

## Chapter 1 - The Evolution of Psychology

1. Which two disciplines provided foundations for the field of psychology?
  - a. physiology and theology
  - b. physiology and sociology
  - c. philosophy and physiology
  - d. sociology and philosophy

ANSWER: c

2. While the term “psychology” has existed since at least the early 1700s, when did psychology come to be considered a science?
  - a. the 1750s
  - b. the early 1800s
  - c. the late 1800s
  - d. the 1940s

ANSWER: c

3. Which event marked the “birth” of psychology as a science?
  - a. Wilhelm Wundt established the first laboratory for psychological research.
  - b. Sigmund Freud first described the unconscious.
  - c. Charles Darwin published the theory of natural selection.
  - d. William James published the textbook *Principles of Psychology*.

ANSWER: a

4. How did Wilhelm Wundt define psychology?
  - a. the scientific study of the unconscious
  - b. the scientific study of conscious experience
  - c. the scientific study of behaviour
  - d. the scientific study of the brain

ANSWER: b

5. Which of the following is NOT one of the major contributions of G. Stanley Hall?
  - a. He established the first research laboratory for psychology in the United States.
  - b. He was the first president of the American Psychological Association.
  - c. He received the first Ph.D. in psychology in the United States.
  - d. He established the first American psychological journal.

ANSWER: c

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6. Who was the psychologist who established the first psychology research laboratory in the United States, founded the first American psychological journal, and was the first president of the American Psychological Association?
- John Watson
  - G. Stanley Hall
  - William James
  - Wilhelm Wundt

*ANSWER:* b

7. Which school of psychology stated that the task of psychology is to analyze conscious experience into its basic elements?
- functionalism
  - psychoanalysis
  - behaviourism
  - structuralism

*ANSWER:* d

8. What did both Wilhelm Wundt and Edward Titchener believe should be the focus of psychology?
- observable behaviour
  - the function or purpose of consciousness
  - unconscious determinants of behaviour
  - basic elements of conscious experience

*ANSWER:* d

9. Which technique would you be using if you take a sip of a soft drink and concentrate on what you are experiencing (cold, bubbly, sweet, etc.)?
- empiricism
  - behaviourism
  - introspection
  - functionalism

*ANSWER:* c

10. What technique would you be using if, while watching a sunset, you stop and analyze your sensations, thoughts, and feelings?
- behaviourism
  - introspection
  - psychoanalysis
  - functionalism

*ANSWER:* b

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11. What did William James believe should be the focus of psychology?
- the function or purpose of consciousness
  - basic elements of conscious experience
  - observable behaviour
  - unconscious determinants of behaviour

*ANSWER: a*

12. Which individual is known as the founder of functionalism?
- Sigmund Freud
  - John Watson
  - Wilhelm Wundt
  - William James

*ANSWER: d*

13. Which school of psychology stated that consciousness developed in humans because it serves a useful purpose?
- humanism
  - functionalism
  - behaviourism
  - structuralism

*ANSWER: b*

14. Which individual provided a significant influence for William James's perspective on psychology?
- Sigmund Freud
  - Plato
  - Aristotle
  - Charles Darwin

*ANSWER: d*

15. Which of the following schools of thought was most influenced by Charles Darwin's theory of natural selection?
- functionalism
  - psychoanalysis
  - behaviourism
  - structuralism

*ANSWER: a*

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16. Which school of psychology had a practical focus and was interested in how people adapted their behaviour to the demands of the world?
- functionalism
  - behaviourism
  - psychoanalysis
  - structuralism

*ANSWER:* a

17. Which individual is associated with the concept of “stream of consciousness”?
- William James
  - Wilhelm Wundt
  - Sigmund Freud
  - John Watson

*ANSWER:* a

18. Two scientists from another planet, Poz and Zog, visit earth and are attempting to study our computers. Poz focuses on how the computer is used for work and for play, while Zog concentrates on the construction of each component of the computer. If you were to compare their approaches to the original schools of psychology, which of the following analogies is most accurate?
- Poz’s approach is similar to functionalism.
  - Zog’s approach is similar to behaviourism.
  - Zog’s approach is similar to psychoanalysis.
  - Poz’s approach is similar to structuralism.

*ANSWER:* a

19. Which of the following most accurately describes the enduring influence of structuralism and functionalism on psychology today?
- Neither structuralism nor functionalism exerted a long-lasting influence on psychology.
  - Both structuralism and functionalism exerted equivalent influences on psychology.
  - Structuralism has exerted the greatest influence on psychology.
  - Functionalism has exerted the greatest influence on psychology.

*ANSWER:* d

20. Who is known as the founder of behaviourism?
- John Watson
  - Carl Rogers
  - Wilhelm Wundt
  - Sigmund Freud

*ANSWER:* a

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21. How did John Watson define psychology?
- a. the scientific study of the brain
  - b. the scientific study of the unconscious
  - c. the scientific study of behaviour
  - d. the scientific study of conscious experience

*ANSWER: c*

22. Which school of psychology made a clear distinction between observable behaviours and unobservable thoughts and feelings?
- a. functionalism
  - b. behaviourism
  - c. psychoanalysis
  - d. structuralism

*ANSWER: b*

23. What did John Watson believe should be the focus of psychology?
- a. unconscious determinants of behaviour
  - b. observable behaviour
  - c. basic elements of conscious experience
  - d. the function or purpose of consciousness

*ANSWER: b*

24. Which psychological approach is often referred to as stimulus-response (S-R) psychology?
- a. psychoanalytic theory
  - b. structuralism
  - c. evolutionary psychology
  - d. behaviourism

*ANSWER: d*

25. If Dr. Meharry is a behaviourist, which of the following would he most likely say is the cause of a child's disruptive behaviour in school?
- a. a combination of his genetic inheritance and his prior experiences
  - b. his prior experiences
  - c. his genetic inheritance
  - d. a learning disability

*ANSWER: b*

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26. Which of the following schools of psychology was most influential in increasing the use of animals in psychological research?
- structuralism
  - humanism
  - behaviourism
  - animalism

*ANSWER: c*

27. Which of the following individuals would be most likely to focus on your thoughts, memories, and desires that are outside of conscious rational processes?
- B. F. Skinner
  - Sigmund Freud
  - John Watson
  - Abraham Maslow

*ANSWER: b*

28. What did Sigmund Freud believe should be the focus of studies of personality, motivation, and mental disorders?
- observable behaviour
  - basic elements of conscious experience
  - unconscious determinants of behaviour
  - the function or purpose of consciousness

*ANSWER: c*

29. Even though you know it isn't good for you, you just ate an entire large bag of chips. What would Sigmund Freud say is the cause of your behaviour?
- your unconscious mind
  - your genetic influences
  - your history of reinforcement and punishment
  - your inability to think quickly

*ANSWER: a*

30. Which of the following did NOT have a significant influence on the development of Sigmund Freud's theory?
- the results of his experimental research
  - his observation of the slips of the tongue people tend to make
  - knowledge gained from his examination of his own anxieties, conflicts, and desires
  - knowledge gained as a result of working with patients

*ANSWER: a*

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31. What did Sigmund Freud believe prevented us from being totally in control of our own minds?
- the physiological functioning of our bodies
  - environmental influences acting on us
  - the unconscious
  - introspection

*ANSWER: c*

32. Which of the following was NOT one of the reasons that psychoanalysis was controversial when it was first developed?
- its focus on the unconscious
  - its lack of experimental research
  - its emphasis on sexual issues
  - its focus on abnormal behaviour

*ANSWER: d*

33. Which of the following statements is most accurate, regarding experimental psychology's eventual reaction to psychoanalytic theory?
- Psychoanalytic theory was rejected by experimental psychologists.
  - Psychoanalytic theory was accepted by experimental psychologists.
  - Experimental psychologists began to reject behaviourism.
  - Experimental psychologists tested psychoanalytic hypotheses.

*ANSWER: d*

34. Which school of psychology is associated with B.F. Skinner?
- humanism
  - behaviourism
  - psychoanalysis
  - functionalism

*ANSWER: b*

35. Which of the following behaviourists was known for his concept of radical behaviourism?
- B. F. Skinner
  - Ivan Pavlov
  - Edward Thorndike
  - John B. Watson

*ANSWER: a*

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36. Which psychologist believed that organisms tend to repeat responses that lead to positive outcomes?
- Sigmund Freud
  - F. Skinner
  - William James
  - Carl Rogers

*ANSWER: b*

37. According to B. F. Skinner, if you study “extra hard” for your first psychology midterm and earn an “A,” what would you do for your next psychology midterm?
- reduce your study time by approximately 50 percent
  - continue to study “extra hard”
  - devote all of your study time to your other courses
  - reduce your study time by approximately 25 percent

*ANSWER: b*

38. If you wish to teach a child to pick up his toys, which of the following theorist’s principles and techniques would be most useful?
- Wilhelm Wundt
  - William James
  - B. F. Skinner
  - Abraham Maslow

*ANSWER: c*

39. Lisa taught her son to buckle his seatbelt quickly after getting into the car by allowing him to play one of his CDs on the car stereo only after he was buckled up. Which school of psychology would most endorse this method?
- cognitive psychology
  - humanism
  - biological psychology
  - behaviourism

*ANSWER: d*

40. Which of the following statements would Skinner most likely disagree with?
- Organisms tend to repeat responses that lead to positive outcomes.
  - Organisms tend not to repeat responses that lead to neutral or negative outcomes.
  - All behaviour is governed by external consequences.
  - Individuals have free will.

*ANSWER: d*

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41. Upon reflecting upon your own behaviour, you come to the conclusion that you behave in a very predictable fashion. You feel that you don't really choose your behaviours freely or consciously. Rather, you believe that your behaviour is controlled by what has happened to you in the past. Which of the following theorists would be most likely to agree with you?
- B. F. Skinner
  - Edward Titchener
  - Carl Rogers
  - Sigmund Freud

*ANSWER: a*

42. Which school of psychology first emerged in the 1950s?
- psychoanalysis
  - behaviourism
  - functionalism
  - humanism

*ANSWER: d*

43. Which school of psychology believes people have a basic need to fulfill their potential for personal growth and that we have free will?
- psychoanalysis
  - cognitive psychology
  - humanism
  - behaviourism

*ANSWER: c*

44. Which school of psychology would be least likely to compare humans to other animals?
- behaviourism
  - functionalism
  - humanism
  - evolutionary psychology

*ANSWER: c*

45. Which of the following psychologists is considered a humanistic psychologist?
- Carl Rogers
  - Wilhelm Wundt
  - B. F. Skinner
  - Sigmund Freud

*ANSWER: a*

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46. Which of the following would both Carl Rogers and Abraham Maslow agree with?
- a. People have a basic need to fulfill their potential for personal growth.
  - b. Human behaviour is entirely shaped by environmental events.
  - c. People are controlled by genetic forces and do not tend to change across the life span.
  - d. Human behaviour is largely determined by primitive sexual urges.

