on the first than on the second.
- b) The means were the same on the two tests, but the standard deviation was higher on the first than on the second.
- c) The mean was higher on the second test than on the first, but the standard deviation was lower on the second test.
- d) The means and standard deviations were the same on the two tests.

Ans: b

Section Ref: Analysing and Interpreting Quantitative Data

Learning Objective: Describe the various statistical techniques used to analyse and interpret quantitative data.

Difficulty: Medium

169. What do psychologists usually mean when they say a particular experimental result is ‘significant’?

- a) The result reflects a large difference between the mean scores of one participant group and the mean scores of another.
- b) The result is important in a practical sense.
- c) The result will allow psychologists to support one theory over alternative theories.
- d) The result is unlikely to have occurred solely as a result of chance.

Ans: d

Section Ref: Analysing and Interpreting Quantitative Data

Learning Objective: Describe the various statistical techniques used to analyse and interpret quantitative data.

Difficulty: Medium

170. Paulette encounters the following sentence in a psychology journal article she is reading: "Participants exposed to brief heat stress made more errors on the visual attention task than did participants not exposed to heat stress, $p < .05$." Paulette can conclude each of the following EXCEPT:

- a) The difference between the groups in the number of errors most likely stems from heat stress.
- b) There was a significant difference between the groups in the number of errors.
- c) The number of errors was much larger in the heat stress group than it was in the other group.
- d) There is less than a 5% chance that random coincidence was responsible for the difference between the groups in the number of errors.

Ans: c

Section Ref: Analysing and Interpreting Quantitative Data

Learning Objective: Describe the various statistical techniques used to analyse and interpret quantitative data.

Difficulty: Hard

171. Why do the editors of psychology journals sometimes insist that psychologists include an estimate of effect size along with the probability statistic when they report a significant result?

- a) By itself, a probability statistic indicates only whether the difference in means between the groups in the study is unlikely to reflect chance. The effect size statistic indicates whether the difference is large.
- b) By itself, a probability statistic indicates only that the difference in means between the groups in the study is large. The effect size statistic indicates whether the difference is unlikely to reflect chance.
- c) The effect size statistic replicates the probability statistic, providing additional evidence that the result is significant.
- d) By itself, a probability statistic indicates only that there is a relationship between two variables. The effect size statistic gives some indication of cause and effect.

Ans: a

Section Ref: Analysing and Interpreting Quantitative Data

Learning Objective: Describe the various statistical techniques used to analyse and interpret quantitative data.

Difficulty: Medium

True/False

172. A small effect size indicates that a researcher has little room for error in the data.

Ans: False

Section Ref: Analysing and Interpreting Quantitative Data

Learning Objective: Describe the various statistical techniques used to analyse and interpret

quantitative data.
Difficulty: Hard

Fill-in-the-blank

173. To assess the strength of the relationship between variables, a(n) _____ can be calculated.

Ans: effect size

Section Ref: Analysing and Interpreting Quantitative Data

Learning Objective: Describe the various statistical techniques used to analyse and interpret quantitative data.

Difficulty: Medium

174. Which of the following is not a characteristic of qualitative research methods?

- a) Involvement of researcher in the research process
- b) Focus on the complexity of human experience
- c) Idiographic approach
- d) Generalizability of results

Ans: d

Section Ref: Qualitative Research Methods

Learning Objective: Demonstrate an understanding of some of the qualitative methods used by psychologists.

Difficulty: Medium

Essay

175. Describe the main methods used in qualitative research to obtain qualitative data.

Ans: participant observation; interviews; focus groups; textual sources

Section Ref: Qualitative Research Methods

Learning Objective: Demonstrate an understanding of some of the qualitative methods used by psychologists.

Difficulty: Medium

True/False

176. One of the disadvantages of content analysis is that it can be performed only with textual material.

Ans: False

Section Ref: Qualitative Research Methods

Learning Objective: Demonstrate an understanding of some of the qualitative methods used by psychologists.

Difficulty: Medium

177. Grounded theory is a theory-driven technique used in qualitative research.

Ans: False

Section Ref: Qualitative Research Methods

Learning Objective: Demonstrate an understanding of some of the qualitative methods used by psychologists.

Difficulty: Hard

Fill-in-the-blank

178. One of the techniques used to analyse qualitative data consists of trying to develop a theory starting from the data, using a bottom-up approach rather than interpreting the data based on pre-existing theories. This method is known as _____.

Ans: grounded theory

Section Ref: Qualitative Research Methods

Learning Objective: Demonstrate an understanding of some of the qualitative methods used by psychologists.