*ANSWER: a*

47. Imagine that you are a psychologist, and your major goal is to help people reach their potential. Which school of psychology do you endorse with that statement?
- a. structuralism
  - b. humanism
  - c. psychoanalysis
  - d. behaviourism

*ANSWER: b*

48. Where was the first experimental psychology laboratory in Canada established?
- a. University of Toronto
  - b. Dalhousie University
  - c. University of Alberta
  - d. McGill University

*ANSWER: a*

49. When did psychology become a popular subject in universities in Canada?
- a. 1820s
  - b. 1850s
  - c. 1920s
  - d. 1950s

*ANSWER: b*

50. What is the focus of applied psychology?
- a. pure science research
  - b. unique qualities of people
  - c. practical problems
  - d. mental processes involved in acquiring knowledge

*ANSWER: c*

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51. Tracey is conducting research on children's learning styles, and her research is used to help create new teaching activities in daycare centres. Which category would Tracey's research fit into best?
- clinical psychology
  - applied psychology
  - behaviourism
  - functionalism

*ANSWER: b*

52. Which area of psychology is concerned with the diagnosis and treatment of psychological problems and disorders?
- applied psychology
  - clinical psychology
  - medical psychology
  - research psychology

*ANSWER: b*

53. Which of the following major historical events influenced the development of psychology as a profession?
- World War II
  - the Cold War of the 1950s
  - World War I
  - the Great Depression of the 1930s

*ANSWER: a*

54. What did many psychologists begin to specialize in after World War II?
- clinical psychology
  - experimental psychology
  - industrial psychology
  - research psychology

*ANSWER: a*

55. Which type of psychology best categorizes the research on bullying described in the Featured Study?
- behavioural psychology
  - cognitive psychology
  - experimental psychology
  - applied psychology

*ANSWER: d*

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56. Dr. LeBlanc became a psychologist in 1925. Which of the following types of psychologists is Dr. LeBlanc most likely to be?
- a. a counselling psychologist
  - b. an experimental psychologist
  - c. an applied psychologist
  - d. a clinical psychologist

*ANSWER: b*

57. Which pair of terms reflects the observation that “psychology returned to its roots” in the latter part of the 20th century?
- a. cognitive perspective and humanism
  - b. cognitive perspective and biological perspective
  - c. biological perspective and humanism
  - d. cultural perspective and biological perspective

*ANSWER: b*

58. Which psychological perspective emerged in the 1950s and 1960s, and reflected a renewed interest in the study of the mind or consciousness?
- a. the mental perspective
  - b. the philosophical perspective
  - c. the biological perspective
  - d. the cognitive perspective

*ANSWER: d*

59. If you were to ask a cognitive psychologist about her current research, which of the following is most likely to be the topic?
- a. unconscious emotional conflicts
  - b. problem solving
  - c. the influence of hormones on behaviour
  - d. common attitudes across cultures

*ANSWER: b*

60. Which type of psychologist is most likely to study decision making, reasoning, problem solving, and language?
- a. an evolutionary psychologist
  - b. a cognitive psychologist
  - c. a behavioural psychologist
  - d. a biological psychologist

*ANSWER: b*

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61. Which psychological perspective emerged in the 1950s and 1960s and reflected a renewed interest in the study of the physiological bases of behaviour?
- the philosophical perspective
  - the biological perspective
  - the mental perspective
  - the cognitive perspective

ANSWER: b

62. Which of the following psychological perspectives is most likely to focus on the interrelations among the mind, body, and behaviour?
- the biological perspective
  - the cognitive perspective
  - the behavioural perspective
  - the evolutionary perspective

ANSWER: a

63. According to the biological perspective, what must psychologists focus on in order to fully understand behaviour?
- the interrelations among the mind, body, and behaviour
  - internal mental events
  - the adaptive value of a behaviour
  - the role of the unconscious

ANSWER: a

64. Which of the following is partly responsible for Donald Hebb's tremendous impact on the field of psychology?
- his discovery that the hemispheres of the brain are specialized for different tasks
  - his collaborative work with Roger Sperry
  - his focus on the study of children's development
  - his book *The Organization of Behavior: A Neuropsychological Theory*

ANSWER: d

65. Imagine that you are a graduate student in Montreal in the 1940s. You work under the supervision of a very influential researcher who published *The Organization of Behavior*, which provided an integrative approach to psychology. Which of the following are you likely to be researching?
- history and systems of psychology
  - child development
  - brain mechanisms of behaviour
  - memory and problem solving

ANSWER: c

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66. Which of the following represents a major focus of psychology in both the 19th century and now?
- the role of unconscious conflicts
  - a focus on biological bases for behaviour
  - identifying the smallest units of conscious experience
  - striving for self-actualization

*ANSWER: b*

67. Which of the following is true of most research in psychology?
- The participants all experience the same experimental manipulation.
  - The research focuses on similarities among age groups.
  - The participants all come from the same cultural background.
  - The research focuses on differences between nations.

*ANSWER: c*

68. Which of the following has become the most recent focus of attention for psychologists?
- unconscious mechanisms
  - intelligence
  - emotions
  - culture

*ANSWER: d*

69. Which of the following is a psychologist who focuses attention on cultural diversity least likely to do?
- document differences among varying cultures
  - test the generality of earlier findings to other cultures
  - document similarities among varying cultures
  - identify deficiencies in other cultures

*ANSWER: d*

70. Based on the results of the Featured Study on bullying in Canadian schoolyards, which of the following situations is most typical of bullying?
- A student is bullied in isolation by someone with a reputation for aggression.
  - A group of students is bullied by a single individual.
  - A group of students is bullied by a much older group of students.
  - A student is bullied by someone, while other peers either take part or observe.

*ANSWER: d*

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71. What do evolutionary psychologists focus on when they study behavioural processes?
- adaptive value of the behaviour
  - influence on intelligence
  - hormonal substrate
  - cognitive correlates

*ANSWER:* a

72. Which area of psychology is consistent with the following hypothesis: “We learn quickly about dangerous situations because we have inherited traits that keep us safe and increase the likelihood that we will survive to reproduce.”
- humanism
  - cultural psychology
  - biological psychology
  - evolutionary psychology

*ANSWER:* d

73. Dr Tanaka hypothesizes that men and women have subtle differences in cognition because historically men and women have had different roles and challenges. This led to different traits and abilities being adaptive for men and women. What type of psychologist is Dr. Tanaka?
- a behaviourist
  - a cognitive psychologist
  - a humanist
  - an evolutionary psychologist

*ANSWER:* d

74. Terry is interested in doing research on creativity. She really wants to be able to help people develop their creativity, so that they can improve their own lives. Which type of psychology is Terry interested in?
- educational psychology
  - positive psychology
  - functional psychology
  - clinical psychology

*ANSWER:* b

75. In promoting positive psychology, what did Seligman suggest had been the historical focus of the field of psychology?
- pathology, weakness, and damage
  - genetic and physiological influences
  - animal, child, and disordered behaviour
  - behaviourism and psychoanalysis

*ANSWER:* a

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76. In addition to being a science, what is the other aspect of the field of psychology, according to your textbook's definition?
- a. career
  - b. profession
  - c. philosophy
  - d. art

*ANSWER: b*

77. Which of the following is NOT included in your textbook's definition of psychology?
- a. Psychology is a profession that solves practical problems.
  - b. Psychology is a science.
  - c. Psychology studies behaviour including physiological and cognitive processes.
  - d. Psychology primarily studies the unconscious mind.

*ANSWER: d*

78. Approximately what percentage of psychologists work in colleges and universities?
- a. 10 percent
  - b. 30 percent
  - c. 50 percent
  - d. 70 percent

*ANSWER: b*

79. Which of the following is NOT a major area of specialization in research psychology?
- a. industrial/organizational psychology
  - b. social psychology
  - c. personality psychology
  - d. psychometrics

*ANSWER: a*

80. What are currently the two largest areas of specialization in research-oriented psychology?
- a. clinical and counselling psychology
  - b. developmental and clinical psychology
  - c. social and counselling psychology
  - d. developmental and social psychology

*ANSWER: d*

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81. Which type of psychologist is concerned with changes in behaviour throughout the life span?
- a. a social psychologist
  - b. a developmental psychologist
  - c. a personality psychologist
  - d. a cognitive psychologist

*ANSWER: b*

82. A newspaper article reported a study by a psychologist in which the attitudes of men and women toward traditional sex roles were studied. Which type of psychologist most likely conducted the study?
- a. a developmental psychologist
  - b. a cognitive psychologist
  - c. a social psychologist
  - d. a counselling psychologist

*ANSWER: c*

83. Which area of research specialization in psychology studies many of the traditional topics in psychology (such as sensation, learning, and motivation)?
- a. psychometrics
  - b. experimental psychology
  - c. cognitive psychology
  - d. educational psychology

*ANSWER: b*

84. Jane's thyroid gland has become inactive, and, as a result, she is becoming lethargic and has gained weight. Which branch of psychology would include studies on these sorts of effects?
- a. medical psychology
  - b. physiological psychology
  - c. experimental psychology
  - d. clinical psychology

*ANSWER: b*

85. Which of the following would be most interesting to a psychologist who specializes in psychometrics?
- a. the development of techniques to monitor the functioning of the nervous system
  - b. explaining development across the life span
  - c. the development of psychological tests to measure intelligence or personality traits
  - d. conducting psychotherapy in a clinical setting

*ANSWER: c*

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86. Which of the following is NOT a major area of specialization of professional psychology?
- a. industrial and organizational psychology
  - b. counselling psychology
  - c. school psychology
  - d. personality psychology

*ANSWER: d*

87. What is the largest specialization in professional psychology?
- a. counselling psychology
  - b. industrial/organizational psychology
  - c. clinical psychology
  - d. developmental psychology

*ANSWER: c*

88. Which specialization in applied psychology is primarily involved in the treatment of less severe problems of everyday life?
- a. social psychology
  - b. counselling psychology
  - c. cognitive psychology
  - d. clinical psychology

*ANSWER: b*

89. Which of the following areas of specialization in psychology is involved with the development of curricula and the training of teachers?
- a. school psychology
  - b. experimental psychology
  - c. industrial/organizational psychology
  - d. educational psychology

*ANSWER: d*

90. Which psychologists work in schools and primarily help individual children having difficulties in school, or aid parents and teachers in solving school-related problems?
- a. educational psychologists
  - b. counselling psychologists
  - c. school psychologists
  - d. social psychologists

*ANSWER: c*

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91. As the result of a breakdown in communication, morale is low among employees in a local factory. Which type of psychologist would be most likely to be helpful in restoring communication and improving morale?
- a clinical psychologist
  - a social psychologist
  - an educational psychologist
  - an industrial/organizational psychologist

*ANSWER: d*

92. Which of the following professionals is a medical doctor?
- a physiological psychologist
  - a clinical psychologist
  - a psychiatrist
  - a counselling psychologist

*ANSWER: c*

93. Which of the following professionals could provide a prescription for antidepressant medication?
- a physiological psychologist
  - a clinical psychologist
  - a psychiatrist
  - a counselling psychologist

*ANSWER: c*

94. Your textbook describes seven unifying themes that provide continuity throughout psychology. What are the two primary divisions of those themes?
- psychology as a way of studying behaviour; the things that influence behaviour
  - psychology as a science; psychology utilizes theories
  - psychology as a science; psychology as a profession
  - psychology studies behaviour; people are subjective

*ANSWER: a*

95. Consider your textbook's unifying theme that "psychology is empirical." What does this theme imply that psychologists base their conclusions on?
- logical reasoning
  - direct observations
  - speculation
  - common sense

*ANSWER: b*

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96. Which of the following premises means that knowledge should be acquired through observation?
- philosophy
  - empiricism
  - subjectivity
  - introspection

*ANSWER:* b

97. Which of your text's unifying themes is emphasized by John Watson's proposal that psychology should study only observable behaviours and not consciousness?
- Behaviour is influenced by multiple causes.
  - Psychology should use theories.
  - Psychology should be empirical.
  - People's experience of the world is highly subjective.

*ANSWER:* c

98. What is a theory?
- the premise that knowledge should be acquired through logical reasoning
  - a statement of fact that describes a set of observations
  - the premise that knowledge should be acquired through observation
  - a system of interrelated ideas used to explain a set of observations

*ANSWER:* d

99. What does a scientist use to explain a set of observations?
- introspection
  - a theory
  - common sense
  - empiricism

*ANSWER:* b

100. Which of the following is implied by your textbook's unifying theme that "psychology is theoretically diverse"?
- Psychology has not, as yet, focused on empirical observations.
  - Psychology values all opinions, and treats different views as equally valid.
  - Psychology can only be described as a social science, rather than a pure science.
  - There are often several ways to interpret a set of observations.

*ANSWER:* d

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101. While Sigmund Freud might explain an individual's depression by focusing on the person's unconscious thoughts, a physiological psychologist might focus instead on a chemical imbalance in the brain. Which of your textbook's unifying themes is illustrated by this example?
- Heredit and environment jointly influence behaviour.
  - Psychology evolves in a sociohistorical context.
  - Psychology is empirical.
  - Psychology is theoretically diverse.

*ANSWER:* d

102. Which of the following is one of your text's unifying themes related to psychology as a field of study?
- Heredit and environment jointly influence behaviour.
  - Psychology evolves in a sociohistorical context.
  - Behaviour is determined by multiple causes.
  - People's experience of the world is highly subjective.

*ANSWER:* b

103. Which of the following is NOT one of the text's unifying themes related to psychology as a field of study?
- Psychology is empirical.
  - Heredit and environment jointly influence behaviour.
  - Psychology is theoretically diverse.
  - Psychology evolves in a sociohistorical context.

*ANSWER:* b

104. Which of the following is implied by your text's unifying theme that "psychology evolves in a sociohistorical context"?
- Knowledge should be acquired through observation.
  - Dense interconnections exist between what happens in psychology and in society at large.
  - Shared customs, beliefs, and values are transmitted socially across generations.
  - There are often several ways to interpret a set of observations.

*ANSWER:* b

105. Which of the following best describes the unifying theme that "psychology evolves in a sociohistorical context"?
- Social trends and values have an impact on personal behaviour.
  - Social trends and values have an impact on psychology.
  - Psychology and society both influence each other.
  - Psychological research and theories have an impact on society.

*ANSWER:* c

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106. During the last few decades, people have become more aware of the sexual abuse of children by adults, and psychologists have devoted more research attention to the long-term effects of childhood sexual abuse. These observations best reflect which unifying theme in psychology?
- People's experience of the world is highly subjective.
  - Psychology is theoretically diverse.
  - Behaviour is determined by multiple causes.
  - Psychology evolves in a sociohistorical context.

*ANSWER: d*

107. Taken as a whole, your text's review of the early schools of psychology best reflects which one unifying theme in psychology?
- Behaviour is shaped by cultural heritage.
  - Heredity and environment jointly influence behaviour.
  - Psychology is theoretically diverse.
  - People's experience of the world is highly subjective.

*ANSWER: c*

108. Which of the following is one of your text's unifying themes related to the subject matter of psychology?
- Psychology is empirical.
  - Psychology evolves in a sociohistorical context.
  - Heredity and environment jointly influence behaviour.
  - Psychology is theoretically diverse.

*ANSWER: c*

109. Which of the following is NOT one of your text's unifying themes related to the subject matter of psychology?
- Psychology is theoretically consistent.
  - Heredity and environment jointly influence behaviour.
  - Behaviour is determined by multiple causes.
  - People's experience of the world is highly subjective.

*ANSWER: a*

110. Which of the following reflects psychology's view of behaviour?
- It has an objective cause.
  - It has a single cause.
  - It has subjective causes.
  - It has multiple causes.

*ANSWER: d*

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111. Your text's two unifying themes of "our behaviour is shaped by our cultural heritage" and "heredity and environment jointly influence behaviour" both describe more specialized statements of which other theme?
- Psychology evolves in a sociohistorical context.
  - Psychology is theoretically diverse.
  - People's experience of the world is highly subjective.
  - Behaviour is determined by multiple causes.

*ANSWER:* d

112. Which of the following includes the widely shared customs, beliefs, values, norms, institutions, and other products of a community that are transmitted socially across generations?
- cultural heritage
  - legal heritage
  - religious heritage
  - sociohistorical heritage

*ANSWER:* a

113. If you normally use a knife, fork, and spoon to eat dinner, what does that reflect?
- adaptation
  - subjective thoughts concerning proper behaviour
  - objective thoughts concerning proper behaviour
  - cultural heritage

*ANSWER:* d

114. Which of the following phrases reflects your textbook's unifying theme of "heredity and environment jointly influence behaviour"?
- man versus nature
  - nature versus nurture
  - parent versus child
  - biology versus psychology

*ANSWER:* b

115. When John Watson said, "Give me a dozen healthy infants ..., " what was he arguing that behaviour is strongly influenced by?
- environmental factors
  - heredity factors
  - cultural factors
  - subjective factors

*ANSWER:* a

## Chapter 1 - The Evolution of Psychology

116. Which of your textbook's unifying themes is reflected in the fact that people sometimes see what they either "want to see" or "expect to see"?
- Heredity and environment jointly influence behaviour.
  - People's experience of the world is highly subjective.
  - Behaviour is shaped by cultural heritage.
  - People's experience of the world is empirical.

*ANSWER: b*

117. The unifying theme "people's experience of the world is highly subjective" most directly impacts which other unifying theme?
- Psychology is empirical.
  - Psychology evolves in a sociohistorical context.
  - Behaviour is shaped by cultural heritage.
  - Heredity and environment jointly influence behaviour.

*ANSWER: a*

118. Which of the following is NOT good advice for developing sound study habits?
- Find a place to study where you can concentrate.
  - Set up a schedule for studying.
  - Reward yourself for studying.
  - Avoid taking study breaks while studying.

*ANSWER: d*

119. How would you describe cramming for an exam as a study strategy for most students?
- ineffective
  - effective
  - beneficial
  - time efficient

*ANSWER: a*

120. Which of the following is the best advice when faced with a major assignment such as a term paper?
- Set aside a large block of time (e.g., an entire weekend) to devote to the assignment.
  - Break the assignment down into smaller components.
  - Start the assignment with a clear idea of your conclusion in mind.
  - Postpone beginning the assignment until shortly before the due date in order to incorporate information from the instructor's lectures into the project.

*ANSWER: b*

## Chapter 1 - The Evolution of Psychology

121. What is the SQ3R study system designed to promote?

- a. effective writing of themes and essays
- b. effective reading of course material
- c. effective test-taking strategies
- d. effective note taking of course lectures

*ANSWER: b*

122. What is the correct order of the steps in the SQ3R method?

- a. survey, question, read, review, recite
- b. summarize, question, read, recite, review
- c. survey, question, read, recite, review
- d. summarize, question, read, review, recite

*ANSWER: c*

123. Which type of student is the SQ3R method most helpful for?

- a. those with medium to high reading ability
- b. those with low to medium reading ability
- c. those with extremely low reading ability
- d. those with extremely high reading ability

*ANSWER: b*

124. Based on empirical studies, which of the following students would you expect to have the poorest attendance during the semester?

- a. Tom, who earned an A?
- b. Sue, who earned a B
- c. Ashley, who earned a C+
- d. Steve, who earned a D?

*ANSWER: d*

125. Which of the following is good advice for getting more out of class lectures?

- a. Concentrate on writing down the definitions of terms.
- b. Read along in the text as the instructor is lecturing.
- c. Read the relevant pages in the text before the lecture.
- d. Avoid interrupting the instructor by asking questions.

*ANSWER: c*

## Chapter 1 - The Evolution of Psychology

126. Which of the following is NOT good advice for improving your test-taking ability?
- a. Don't waste too much time pondering difficult-to-answer questions.
  - b. Review the test if you have time left after completing the test.
  - c. Check for hidden complexities in simple-looking questions.
  - d. Make sure you use your time efficiently and have enough time to complete the test.

ANSWER: c

127. Which of the following is good advice for taking multiple-choice exams?
- a. Remember that options that use broad generalizations such as "always, never, and must" tend to be correct.
  - b. Remember to continue to read all options even after you find your anticipated answer.
  - c. Remember that if "all of the above" is an option, it must be correct.
  - d. Remember that options that use qualified statements such as "often, sometimes, and may" tend to be incorrect.

ANSWER: b

128. Which questions should you answer first on an essay test?
- a. the ones that are worth the most points
  - b. the ones that are listed first on the exam
  - c. the ones that cover material that was most recently discussed in class
  - d. the ones that you know best

ANSWER: d

129. Which of the following is NOT part of critical thinking?
- a. working systematically toward a desired goal
  - b. originally believing that the stated position on a topic is incorrect
  - c. generating multiple solutions to problems
  - d. using principles of likelihood when dealing with probabilistic events

ANSWER: b

130. Which of the following seems to be true about the skills and attitudes involved in critical thinking?
- a. They naturally develop during early adulthood.
  - b. They develop only in individuals trained in scientific disciplines.
  - c. They need to be specifically taught to individuals.
  - d. They naturally develop during adolescence.

ANSWER: c

## Chapter 1 - The Evolution of Psychology

131. Which of the following is consistent with your textbook's suggestions for improving academic performance by improving your reading, getting more out of lectures, and improving test-taking strategies?
- subjective thinking skills
  - accepted thinking skills
  - critical thinking skills
  - objective thinking skills

*ANSWER: c*

132. Which of the following observations weakens the evolutionary explanation of gender differences in spatial abilities?
- There frequently was a sex-based division of labour in ancient hunting and gathering societies.
  - Males are encouraged to engage in activities that provide more practice with spatial tasks.
  - Males frequently perform slightly better than females on tasks involving mental rotation of images and navigation in space.
  - Females perform slightly better than males on tasks involving memory for locations.

*ANSWER: b*

133. Which of the following would you find if you were to compare and contrast the six contemporary theoretical perspectives in psychology described in your text?
- Psychoanalytic theory is the only approach that examines the role of thoughts and feelings.
  - The earlier approaches (pre-1950s) are very similar to one another, whereas the later approaches are dramatically different from one another.
  - The structuralist approach permeates all contemporary theoretical perspectives.
  - The psychoanalytic, humanistic, and cognitive perspectives are very different from the others with regard to focus on the human species.

*ANSWER: d*

134. When Alex trains raccoons to respond to symbols, with which of the following psychologists are his methods most consistent?
- Brenda Milner
  - Donald Hebb
  - B. F. Skinner
  - William James

*ANSWER: c*

135. Which type of psychologist would be LEAST interested in Alex's research?
- a cognitive psychologist
  - a humanist
  - a functionalist
  - a behaviourist

*ANSWER: b*

## Chapter 1 - The Evolution of Psychology

136. Which of the following types of psychologists would be MOST interested in Alex's research?

- a. a clinical psychologist
- b. a structuralist
- c. an evolutionary psychologist
- d. a humanist

*ANSWER: c*

137. Which of your textbook's themes is illustrated when Alex collects data in order to evaluate his ideas?

- a. Psychology is theoretically diverse.
- b. Psychology is empirical.
- c. Psychology evolves in a sociohistorical context.
- d. Behaviour is determined by multiple causes.

*ANSWER: b*

138. When Alex trains his students, which skill is he emphasizing?

- a. critical thinking
- b. structuralism
- c. positive psychology
- d. statistical training

*ANSWER: a*

## Chapter 1 - The Evolution of Psychology

1. What can we conclude from the case of Reena Virk, described at the beginning of Chapter 1, and the information about bullying by females presented in the Featured Study on bullying behaviour?
  - a. Bullying refers to only minor, non-violent behaviours, and the case of Reena Virk is about murder rather than bullying.
  - b. Although the rate of bullying by females is lower, it is increasing at a faster rate for girls than for boys, and females may use different “styles” of bullying.
  - c. Violent bullying is done by males and non-violent bullying is done by females.
  - d. Bullying is mainly a female behaviour, but males tend to get caught more often.