Difficulty: Medium

179. IPA stands for _____ and it is an example of 'phenomenological psychology'. The focus of this analysis is on the individual's experience, for this reason it is known for using a(n) _____ approach.

Ans: interpretative phenomenological analysis; idiographic

Section Ref: Qualitative Research Methods

Learning Objective: Demonstrate an understanding of some of the qualitative methods used by psychologists.

Difficulty: Medium

Short answer

180. Which qualitative analysis is focused on how language conveys information about social interactions and individuals' interpretations of reality?

Ans: Discourse analysis

Section Ref: Qualitative Research Methods

Learning Objective: Demonstrate an understanding of some of the qualitative methods used by psychologists.

Difficulty: Medium

181. Name at least four weaknesses of qualitative research methods

Ans: Violation of the principle of replicability; difficulties assessing validity and reliability; poor generalizability; difficulties drawing cause-and-effect conclusions

Section Ref: Qualitative Research Methods

Learning Objective: Demonstrate an understanding of some of the qualitative methods used by psychologists.

Difficulty: Medium

True/False

182. Modern psychologists no longer have reasons to be concerned about ethics in research.

Ans: False

Section Ref: Good and Bad Practice in Psychological Research

Learning Objective: Demonstrate a clear understanding of how to conduct research in an ethical and unbiased fashion.

Difficulty: Easy

183. Both the American Psychological Association and the British Psychological Society provide guidelines on ethical issues in conducting research.

Ans: True

Section Ref: Good and Bad Practice in Psychological Research

Learning Objective: Demonstrate a clear understanding of how to conduct research in an ethical and unbiased fashion.

Difficulty: Easy

Multiple choice

184. Before a researcher can test his/her hypotheses by collecting data, _____ must provide ethical oversight.

- a) a collaborator
- b) an independent panel
- c) participants
- d) the Home Office

Ans: b

Section Ref: Good and Bad Practice in Psychological Research

Learning Objective: Demonstrate a clear understanding of how to conduct research in an ethical and unbiased fashion.

Difficulty: Easy

185. What is the ethical goal of psychologists who are conducting research?

- a) Ensuring their research is not a waste of taxpayers' money
- b) Ensuring their research is as high quality as possible
- c) Ensuring their participants are protected from physical and emotional harm during the study
- d) Ensuring their sample is representative of the general population

Ans: c

Section Ref: Good and Bad Practice in Psychological Research

Learning Objective: Demonstrate a clear understanding of how to conduct research in an ethical and unbiased fashion.

Difficulty: Easy

Essay

186. What special considerations must researchers give to participants such as children or people with intellectual deficits?

Ans: These populations are protected because they may not be able to give informed consent on their own. Caregivers, parents or their guardian must give permission for them to participate. However, testing must be ended whenever participants show any signs of distress or reluctance to take part.

Section Ref: Good and Bad Practice in Psychological Research

Learning Objective: Demonstrate a clear understanding of how to conduct research in an ethical and unbiased fashion.

Difficulty: Medium

Multiple choice

187. What procedure at the end of an experiment provides participants with information regarding the full purpose and goals of the study?

- a) informed consent
- b) confidentiality review
- c) debriefing
- d) welfare review

Ans: c

Section Ref: Good and Bad Practice in Psychological Research

Learning Objective: Demonstrate a clear understanding of how to conduct research in an ethical and unbiased fashion.

Difficulty: Easy

188. Greta, a PhD student in psychology, is preparing her thesis proposal. The institutional ethics committee at her university will approve her research if:

- a) the research promises at least some scientific benefit
- b) participants will experience no risk or discomfort during the research
- c) the scientific benefit of the research outweighs the risk to the participants
- d) participants are fully informed of the study's true purpose before the session begins

Ans: c

Section Ref: Good and Bad Practice in Psychological Research

Learning Objective: Demonstrate a clear understanding of how to conduct research in an ethical and unbiased fashion.

Difficulty: Hard

189. Dr O'Connor is telling his participants before he begins the experiment that their participation is completely voluntary and that they can stop taking part at any time. Dr Quick is providing a detailed explanation to participants who have just completed a study. Which of the following statements is TRUE?

- a) Dr O'Connor is obtaining informed consent from his participants. Dr Quick is debriefing her participants.
- b) Dr O'Connor is debriefing his participants. Dr Quick is obtaining informed consent from her participants.
- c) Both Dr O'Connor and Dr Quick are obtaining informed consent from their participants.
- d) Both Dr O'Connor and Dr Quick are debriefing their participants.