ANSWER: b

2. The term “psychology” comes from the Greek words *psyche* and *logos*. What does *logos* mean?
  - a. the study of a subject
  - b. the soul
  - c. logic
  - d. discipline

ANSWER: a

3. According to historians, when and where did the “birth” of psychology occur?
  - a. 1859 in England
  - b. 1879 in Germany
  - c. 1883 in the United States
  - d. 1909 in Austria

ANSWER: b

4. According to Wilhelm Wundt, what was the focus of psychology?
  - a. to understand functions of behaviour
  - b. to understand unconscious motivation
  - c. the scientific study of observable behaviour
  - d. the scientific study of conscious experience

ANSWER: d

5. What did Wilhelm Wundt believe the focus of psychology should be?
  - a. studying stimulus-response associations
  - b. questioning the nature of existence
  - c. examining people’s awareness of their immediate experience
  - d. determining people’s unconscious motivation for behaviour

ANSWER: c

## Chapter 1 - The Evolution of Psychology

6. Who established the first psychological research laboratory in the United States and launched that country's first psychology journal?
- William James
  - G. Stanley Hall
  - John Watson
  - Edward Titchener

*ANSWER:* b

7. Who was the first president of the American Psychological Association (APA)?
- G. Stanley Hall
  - John Watson
  - William James
  - Sigmund Freud

*ANSWER:* a

8. What is the world's largest organization devoted to the advancement of psychology?
- The Structuralists
  - Western Psychological Society
  - World Psychology Organization
  - American Psychological Association

*ANSWER:* d

9. What were the first two major schools of psychology?
- functionalism and behaviourism
  - behaviourism and psychoanalytic theory
  - behaviourism and Gestalt psychology
  - structuralism and functionalism

*ANSWER:* d

10. Which school of psychology focused on identifying and examining the fundamental components of conscious experience, such as sensations, feelings, and images?
- humanism
  - structuralism
  - functionalism
  - behaviourism

*ANSWER:* b

## Chapter 1 - The Evolution of Psychology

11. Which type of psychologist was most likely to use the technique of introspection?
- structuralist
  - behaviourist
  - cognitive
  - humanist

*ANSWER:* a

12. Mariska is participating in a study in which she is asked to carefully observe and report her conscious reactions to several stimuli. Which type of psychologist is most likely to conduct a study like this?
- structuralist
  - humanist
  - behaviourist
  - psychoanalytic

*ANSWER:* a

13. Isabel is listening to a piece of classical music and recording all her feelings and impressions as she experiences them. Which school of psychology was most well-known for using this sort of technique?
- humanism
  - structuralism
  - functionalism
  - behaviourism

*ANSWER:* b

14. In an attempt to learn something about his conscious experience, William looked at an abstract painting and wrote down all of his impressions as they came to him. What is the biggest limitation to this method?
- It relies on sensation and perception.
  - It is overly objective and empirical.
  - The experiences cannot be verified.
  - There is no test-retest reliability.

*ANSWER:* c

## Chapter 1 - The Evolution of Psychology

15. Dr. Asgaard believes that in order to fully understand complex processes, such as auditory processing, it is first necessary to understand all the separate component parts. Which of the following psychologists would be most likely to share Dr. Asgaard's views?
- Ivan Pavlov
  - Carl Rogers
  - William James
  - Edward Titchener

*ANSWER:* d

16. Which of the following modern fields in psychology is closest to the school of psychology known as structuralism?
- sensation and perception
  - evolutionary psychology
  - clinical psychology
  - social psychology

*ANSWER:* a

17. Which of the following schools of psychology focused on understanding the purpose of behaviour?
- structuralism
  - functionalism
  - neodynamism
  - behaviourism

*ANSWER:* b

18. Which of the following statements is most likely to be made by a researcher who studies pain perception from a functionalist perspective?
- We can understand pain perception only if we understand the unconscious processes that initiate the sensation of pain.
  - We can study pain only by observing the outward expression of pain in response to different stimuli.
  - We can study pain only if all the component parts that make up the experience of pain are understood.
  - We can understand pain perception only if we understand the role of pain in human survival and adaptation.

*ANSWER:* d

## Chapter 1 - The Evolution of Psychology

19. Which of the following theorists most heavily influenced the functionalist pioneer, William James?

- a. Charles Darwin.
- b. Sigmund Freud
- c. B.F. Skinner
- d. John Watson

*ANSWER:* a

20. Which school of psychology stressed that psychology should study the purpose of consciousness rather than the individual components of consciousness?

- a. psychoanalysis
- b. structuralism
- c. Gestalt psychology
- d. functionalism

*ANSWER:* d

21. Dr. Smythe believes that in order to fully understand complex processes, such as taste, it is necessary to understand the role that taste plays in survival, not the elementary components that combine to produce taste sensations. With which school of thought are Dr. Smythe's views most consistent?

- a. structuralist approach
- b. behaviourist approach
- c. functionalist approach
- d. psychoanalytic approach

*ANSWER:* c

22. Dr. Ramos believes that it is not possible to fully understand emotions unless we understand the role that emotions play in survival and adaptation. With which theorist are Dr. Ramos's views most consistent with?

- a. Ivan Pavlov
- b. Carl Rogers
- c. Edward Titchener
- d. William James

*ANSWER:* d

## Chapter 1 - The Evolution of Psychology

23. What is the term used by William James to describe a continuous flow of thoughts?
- phenomenological flow
  - stream of consciousness
  - transcendental meditation
  - existential awareness

*ANSWER: b*

24. Which of the following is a concept that is LEAST associated with functionalism?
- mental testing
  - elements of consciousness
  - stream of consciousness
  - adapting to the environment

*ANSWER: b*

25. Which of the following was an early approach in psychology that fostered the development of modern-day applied psychology?
- behaviourism
  - functionalism
  - pragmatism
  - structuralism

*ANSWER: b*

26. Which of the following areas of study was pioneered by functionalists?
- psychophysics
  - sensation and perception
  - introspective analysis
  - mental testing

*ANSWER: d*

27. Who was the first woman to receive a Ph.D. in psychology?
- Mary Calkins
  - Anna Freud
  - Margaret Washburn
  - Leta Stetter Hollingworth

*ANSWER: c*

## Chapter 1 - The Evolution of Psychology

28. What is Leta Stetter Hollingworth most well-known for?
- debunking theories that proposed that women are inferior to men
  - founding one of the early psychology laboratories in America
  - being the first woman to receive a Ph.D. in psychology
  - being the first woman president of the American Psychological Association

ANSWER: a

29. Which psychologist proposed that the study of consciousness should be replaced by the study of behaviour?
- G. Stanley Hall
  - John B. Watson
  - Sigmund Freud
  - Abraham Maslow

ANSWER: b

30. Which theoretical orientation insisted that observations be verifiable?
- behaviourism
  - functionalism
  - psychoanalysis
  - structuralism

ANSWER: a

31. With which of the following statements would a behaviourist agree?
- Psychology should be the science of observable behaviour.
  - Behaviour can be explained only in terms of phenomenology, that is, an individual's interpretation of experience.
  - In order to understand behaviour, one must understand the motives behind the behaviour.
  - Conscious experiences can be studied in an objective, precise way.

ANSWER: a

32. Which of the following did John B. Watson argue that psychologists should do?
- confine their work to people who are diagnosed as mentally ill
  - use the method of introspection to establish the structural aspects of consciousness
  - abandon the study of consciousness
  - concern themselves with the intentionality of behaviour

ANSWER: c

## Chapter 1 - The Evolution of Psychology

33. According to John Watson, by which of the following is behaviour governed, primarily?

- a. personal motives
- b. heredity
- c. environment
- d. unconscious desires

*ANSWER: c*

34. With which of the following statements would strict behaviourists most likely agree?

- a. The primary causes for human behaviour are unknown.
- b. Human behaviour is caused primarily by environmental factors.
- c. Human behaviour is caused primarily by inherited factors.
- d. Human behaviour is caused primarily by equal contributions of inherited and environmental factors.

*ANSWER: b*

35. What did Watson state that psychologists should study?

- a. only the things that people or other animals do, because those are observable behaviours
- b. only the things that people do as a result of experience, because reflexes are not valid behaviours
- c. things that people do, think, and feel
- d. only the things that people think and feel, because those are psychological processes

*ANSWER: a*

36. What is another name for the behavioural approach in psychology?

- a. structuralism
- b. applied psychology
- c. Gestalt psychology
- d. stimulus-response psychology

*ANSWER: d*

37. Ariadne believes that individuals learn to be either aggressive or non-aggressive as a result of the experiences they have. With which type of psychology are Ariadne's views most consistent?

- a. functionalist
- b. structuralist
- c. psychoanalytic
- d. behaviourist

*ANSWER: d*

## Chapter 1 - The Evolution of Psychology

38. Lynelle teases her brother and then he starts crying. If you describe the teasing as a stimulus, and the crying as a response to that stimulus, what type of analysis are you conducting?

- a. structuralist
- b. behaviourist
- c. psychoanalytic
- d. functionalist

*ANSWER:* b

39. Which school of psychology was most responsible for the rise of animal research in psychology?

- a. structuralism
- b. psychoanalysis
- c. behaviourism
- d. Gestaltism

*ANSWER:* c

40. If Dr. Scott chooses to conduct experiments with animals in order to exert more experimental control over the study, which type of researcher is Dr. Scott?

- a. psychoanalytic
- b. behaviourist
- c. structuralist
- d. Gestaltist

*ANSWER:* b

41. Dr. Tsang is a psychologist who conducts research on the effects of reward on maze learning in rats. Which type of psychologist is Dr. Tsang?

- a. behaviourist
- b. structuralist
- c. Gestaltist
- d. psychoanalytic

*ANSWER:* a

## Chapter 1 - The Evolution of Psychology

42. Which of the following statements best reflects the main advantage of conducting psychological research with animals?
- a. With research on animals, there are no ethical issues to be concerned with.
  - b. In their biological makeup, animals are fundamentally similar to humans.
  - c. A researcher can exert more control over an animal than over a human subject.
  - d. It is much cheaper to conduct research on animals than on humans.

*ANSWER: c*

43. Sigmund Freud developed an innovative procedure for treating people with psychological problems. What did he call this procedure?
- a. rational-emotive therapy
  - b. behaviour modification
  - c. primal therapy
  - d. psychoanalysis

*ANSWER: d*

44. According to Sigmund Freud, what determines an individual's personality?
- a. strivings for superiority
  - b. forces in the unconscious
  - c. self-actualizing tendencies
  - d. forces in the environment

*ANSWER: b*

45. You are interviewing a new member of the psychology department for the university newspaper. The faculty member states: "Many times people are unaware of the unconscious motivations that drive their overt actions." Which theorist is this faculty member's view most similar to?
- a. Wilhelm Wundt
  - b. Carl Rogers
  - c. Ivan Pavlov
  - d. Sigmund Freud

*ANSWER: d*

## Chapter 1 - The Evolution of Psychology

46. What did Freud conclude are the dominant causes of psychological disturbances?
- conflicts between conscious desires and environmental constraints
  - personal conflicts existing at an unconscious level
  - unrealistic demands from family and friends
  - genetic predispositions to behave in a particular way

ANSWER: b

47. How did Freud's theories about human behaviour differ from prevailing viewpoints in the early 1900s?
- He proposed the existence of free will.
  - He saw people as not fully aware of the forces that control their behaviour.
  - He emphasized environmental forces on behaviour.
  - He saw abnormal behaviour as resulting from biological causes.

ANSWER: b

48. Why did many psychologists resist psychoanalysis?
- due to its use of introspection
  - due to its emphasis on unconscious motivation
  - due to its focus on the role of heredity
  - due to its explanations in terms of stimulus-response associations

ANSWER: b

49. Liserel is a graduate student who believes that the best approach to the study of psychology is to focus exclusively on the unconscious determinants of behaviour. Which perspective matches Liserel's views toward the study of psychology?
- humanistic
  - psychoanalytic
  - structuralist
  - cognitive

ANSWER: b

50. Which of the following do behaviourism and psychoanalytic theory have in common?
- an emphasis on the role of sexuality in behaviour
  - the implication that people are not necessarily in complete control of behaviour
  - the notion that unconscious motives have a major influence on behaviour
  - a resistance to the use of animal subjects in psychological research

ANSWER: b

## Chapter 1 - The Evolution of Psychology

51. Much like Freud, Skinner's views on human behaviour were controversial and often criticized. Which controversies were predominant for each of Freud and Skinner?
- Freud's focus on sexual motivation and Skinner's suggestion that free will was an illusion
  - Freud's focus on sexual motivation and Skinner's belief that maladaptive behaviour was biological in origin
  - Freud's insensitive treatment of patients and Skinner's violation of existing animal ethics rules
  - Freud's focus on conscious processes and Skinner's focus on unconscious processes

*ANSWER:* a

52. Which of the following statements about the current status of Freud's psychoanalytic theory is most accurate?
- Freud's views exert a tremendous influence on other disciplines, but not on psychology.
  - Freud's views have been largely abandoned and they exert relatively little, if any, influence on current mainstream psychology.
  - Many psychoanalytic concepts have filtered into the mainstream of psychology.
  - Freud's views exert a tremendous influence on developmental and abnormal psychology, but not on other areas of mainstream psychology.

*ANSWER:* c

53. Which psychologist took the position that organisms tend to repeat responses that lead to positive outcomes and tend not to repeat responses that lead to neutral or negative outcomes?
- Abraham Maslow
  - Carl Rogers
  - F. Skinner
  - Sigmund Freud

*ANSWER:* d

54. With which individual is B. F. Skinner most in agreement on the issue of internal mental events?
- Abraham Maslow
  - Sigmund Freud
  - John Watson
  - Wilhelm Wundt

*ANSWER:* c

## Chapter 1 - The Evolution of Psychology

55. Janet trained her dog to sit on command by rewarding the dog's behaviour of sitting with a dog biscuit and praise. Which psychological perspective's methods did Janet use?

- a. psychoanalysis
- b. humanism
- c. functionalism
- d. behaviourism

*ANSWER: d*

56. A study determines that rats can be trained to press a lever if lever pressing is followed by the presentation of food. Of the following theorists, who would be most likely to have devised this study?

- a. Wilhelm Wundt
- b. Abraham Maslow
- c. F. Skinner
- d. William James

*ANSWER: c*

57. You are interviewing a new member of the psychology department for the university newspaper. The faculty member states, "Sure, people have emotions and thoughts and dreams, but you don't have to study those things in order to predict behaviour." Which theorist's views are most similar to the views held by this faculty member?

- a. Sigmund Freud
- b. B. F. Skinner
- c. William James
- d. Carl Rogers

*ANSWER: b*

58. Which of the following is most likely to be studied by a behaviourist?

- a. animal training methods
- b. emotional reactions to trauma
- c. reaction time in response to complex words
- d. how children develop humour

*ANSWER: a*

## Chapter 1 - The Evolution of Psychology

59. Marissa wants to study people's emotional reactions to increases in temperature. Her classmate, Bernard, tells her that her study should focus on observable behaviours, rather than thoughts or feelings. Which psychological perspective is consistent with Bernard's advice?

- a. evolutionary
- b. psychodynamic
- c. humanist
- d. behavioural

*ANSWER: d*

60. Caroline conducts research in which she systematically changes some aspect of the environment and then measures changes in observable behaviour. Which psychological perspective is most consistent with Caroline's method?

- a. cognitive
- b. humanist
- c. behaviourist
- d. psychoanalytic

*ANSWER: c*

61. Which of the following is characteristic of Skinner's view of behaviourism?

- a. It focused on the importance of free will.
- b. It focused on the study of behaviour and its consequences.
- c. It encouraged speculative statements about consciousness.
- d. It included hypotheses about motives and goals.

*ANSWER: b*

62. Which of the following psychologists would have been most likely to say, "You think that you're in control of your own behaviour, but you're not truly in control."?

- a. B. F. Skinner
- b. Abraham Maslow
- c. Wilhelm Wundt
- d. Carl Rogers

*ANSWER: a*

## Chapter 1 - The Evolution of Psychology

63. What was the dominant school of thought in psychology during the 1950s and 1960s?

- a. behaviourism
- b. structuralism
- c. Gestaltism
- d. functionalism

*ANSWER:* a

64. Which of the following groups would be most likely to suggest that people can have complete control over their own destinies?

- a. psychoanalysts
- b. humanists
- c. behaviourists
- d. Gestaltists

*ANSWER:* b

65. Which school of psychology takes the most optimistic view of human nature?

- a. structuralism
- b. behaviourism
- c. humanism
- d. functionalism

*ANSWER:* c

66. Which type of psychologist would be LEAST likely to generalize from studies of animal subjects to human behaviour?

- a. evolutionary psychologist
- b. humanist
- c. cognitive psychologist
- d. behaviourist

*ANSWER:* b

## Chapter 1 - The Evolution of Psychology

67. Oliver is studying motivation in chimpanzees. His roommate believes that Oliver's research is only useful for understanding chimpanzees, and cannot generalize to humans. Which perspective does Oliver's roommate apparently take?
- a. cognitive
  - b. biological
  - c. humanistic
  - d. evolutionary

*ANSWER: c*

68. Which theoretical viewpoint is most closely associated with Carl Rogers and Abraham Maslow?
- a. cognitive approach
  - b. humanism
  - c. structuralism
  - d. biological approach

*ANSWER: b*

69. Which of the following statements is LEAST likely to be made by a humanist?
- a. Research on animals has no relevance to understanding human behaviour.
  - b. Humans have a basic need to fulfill their potential.
  - c. The behaviour of humans tends to be dictated by environmental circumstances.
  - d. Humans are unique.

*ANSWER: c*

70. What do humanists believe governs people's behaviour?
- a. unconscious sexual urges
  - b. outcomes of an individual's responses
  - c. biochemical processes
  - d. self-concepts

*ANSWER: d*

## Chapter 1 - The Evolution of Psychology

71. Micha tends to be very passive and allows people to take advantage of him. What would a humanist most likely say about Micha?
- Micha simply needs to take an assertiveness training class in which he can learn and practise assertive behaviours.
  - Micha should undergo analysis so that he can begin to resolve whatever unconscious conflict is at the root of his passivity.
  - Micha will find it difficult to change because he probably has deep-seated feelings of inferiority.
  - Micha can become more assertive once he begins to feel better about himself and recognizes that he has the ability to fulfill his potential.

*ANSWER:* d

72. Which of the following psychologists would be most likely to state that each person has a drive to grow and fulfill his or her potential?
- Sigmund Freud
  - B. F. Skinner
  - G. Stanley Hall
  - Abraham Maslow

*ANSWER:* d

73. Imagine that the editor of your local newspaper writes a column supporting a reduction in government intervention with more rights for individual citizens. The editor bases this argument on the assumption that people are rational beings who will fulfill their maximum potential as long as others do not infringe on their basic human needs. Which psychological perspective do this editor's views reflect?
- evolutionary
  - humanistic
  - behavioural
  - psychodynamic

*ANSWER:* b

74. According to humanists, why are animal studies of little relevance to understanding humans?
- Animals do not develop mental disorders.
  - Animals do not have a self-concept.
  - Animals have a much shorter period of development.
  - Animals cannot communicate their thoughts to us.

*ANSWER:* b

## Chapter 1 - The Evolution of Psychology

75. What has been humanism's most important contribution to psychology?
- the concept of free will
  - the method of introspection
  - innovative treatments for psychological problems
  - a focus on the measurable and verifiable aspects of behaviour

*ANSWER: c*

76. Which organization was established in 1939 to advance psychology as a science in Canada, and continues to play a vital role in the field?
- APA–Canada
  - Canadian Psychological Association (CPA)
  - Association of Canadian Experimental Psychologists (ACEP)
  - Canadian Society of Psychologists (CSP)

*ANSWER: b*

77. Which branch of psychology is concerned with everyday, practical problems?
- cognitive
  - developmental
  - applied
  - abnormal

*ANSWER: c*

78. Which of the following would be the focus of an applied psychologist?
- practical problems
  - construction of theory
  - development of imaging technology
  - experimental methods

*ANSWER: a*

79. Which of the following sounds LEAST like the work of an applied psychologist?
- finding ways to teach learning-disabled children
  - looking for ways to increase efficiency in an organization
  - treating someone with a phobia
  - studying basic learning processes in rats

*ANSWER: d*

## Chapter 1 - The Evolution of Psychology

80. Which of the following is most likely to be a clinical psychologist?
- a. Alrick, who treats patients with eye disorders
  - b. Beth, who helps organizations hire the best managers
  - c. Callum, who studies drugs that treat anxiety
  - d. Della, who leads group therapy sessions for survivors of trauma

ANSWER: d

81. Which branch of psychology is concerned with the diagnosis and treatment of psychological disorders?
- a. counselling psychology
  - b. developmental psychology
  - c. clinical psychology
  - d. humanistic psychology

ANSWER: c

82. Which type of psychologist would be the greatest help to you if you were having problems with depression?
- a. social psychologist
  - b. motivational psychologist
  - c. developmental psychologist
  - d. clinical psychologist

ANSWER: d

83. Michael is having problems relating to other people because he is very paranoid and experiences hallucinations. Which type of psychologist should Michael contact for help?
- a. physiological psychologist
  - b. clinical psychologist
  - c. developmental psychologist
  - d. experimental psychologist

ANSWER: b

84. Which type of applied psychology was most stimulated by World War II?
- a. industrial psychology
  - b. clinical psychology
  - c. educational psychology
  - d. neurological psychology

ANSWER: b

## Chapter 1 - The Evolution of Psychology

85. Which of the following was one of the first areas of applied psychology to develop?

- a. personnel psychology
- b. counselling psychology
- c. psychological testing
- d. sports psychology

*ANSWER: c*

86. Which of the following contributed most to the development of applied psychology?

- a. the advent of high-speed computers
- b. an increase in the number of people earning advanced degrees in psychology
- c. high demand for the screening of military recruits and treatment of traumatized war veterans
- d. an increase in public awareness of the symptoms of psychological disorders, and the rise of behaviourism

*ANSWER: c*

87. Which of the following applies to clinical psychologists but not academic psychologists?

- a. Clinical psychologists have Ph.Ds.
- b. Clinical psychologists do research.
- c. Clinical psychologists are behaviourists.
- d. Clinical psychologists are licensed.

*ANSWER: d*

88. Which of the following is LEAST likely to be included under the umbrella of applied psychology?

- a. cognitive psychology
- b. school psychology
- c. counselling psychology
- d. industrial/organizational psychology

*ANSWER: a*

89. Which of the following terms refers to the mental processes involved in acquiring knowledge?

- a. introspection
- b. application
- c. empiricism
- d. cognition

*ANSWER: d*

## Chapter 1 - The Evolution of Psychology

90. Which of the following is a relatively recent movement in psychology that has revived the old interest in mental and conscious events?
- a. psychoanalysis
  - b. cognitive psychology
  - c. physiological psychology
  - d. behavioural psychology

*ANSWER:* b

91. Which of the following individuals is most closely associated with the cognitive perspective on language?
- a. Noam Chomsky
  - b. B. F. Skinner
  - c. Abraham Maslow
  - d. David Buss

*ANSWER:* a

92. Which psychological approach contends that psychology must study internal mental events in order to fully understand behaviour?
- a. cognitive psychology
  - b. clinical psychology
  - c. developmental psychology
  - d. behaviourism

*ANSWER:* a

93. Which of the following is most likely to be studied by a cognitive psychologist?
- a. factors that determine group cohesiveness
  - b. whether a job incentive program is effective
  - c. play behaviour in preschool children
  - d. strategies used by students to solve puzzles

*ANSWER:* d

## Chapter 1 - The Evolution of Psychology

94. Programmers who were working on a chess-playing supercomputer asked a psychologist from their university for some help in working out the problem-solving algorithms they would be using. Which type of psychologist would be most likely to help with this project?
- structural psychologist
  - educational psychologist
  - behavioural psychologist
  - cognitive psychologist

*ANSWER: d*

95. Darnell is working on a computer system that will have full language-recognition capabilities. Which type of psychologist could probably give Darnell the most help in developing this computer system?
- clinical psychologist
  - cognitive psychologist
  - humanistic psychologist
  - behavioural psychologist

*ANSWER: b*

96. In approximately what year did the cognitive perspective surpass the behavioural perspective in influence, according to results from a recent study?
- 1920
  - 1950
  - 1970
  - 1990

*ANSWER: c*

97. Which of the following psychologists demonstrated that electrical stimulation of the brain could evoke emotional responses such as pleasure and rage in animals?
- Roger Sperry
  - James Olds
  - B.F. Skinner
  - Abraham Maslow

*ANSWER: b*

## Chapter 1 - The Evolution of Psychology

98. Annabel wants to investigate differences in the way language is processed by the brain hemispheres. Whose research should Annabel read?

- a. Roger Sperry
- b. Carl Rogers
- c. Alfred Adler
- d. John B. Watson

ANSWER: a

99. The Human Genome Project involves a large number of scientists who are trying to determine the biochemical nature of all the genes on each chromosome in the human body. These scientists come from a variety of areas, including psychology. Which type of psychologist is most likely to work on this project?