Ans: a

Section Ref: Good and Bad Practice in Psychological Research

Learning Objective: Demonstrate a clear understanding of how to conduct research in an ethical and unbiased fashion.

Difficulty: Medium

190. Which of the following sequences best reflects the order of events in a typical experimental session?

- a) informed consent – debriefing – experiment
- b) informed consent – experiment – debriefing
- c) debriefing – informed consent – experiment
- d) debriefing – experiment – informed consent

Ans: b

Section Ref: Good and Bad Practice in Psychological Research

Learning Objective: Demonstrate a clear understanding of how to conduct research in an ethical and unbiased fashion.

Difficulty: Medium

191. How is animal research at colleges, universities, and institutes regulated?

- a) It is overseen by the same ethics committee that regulates research with human participants.
- b) It is overseen by Home Office, which provides strict regulations.
- c) In contrast to research with human participants, the regulation of animal research is left to the common sense of individual scientists.
- d) It is overseen by the British Psychological Society.

Ans: b

Section Ref: Good and Bad Practice in Psychological Research

Learning Objective: Demonstrate a clear understanding of how to conduct research in an ethical and unbiased fashion.

Difficulty: Medium

Short answer

192. Identify 3 pieces of information that are often included on a research study consent form?

Ans: Details regarding purpose of the study, procedures to be used, disclosure of risks and benefits of participation, information regarding confidentiality, information regarding the right to withdraw.

Section Ref: Good and Bad Practice in Psychological Research

Learning Objective: Demonstrate a clear understanding of how to conduct research in an ethical and unbiased fashion.

Difficulty: Medium

Fill-in-the-blank

193. Protecting the identity and information collected from individual respondents in a research study refers to maintaining _____.

Ans: confidentiality

Section Ref: Good and Bad Practice in Psychological Research

Learning Objective: Demonstrate a clear understanding of how to conduct research in an ethical and unbiased fashion.

Difficulty: Medium

True/False

194. Research participants are fully responsible for protecting themselves from harm or discomfort in a research study.

Ans: False

Section Ref: Good and Bad Practice in Psychological Research

Learning Objective: Demonstrate a clear understanding of how to conduct research in an ethical and unbiased fashion.

Difficulty: Easy

Fill-in-the-blank

195. An unintentional factor that conveys what a researcher expects to find is known as a(n) _____.

Ans: demand characteristic

Section Ref: Good and Bad Practice in Psychological Research

Learning Objective: Demonstrate a clear understanding of how to conduct research in an ethical and unbiased fashion.

Difficulty: Medium

Essay

196. Define and provide an example of a demand characteristic.

Ans: Any unintentional factor that conveys what a researcher expects to find such that participants may change their behaviours, therefore compromising the validity of the results. Provide an applicable example.

Section Ref: Good and Bad Practice in Psychological Research

Learning Objective: Demonstrate a clear understanding of how to conduct research in an ethical and unbiased fashion.

Difficulty: Hard

Fill-in-the-blank

197. fMRI has very high _____ resolution but poor _____ resolution. On the other hand, EEG has high _____ resolution and relatively poor _____ resolution.

Ans: spatial; temporal; temporal; spatial

Section Ref: Future Developments

Learning Objective: Describe some of the possible future directions of psychology research and practice.

Difficulty: Medium

198. _____ assessment allows real-time measurements of behaviour either periodically (_____ technique) or whenever they are required (_____ technique).

Ans: Ambulatory; time-sampling; event sampling

Section Ref: Future Developments

Learning Objective: Describe some of the possible future directions of psychology research and practice.

Difficulty: Hard

Essay

199. Discuss the following statement as reported in your textbook: “Statistical analyses in psychology are likely to change radically in the next few years, with a shift in focus from how *likely* results are to how *sizeable* and *replicable* they are.”

Ans: This reflects the null hypothesis significance testing issue, which encourages a simplistic dichotomous ‘significant vs. non-significant’ thinking. Editors of leading psychology journals are encouraging scientists to abandon the traditional p-value in favour of reporting effect sizes,

confidence intervals and meta-analyses.

Section Ref: Future Developments

Learning Objective: Describe some of the possible future directions of psychology research and practice.

Difficulty: Hard

True/False

200. Technological advances may render measures of accuracy and reaction time obsolete, leading to a possible extinction of behavioural methods in psychology.

Ans: True

Section Ref: Future Developments

Learning Objective: Describe some of the possible future directions of psychology research and practice.

Difficulty: Medium