- a. behavioural
- b. biological
- c. clinical
- d. applied

ANSWER: b

100. Which of the following types of psychologist would be most likely to have a copy of Hebb's *The Organization of Behavior* on her bookshelf?

- a. a psychoanalyst
- b. an industrial/organizational psychologist
- c. a humanistic psychologist
- d. a neuroscientist

ANSWER: d

101. Which of the following pairs of theoretical perspectives is most likely to be associated with studies using animals?

- a. behavioural and biological
- b. psychoanalytic and cognitive
- c. clinical and psychoanalytic
- d. biological and clinical

ANSWER: a

## Chapter 1 - The Evolution of Psychology

102. Professor Vasquez believes that nearly all psychological disorders can ultimately be traced to abnormalities in brain chemistry. With which perspective are Professor Vasquez's beliefs most consistent?
- a. behavioural
  - b. biological
  - c. cognitive
  - d. clinical

ANSWER: b

103. What is the key to understanding the organization of behaviour, according to Donald Hebb?
- a. measurement of observable behaviour
  - b. introspection
  - c. analysis of unconscious conflicts
  - d. activity at the neuronal level

ANSWER: d

104. Research in neuroscience owes a great deal of its inspiration to Donald Hebb, who wrote the book *The Organization of Behavior: A Neuropsychological Theory*. What did Hebb theorize about?
- a. the importance of behaviourist models of learning for understanding how neurons work
  - b. the concept of cell assemblies, and the importance of neuronal processes for behaviour
  - c. the importance of unconscious experiences, and the role of cell assemblies for the execution of behaviour
  - d. the role of social interaction for the organization of the cortex during childhood

ANSWER: b

105. In which country has most of psychology's research historically been conducted?
- a. United States
  - b. Germany
  - c. England
  - d. Japan

ANSWER: a

106. Historically, which of the following groups has been used most often as subjects for psychological research?
- a. middle- and upper-class white males
  - b. lower-class males
  - c. lower-class males and females
  - d. middle- and upper-class white females

ANSWER: a

## Chapter 1 - The Evolution of Psychology

107. Approximately what percentage of Canada's population was born in another country?

- a. 5%
- b. 10%
- c. 15%
- d. 20%

*ANSWER:* d

108. A number of factors have contributed to the recent increased interest in research dealing with "cultural" variables in psychology. Which of the following is NOT one of these contributing factors?

- a. depersonalization of human beings by modern psychology
- b. various groups (such as civil rights groups and women's groups) arguing that society has paid little attention to human diversity
- c. increased ethnic diversity in North America
- d. increased contact with non-Western cultures due to advances in communication and travel

*ANSWER:* a

109. Which of the following is most likely a topic of study for a cross-cultural psychologist?

- a. how travel affects openness to experience in children
- b. how cognitive errors lead to racism
- c. determining the genes associated with skin colour
- d. whether people in different cultures solve puzzles in the same way, or differently

*ANSWER:* d

110. Which psychology approach examines behavioural processes in terms of their adaptive value for a species?

- a. physiological
- b. humanist
- c. clinical
- d. evolutionary

*ANSWER:* d

111. Professor Immel conducts research that examines whether people with particular personality traits have greater success with dating and reproduction. What type of psychological research does Professor Immel conduct?

- a. humanistic
- b. evolutionary
- c. cognitive
- d. behavioural

*ANSWER:* b

## Chapter 1 - The Evolution of Psychology

112. Which of the following is the most important aspect of natural selection?

- a. aggressive interactions with members of other species
- b. passing on genes to the next generation
- c. locating a source of food
- d. establishing a territory

*ANSWER: b*

113. In which of the following visual-spatial tasks do females tend to perform somewhat better than males, on average?

- a. map reading
- b. memory for locations
- c. maze learning
- d. mental rotation of images

*ANSWER: b*

114. Which early psychologist would be most likely to endorse the tenets of evolutionary psychology?

- a. Edward Titchener
- b. John Watson
- c. William James
- d. Wilhelm Wundt

*ANSWER: c*

115. When did evolutionary psychology emerge as a modern discipline?

- a. 1960s
- b. 1970s
- c. 1980s
- d. 1990s

*ANSWER: c*

116. Damion wants to investigate whether specific dating patterns among young adults are the result of evolved predispositions. With whom would Damion most likely choose to work with if he could work with a psychologist who has made a significant contribution in this area of research?

- a. David Buss
- b. B.F. Skinner
- c. Herbert Simon
- d. Carl Jung

*ANSWER: a*

## Chapter 1 - The Evolution of Psychology

117. If Dr. Laker is an evolutionary psychologist who studies nutrition and hunger, which of the following is a likely topic of study for Dr. Laker?
- a. Hunger in response to specific times of day when meals normally occur
  - b. Cravings associated with foods that are necessary for survival
  - c. The relationship between eating and depression
  - d. Body image associated with exposure to TV and magazine advertisements

*ANSWER:* b

118. Females tend to place more emphasis on potential mates' economic resources than do males. What would an evolutionary psychologist suggest is the main reason for this preference among modern females?
- a. Ancestral females with this preference got a larger territory.
  - b. Ancestral females with this preference could acquire more food.
  - c. Ancestral females with this preference had more mates.
  - d. Ancestral females with this preference had more offspring.

*ANSWER:* d

119. If an evolutionary psychologist were studying sleep and dreams, which of the following would be a likely topic?
- a. What is the symbolic meaning of dreams?
  - b. Do sleep patterns change across the life span?
  - c. Are sleep disorders controlled by environmental influences?
  - d. Does sleep benefit health and survival?

*ANSWER:* d

120. Which of the following statements best reflects the current thinking about evolutionary psychology?
- a. It is a simplistic rehash of ideas proposed by Charles Darwin over 140 years ago.
  - b. It is a widely accepted approach to the study of human behaviour.
  - c. It is a radical perspective supported by a small group of fringe scientists.
  - d. It is a thought-provoking, innovative perspective that is rapidly gaining influence.

*ANSWER:* d

121. What is the basic goal for the approach of positive psychology?
- a. have a positive impact on scientific fields outside psychology
  - b. create a more positive experience for psychologists' patients
  - c. treat all patients with positive or progressive methods
  - d. study the positive aspects of human behaviour and experience

*ANSWER:* d

## Chapter 1 - The Evolution of Psychology

122. Which of the following is one of the main areas of interest for positive psychologists?

- a. situations that facilitate health and well-being
- b. symptoms of common disorders
- c. acquisition of wealth and social status
- d. factors involved in making first impressions

*ANSWER:* a

123. Seligman believed that psychology was too focused on negative aspects of human behaviour, including pathology, weakness, damage, and suffering. Which new perspective within psychology did this inspire him to initiate?

- a. Gestalt psychology
- b. positive psychology
- c. optimistic psychology
- d. humanistic psychology

*ANSWER:* b

124. Which of the following is a criticism of the recent positive psychology approach?

- a. Although it claims to be positive, it is actually focused on very damaging aspects of human behaviour.
- b. Dividing human experience into “positive” and “negative” is oversimplified.
- c. The approach is just a restatement of behaviourist principles from decades ago.
- d. Positive psychologists refuse to acknowledge that negative traits exist, and this is counterproductive to progress.

*ANSWER:* b

125. Dr. Andrus studies the factors that predict good sleep habits and the ability to relax. She believes that both sleep and relaxation are key to living a balanced life, as well as being happy and productive. Which psychological approach does Dr. Andrus appear to take?

- a. positive
- b. psychoanalytic
- c. behaviourist
- d. cognitive

*ANSWER:* a

## Chapter 1 - The Evolution of Psychology

126. What is psychology, according to the definition that appears in your text?
- a school of thought and an occupation
  - a science and a profession
  - a theory and an academic discipline
  - a cognitive process and a philosophy

*ANSWER:* b

127. What is a key change that has occurred in psychology over the past few decades?
- Fewer psychologists now work in colleges and universities.
  - Psychologists have gone from being specialists to being generalists.
  - The number of clinicians is decreasing.
  - Psychology has become less applied in its focus.

*ANSWER:* a

128. Which of the following areas is considered an experimental area of psychology?
- clinical
  - perception
  - organizational
  - education

*ANSWER:* b

129. What kind of psychologist would focus on how aggressive behaviour changes as a function of age?
- social psychologist
  - behavioural psychologist
  - developmental psychologist
  - physiological psychologist

*ANSWER:* c

130. Which of the following is likely to be of most interest to a developmental psychologist?
- effects on children of being raised in a single-parent home
  - dynamics of small-group decision making
  - use of physical exercise as a means of combating depression
  - effect of anxiety on problem-solving behaviour

*ANSWER:* a

## Chapter 1 - The Evolution of Psychology

131. What area of psychology includes a specific focus on people who are elderly?

- a. developmental psychology
- b. psychometrics
- c. experimental psychology
- d. cognitive psychology

*ANSWER:* a

132. Chiwe is a graduate student whose major area of interest is social psychology. In which of the following would you expect that Chiwe is most interested?

- a. how people relate to each other and influence each other
- b. the internal factors that lead people to act consistently across a variety of situations
- c. the ways in which physical or genetic factors influence and determine behaviour
- d. the ways in which behaviour and mental processes change over a lifetime

*ANSWER:* a

133. Which of the following questions would a social psychologist be most likely to ask?

- a. How stable is personality over the life span?
- b. Why do we like some people and not others?
- c. What effect does anxiety have on test performance?
- d. Do people who are antisocial think differently than other people?

*ANSWER:* b

134. Dr. Evoy does research that has examined the behaviour of individuals when they are in groups, as well as when they are alone. She has found that people tend to conform to the opinion of a dominant person within a group, and that this opinion tends to be much different than the opinion that would form if the individual were alone.

Based on this information, which sort of psychologist do you think Dr. Evoy is?

- a. social psychologist
- b. developmental psychologist
- c. cognitive psychologist
- d. psychometrist

*ANSWER:* a

## Chapter 1 - The Evolution of Psychology

135. Which of the following is LEAST likely to conduct experiments?

- a. a social psychologist
- b. a psychometrist
- c. a psychiatrist
- d. a developmental psychologist

*ANSWER: c*

136. Which of the following areas of research in psychology is concerned with understanding the role of the endocrine system in the regulation of behaviour?

- a. cognitive psychology
- b. physiological psychology
- c. developmental psychology
- d. psychometrics

*ANSWER: b*

137. Phillip is a graduate student whose major area of interest is physiological psychology. What would Phillip be most interested in?

- a. the ways in which genetic factors influence and determine behaviour
- b. the internal factors that lead people to act consistently across a variety of situations
- c. how people relate to each other and influence each other
- d. the ways in which behaviour and mental processes change over a lifetime

*ANSWER: a*

138. Which of the following would an experimental psychologist be most likely to ask?

- a. What effect does reward have on learning?
- b. How do hormones affect behaviour?
- c. What are the stages of problem solving?
- d. Why do we like some people and not others?

*ANSWER: a*

139. What type of psychologist studies information processing and decision making?

- a. social
- b. psychometric
- c. cognitive
- d. educational

*ANSWER: c*

## Chapter 1 - The Evolution of Psychology

140. What would be of greatest interest to a cognitive psychologist?

- a. information processing
- b. adolescent identity crisis
- c. behaviour in small groups
- d. interpersonal attraction

*ANSWER:* a

141. Ramon is a graduate student whose major area of interest is cognitive psychology. What would Ramon be most interested in?

- a. short-term and long-term memory disruptions
- b. the internal factors that lead people to act consistently across a variety of situations
- c. brain regions associated with language
- d. how people relate to each other and influence each other

*ANSWER:* a

142. Marie is a graduate student whose major area of interest is personality psychology. What would Marie be most interested in?

- a. the internal factors that lead people to act consistently across a variety of situations
- b. how people relate to each other and influence each other
- c. the ways in which behaviour and mental processes change over a lifetime
- d. the ways in which physical or genetic factors influence and determine behaviour

*ANSWER:* a

143. Which type of psychologist would most likely be interested in developing a test that would allow him or her to predict how someone would respond across a variety of situations?

- a. cognitive psychologist
- b. developmental psychologist
- c. physiological psychologist
- d. personality psychologist

*ANSWER:* d

## Chapter 1 - The Evolution of Psychology

144. Which of the following areas of research in psychology is concerned with assessing individual differences, developing tests, and developing new statistical techniques?
- psychometrics
  - social psychology
  - cognitive psychology
  - educational psychology

*ANSWER:* a

145. Which of the following would a psychologist who specializes in psychometrics most likely be concerned with?
- counselling
  - animal experimentation
  - relationship between brain chemistry and behaviour
  - developing intelligence tests

*ANSWER:* d

146. Which of the following is a medical doctor who specializes in diagnosing and treating mental disorders?
- clinician
  - psychiatrist
  - clinical psychologist
  - psychometrist

*ANSWER:* b

147. Which of the following statements regarding the difference between a clinical psychologist and a psychiatrist is most accurate?
- Both clinical psychologists and psychiatrists receive medical training.
  - Clinical psychologists tend to take a non-medical approach to the treatment of psychological disorders.
  - Psychiatrists cannot prescribe drugs.
  - A clinical psychologist has a medical degree.

*ANSWER:* b

148. What degree does a psychiatrist typically have?
- MSc in psychology
  - medical degree
  - Ph.D. in pharmacology
  - doctorate in physiology

*ANSWER:* b

## Chapter 1 - The Evolution of Psychology

149. Which of the following areas is most likely to be classified as an applied area of specialization in psychology?
- counselling psychology
  - personality psychology
  - developmental psychology
  - experimental psychology

*ANSWER:* a

150. Which of the following areas is most similar to clinical psychology?
- personality psychology
  - social psychology
  - psychometrics
  - counselling psychology

*ANSWER:* d

151. Which of the following is primarily an applied area of psychology?
- social psychology
  - industrial/organizational psychology
  - cognitive psychology
  - physiological psychology

*ANSWER:* b

152. In which type of psychology would a psychologist work on trying to increase job satisfaction and productivity in a large company?
- counselling psychology
  - industrial and organizational psychology
  - clinical psychology
  - psychometrics

*ANSWER:* b

153. Which of the following would be expected of an industrial/organizational psychologist?
- providing group or individual psychotherapy
  - providing assistance to people struggling with everyday problems
  - testing and counselling children who are having difficulty in school
  - working to improve employee morale and attitudes

*ANSWER:* d

## Chapter 1 - The Evolution of Psychology

154. Which of the following would be expected of a clinical psychologist?
- study the effects of reward on learning
  - conduct psychotherapy
  - study the factors that motivate behaviour
  - examine the relationship between sleep deprivation and task performance

*ANSWER:* b

155. Psychology is based on systematic observation rather than pure reasoning or common sense. What is another way of saying this?
- Psychology is rational.
  - Psychology is empirical.
  - Psychology is behavioural.
  - Psychology is speculative.

*ANSWER:* b

156. Researchers in psychology have to “see it to believe it.” Which approach to knowledge is this orientation most consistent with?
- empiricism
  - humanism
  - structuralism
  - functionalism

*ANSWER:* a

157. Which of the early fields in psychology MOST emphasized the principle of empiricism?
- psychoanalysis
  - behaviourism
  - humanism
  - functionalism

*ANSWER:* b

158. What is the difference between the common-sense approach to human behaviour and the psychological approach?
- empiricism
  - the use of logic
  - the focus on neurological explanations
  - the rigour of peer review

*ANSWER:* a

## Chapter 1 - The Evolution of Psychology

159. Which of the following principles requires data and documentation?

- a. subjectivity
- b. multifactorial causation
- c. empiricism
- d. theoretical diversity

*ANSWER: c*

160. Which of the following qualifies as empirically based knowledge?

- a. logical consistency
- b. intuition
- c. observed actions
- d. insight

*ANSWER: c*

161. Which of the following is NOT characteristic of empiricism?

- a. observation
- b. documentation
- c. speculation
- d. skepticism

*ANSWER: c*

162. Which of the following statements is consistent with the idea that psychology is empirical?

- a. Conclusions should be guided by theories.
- b. Conclusions should be based on direct observation.
- c. Research should focus on underlying internal events.
- d. Reason and logic are primary to psychology.

*ANSWER: b*

163. Psychologists need to use agreed-upon measurement tools so that other researchers can objectively evaluate the results of the research. Which underlying theme does this aspect of psychology illustrate?

- a. Behaviour is determined by multiple causes.
- b. People's experience of the world is highly subjective.
- c. Psychology evolves in a sociohistorical context.
- d. Psychology is empirical.

*ANSWER: d*

## Chapter 1 - The Evolution of Psychology

164. Liam is reading a magazine article about a new “wonder drug” and finds himself wondering who participated in the study and what evidence the claims are based on. Which of the following ideas does Liam’s thinking illustrate?
- a. Sciences do not exist in a cultural vacuum.
  - b. Single-cause explanations are often inaccurate.
  - c. Motives and expectations can colour our experiences.
  - d. Information needs to be viewed with a certain degree of skepticism.

*ANSWER:* d

165. John Watson’s rejection of introspection and insistence upon laboratory methods is consistent with which of your text’s unifying themes?
- a. Psychology is empirical.
  - b. Heredity and environment jointly influence behaviour.
  - c. People’s experience of the world is highly subjective.
  - d. Psychology evolves in a sociohistorical context.

*ANSWER:* a

166. What is the term for a system of interrelated ideas used to explain a set of observations?
- a. empirical set
  - b. theory
  - c. hypothesis
  - d. sociohistorical context

*ANSWER:* b

167. Which of the following best describes what a theory is?
- a. explanation of unobservable phenomena
  - b. related speculations that are based on common sense
  - c. system of interrelated ideas used to explain some observation
  - d. string of unrelated observations

*ANSWER:* c

## Chapter 1 - The Evolution of Psychology

168. Dr. Kline takes an eclectic approach to treating psychological disorders. She often prescribes medications that influence neurotransmitter levels, but she also works with her clients to change their behaviour and help them understand the impact of social factors in their problems. Which underlying theme does Dr. Kline's approach to therapy illustrate?
- Differing theoretical perspectives can provide a more complete understanding of behaviour.
  - Motives and expectations can colour our experiences.
  - Unconscious motivation has little impact on overt behaviour.
  - Our cultural backgrounds exert a considerable influence over our behaviour.

*ANSWER:* a

169. In trying to understand the psychology of addiction, Dr. Jackson focuses on the neurochemical changes that occur, Dr. Fong focuses on the consequences that people experience for their behaviour, and Dr. Wenkle focuses on the cognitive processes that people use in choosing their actions. Which underlying theme does the different perspectives of these three professionals help to illustrate?
- People's experience of the world is highly subjective.
  - Psychology evolves in a sociohistorical context.
  - Psychology is empirical.
  - Psychology is theoretically diverse.

*ANSWER:* d

170. Which of the following is NOT a reason for psychology's theoretical diversity?
- Data can often be interpreted in several different ways.
  - Psychology lacks adequate objective data to support theory.
  - We need more than one theory to cover the variety of data available today.
  - Different theories focus on different aspects of behaviour.

*ANSWER:* b

171. One psychologist explains a phobia in terms of learning principles, whereas another looks to the unconscious for an explanation. What is most likely happening in this scenario?
- The two psychologists are using different theoretical perspectives.
  - The two psychologists are probably using different sociohistorical contexts.
  - Insufficient data have been collected to support either explanation.
  - One of the two psychologists is mistaken.

*ANSWER:* a

## Chapter 1 - The Evolution of Psychology

172. In the 1920s, there were many fundamental disputes between competing schools of thought in psychology.

Which unifying theme from your text do these disputes illustrate?

- a. Psychology evolves in a sociohistorical context.
- b. Psychology is empirical.
- c. People's experience of the world is highly subjective.
- d. Psychology is theoretically diverse.

*ANSWER:* d

173. In the late 19th century, psychology's rapid growth as a laboratory science was due, in part, to its fascination with which model discipline?

- a. sociology
- b. philosophy
- c. zoology
- d. physics

*ANSWER:* d

174. Freud's theory was based, in part, on prevailing values during his lifetime. Based on this idea, which of the following contexts influences psychology's development?

- a. hypothetical
- b. empirical
- c. multifactorial
- d. sociohistorical

*ANSWER:* d

175. In the 19th century, Wilhelm Wundt attempted to shape the new discipline of psychology along the lines of physics, because in his era, physics was admired as a "model" science. Which unifying theme from your text does Wundt's attempt to imitate physics illustrate?

- a. Behaviour is determined by multiple causes.
- b. Psychology evolves in a sociohistorical context.
- c. People's experience of the world is highly subjective.
- d. Psychology is theoretically diverse.

*ANSWER:* b

## Chapter 1 - The Evolution of Psychology

176. World War I and World War II stimulated the growth of psychology as a profession. Which unifying theme from your text does this influence illustrate?
- Psychology is empirical.
  - People's experience of the world is highly subjective.
  - Psychology is theoretically diverse.
  - Psychology evolves in a sociohistorical context.

*ANSWER:* d

177. The civil rights movement and the women's movement raised concerns about whether basic psychological principles could be applied to groups other than white males. Consequently, psychologists began to select samples of subjects that were more diverse for research studies. Which underlying theme does this change in practice illustrate?
- Motives and expectations can colour our experiences.
  - Science evolves in a sociohistorical context.
  - Theoretical diversity is an important component in science.
  - Behaviour is determined by multiple causes.

*ANSWER:* b

178. Which of the following is best supported by the fact that your performance in this course will be affected by both personal and situational factors?
- a multifactorial causation of behaviour approach
  - a psychoanalytic approach to explaining behaviour
  - an empirical explanation of behaviour
  - a sociohistorical explanation of behaviour

*ANSWER:* a

179. Lily believes that if all violent media programming were banned, aggressive behaviour would almost completely disappear. Which of the following themes suggests that many psychologists would disagree with Lily?
- Behaviour is determined by multiple causes.
  - Psychology evolves in a sociohistorical context.
  - Perception is often subjective.
  - Behaviour is shaped by cultural heritage.

*ANSWER:* a

## Chapter 1 - The Evolution of Psychology

180. Which of the following would you focus on if you were using a multifactorial approach to explaining your performance in a course?

- a. only those factors that you can measure objectively
- b. the features of your environment that control your reactions to stimuli
- c. both personal and situational factors
- d. the relationship between you and your professor

*ANSWER: c*

181. Zoe believes that Samantha has trouble forming long-term relationships because her parents were overly strict and because Samantha inherited a very stubborn personality. Which of the following views is this type of explanation for Samantha's current behaviour most consistent with?

- a. Heredity and the environment jointly influence behaviour.
- b. Perception is often subjective.
- c. Psychology is empirical.
- d. Behaviour is shaped by cultural heritage.

*ANSWER: a*

182. What does the concept of culture refer to?

- a. individuals' collective unconscious
- b. demographic characteristics of a population
- c. widely shared customs, beliefs, and values among members of a group
- d. genetic predisposition to behave in a particular way

*ANSWER: c*

183. Which of the following refers to widely shared customs, beliefs, values, and norms?

- a. ethnicity
- b. sociohistoric context
- c. culture
- d. psychometrics

*ANSWER: c*

## Chapter 1 - The Evolution of Psychology

184. Sunlin prepared a meal for his new girlfriend and she enjoyed it so much that she ate everything on her plate. Later she was surprised that he had found her behaviour somewhat insulting; she thought she was showing her appreciation. Which underlying theme does the couple's miscommunication illustrate in this case?
- Behaviour is determined by multiple causes.
  - Heredity and environment jointly influence behaviour.
  - Psychology evolves in a sociohistorical context.
  - Behaviour is shaped by our cultural heritage.

*ANSWER: d*

185. What are researchers attempting to describe when they talk about the distinction between nature and nurture?
- personality and preference
  - heredity and experience
  - behaviour and attitude
  - experience and environment

*ANSWER: b*

186. Dr. Escher believes that individuals may have a predisposition for some psychological disorders, but that the disorders will not develop unless there is some stressful event that acts as a trigger. Which underlying theme do Dr. Escher's views reflect?
- Psychology is theoretically diverse.
  - Behaviour is shaped by cultural heritage.
  - People's experience of the world is highly subjective.
  - Heredity and environment jointly influence behaviour.

*ANSWER: d*

187. Which of the following best characterizes people's understanding of reality?
- It is culturally determined.
  - It is highly objective.
  - It is highly subjective.
  - It is genetically determined.

*ANSWER: c*

## Chapter 1 - The Evolution of Psychology

188. Which theme is most consistent with the fact that Princeton students “saw” Dartmouth students engage in twice as many infractions as the Dartmouth students did in a Princeton-Dartmouth football game?
- reliance on empirical evidence
  - unconscious motivation
  - multifactorial causation of behaviour
  - subjectivity of perception

*ANSWER:* d

189. In criticizing the structuralists’ reliance on the method of introspection, William James argued that two people could view the same stimulus quite differently. Which unifying theme from your text does James’s argument illustrate?
- People’s experience of the world is highly subjective.
  - Psychology is empirical.
  - Psychology evolves in a sociohistorical context.
  - Heredity and environment jointly influence behaviour.

*ANSWER:* a

190. Rafael and Lydia met for a blind date. Rafael had been told by his best friend that Lydia was charismatic and vivacious. During their date, Lydia was friendly but she was quite shy and didn’t initiate much of the conversation. Still, Rafael thinks that Lydia is one of the most exciting people he has met, and he can’t wait to see her again. Which theme does Rafael’s reaction to his date with Lydia illustrate?
- Behaviour is determined by multiple causes.
  - Cultural heritage has a large impact on behaviour.
  - People’s experience of the world is highly subjective.
  - Unconscious motivation has little impact on overt behaviour.

*ANSWER:* c

191. Carly was in favour of the proposed convention centre; Colin was against the project. When Carly surveyed people she found that 70 percent of those she questioned were in favour of the project. Colin’s survey found that 75 percent of those he surveyed were against building the convention centre. Which idea does these differing survey results support?
- Motives and expectations can colour our experiences.
  - Sciences do not exist in a cultural vacuum.
  - Theoretical diversity is an important component in science.
  - Single-cause explanations are often inaccurate.

*ANSWER:* a

## Chapter 1 - The Evolution of Psychology

192. What is the scientific method designed to do?

- a. counteract subjectivity
- b. utilize subjectivity
- c. enhance subjectivity
- d. ignore subjectivity

*ANSWER:* a

193. Which of the following is the best advice for developing sound study habits?

- a. Make yourself comfortable in your study area by having your favourite music playing.
- b. Try to avoid interrupting your study time with breaks.
- c. Tackle simple, routine tasks before taking on larger tasks.
- d. Plan your study schedule in advance.

*ANSWER:* d

194. Diane has a cup of chocolate chips on her desk while she is studying and she eats one each time she finishes a page of notes. What does this tactic accomplish?

- a. It provides necessary glucose for Diane's brain.
- b. It causes a distraction that will ultimately disrupt Diane's learning.
- c. It leads Diane to rush through her studying.
- d. It provides an immediate reward to make up for the distant reward of a good grade.

*ANSWER:* d

195. Which type of psychology is consistent with the systematic use of rewards in developing effective study habits?

- a. functionalism
- b. humanism
- c. structuralism
- d. behaviourism

*ANSWER:* d

196. What is SQ3R?

- a. a study system designed to promote effective reading
- b. a technique designed to reduce test anxiety
- c. a method of preparing a study schedule
- d. a mnemonic device used to recall key information

*ANSWER:* a

## Chapter 1 - The Evolution of Psychology

197. Which of the following does the “Q” in the SQ3R method of studying refer to?

- a. quiet
- b. quiz
- c. question
- d. quantify

*ANSWER: c*

198. Which of the following is one of the “Rs” in the SQ3R method of studying?

- a. review
- b. retain
- c. remember
- d. reduce

*ANSWER: a*

199. Which of the following steps in the SQ3R method constitutes saying out loud the answers to key questions in your text?

- a. question
- b. recite
- c. survey
- d. review

*ANSWER: b*

200. Which of the following conclusions is supported by research comparing “successful” to “unsuccessful” students?

- a. Successful students and unsuccessful students attended class equally often.
- b. Successful students attended class more often than unsuccessful students.
- c. Successful students used an instructor’s office hours more than unsuccessful students.
- d. Successful students made better use of the textbook than did unsuccessful students.

*ANSWER: b*

201. Which of the following is most likely to be associated with poor grades, according to research findings?

- a. being absent from class
- b. changing answers on a multiple-choice test
- c. rewarding yourself for studying
- d. overlearning the material

*ANSWER: a*

## Chapter 1 - The Evolution of Psychology

202. According to research findings, which of the following has been found to be associated with higher grades?
- writing down everything your instructor says
  - attending class regularly
  - putting off studying until just before an exam
  - not changing answers on tests

*ANSWER:* b

203. Which of the following is good advice for getting more out of lectures?
- Look for hints or common clues from the instructor about what is important.
  - Resist the temptation to anticipate what is coming next.
  - Wait until after class for questions, rather than interrupting the lecture.
  - When you take notes, try to be a “human tape recorder.”

*ANSWER:* a

204. Which of the following is most likely to help you get more out of lectures?
- reading the text material after hearing the lecture
  - avoiding the temptation to anticipate what the lecturer will say next
  - trying to write down everything the lecturer says
  - asking questions as soon as you think of them

*ANSWER:* d

205. Which of the following is a counterproductive strategy for note taking?
- Trying to record the lecturer’s comments verbatim.
  - During the lecture, trying to anticipate what’s coming next and searching for deeper meanings.
  - Asking questions during the lecture.
  - When the material is especially complex, reading ahead on the topic to be covered in class.

*ANSWER:* a

206. Which of the following is typical of “testwise” students?
- a knack for identifying “trick” questions
  - being skilled at using clues contained within a test to improve their scores
  - being particularly knowledgeable about the subject matter being tested
  - tendency to score high on standardized tests

*ANSWER:* b

## Chapter 1 - The Evolution of Psychology

207. What do most people tend to do when changing answers on a multiple-choice test, according to research findings?
- change a right answer to a wrong answer
  - change a wrong answer to a right answer
  - change a right answer to a wrong answer and back again to the right answer
  - change a wrong answer to another wrong answer

*ANSWER:* b

208. Which of the following is good advice for someone about to take a multiple-choice test?
- Do the most difficult and time-consuming questions first.
  - Stick with your first answer.
  - Always read each question completely.
  - As you read the question, try to avoid the temptation to anticipate the answer.

*ANSWER:* c

209. What is suggested by the word “critical” in the term “critical thinking”?
- Effective critical thinkers tend to be judgmental of others’ views.
  - Thinking is essential to success in our culture.
  - Critical thinkers are vigilant about their thinking.
  - The skills of effective thinking are learned early in life.

*ANSWER:* c

210. Why are critical thinking skills sometimes called transcontextual skills?
- If you have critical thinking skills, you can teach them to others.
  - Context determines when these skills are necessary.
  - The skills allow you to determine the role of context in a given problem.
  - These skills are useful in a wide variety of situations.

*ANSWER:* d

211. Which skill is generally involved in the spatial tasks that males tend to do better than females?
- processing verbal directions to a specific location
  - identifying objects in a visual field
  - remembering locations
  - mentally rotating objects

*ANSWER:* d

## Chapter 1 - The Evolution of Psychology

212. Which of the following explanations is most likely to be used by an evolutionary psychologist to explain gender differences in spatial abilities?
- When they are young, males are more likely than females to be encouraged to engage in spatially oriented activities.
  - The principles of natural selection tend to operate differently in males and females.
  - Through evolution, males were classically conditioned to develop certain kinds of spatial abilities.
  - Division of labour between the sexes in hunting and gathering societies created different adaptations for males and females.

*ANSWER:* d

213. Which of the following questions should you ask if you wish to critically evaluate evolutionary hypotheses regarding gender differences in spatial abilities?
- Are there alternative explanations for the results, such as differences in experience between males and females?
  - Are there other differences between males and females that are more important, such as differences in intelligence?
  - Are there other data that confirm this difference, such as performance among professional athletes?
  - Are there ethical reasons that we should not conduct this research, such as the risk of stereotyping females?

*ANSWER:* a

214. Suppose that there is evidence that ancestral females travelled long distances to acquire food, or that males required good memory for locations in order to find their way home. Why would this evidence be important for the critical evaluation of hypotheses about evolved sex differences in spatial ability?
- This evidence runs counter to the hypothesized selective pressures that would have created existing sex differences.
  - This evidence supports the notion that these sex differences are learned.
  - This evidence is irrelevant because ancestral gender roles have no importance for understanding modern socialization processes.
  - This evidence is important for predicting what people in primitive societies will be able to do if they are tested for spatial abilities.

*ANSWER:* a

## Chapter 1 - The Evolution of Psychology

### Rhianna

Rhianna has decided to major in psychology. She is very interested in human behaviour and would like to have a career where she could help people. Rhianna takes the approach that people are very much influenced by their experiences. In fact, she's working with one of her professors on a research project in which they are looking at the effects of self-reward on study habits. Rhianna believes that she can take this knowledge and use it in other settings, like the workplace, in order to help people improve their productivity.

215. Which psychological approach is consistent with Rhianna's perspective that people are influenced by their experiences?
- a. cognitive
  - b. psychodynamic
  - c. behaviourist
  - d. sociocultural

ANSWER: c

216. Which of the following concepts is consistent with the research project that Rhianna is working on?
- a. Skinner's behaviour modification
  - b. Titchener's introspection
  - c. Rogers's humanism
  - d. Pavlov's stimulus-response learning

ANSWER: a

217. Which type of psychologist is Rhianna's professor most likely to be?
- a. clinical
  - b. structuralist
  - c. biological
  - d. educational

ANSWER: d

218. What sort of psychologist will Rhianna be if she uses her ideas to help people improve their productivity in the workplace?
- a. experimental
  - b. clinical
  - c. industrial/organizational
  - d. career

ANSWER: c

## Chapter 1 - The Evolution of Psychology

219. Which unifying theme is reflected by Rhianna's use of research to investigate her ideas about human behaviour?
- Psychology is theoretically diverse.
  - Psychology is empirical.
  - Behaviour is shaped by cultural heritage.
  - People's experience of the world is highly subjective.

ANSWER: b

220. Which of the following theorists is most closely associated with the notion that the subject matter of psychology should be the scientific study of conscious experience?
- William James
  - Wilhelm Wundt
  - Sigmund Freud
  - John B. Watson

ANSWER: b

221. Which of the following reflects the main focus of the school of psychology known as functionalism?
- understanding the purpose of behaviour
  - understanding the basic elements of consciousness
  - deriving general principles of learning
  - deriving general principles of the unconscious mind

ANSWER: a

222. Which school of psychology suggests psychologists should study ONLY what can be objectively observed?
- humanism
  - behaviourism
  - structuralism
  - functionalism

ANSWER: b

223. Which of the following theorists is most closely associated with the concept that unconscious motivations influence our overt behaviour?
- Carl Rogers
  - Wilhelm Wundt
  - B.F. Skinner
  - Sigmund Freud

ANSWER: d

## Chapter 1 - The Evolution of Psychology

224. Which of the following theorists stated that people do not have free will, because behaviour is fully controlled by external stimuli?
- B.F. Skinner
  - Sigmund Freud
  - Wilhelm Wundt
  - Carl Rogers

*ANSWER:* a

225. Which school of psychology emphasizes the unique qualities of individual people and suggests that we have a drive for personal growth?
- humanism
  - psychoanalysis
  - behaviourism
  - functionalism

*ANSWER:* a

226. During World War II, many academic psychologists were needed to serve other roles. Which of the following roles was most likely for a psychologist at that time?
- clinician
  - physician
  - teacher
  - military leader

*ANSWER:* a

227. Which of the following would LEAST likely be studied by a cognitive psychologist?
- how we remember things
  - how children develop language
  - how we perceive colour
  - how people reason to solve problems

*ANSWER:* c

228. Which of the following groups has traditionally been overrepresented in psychological research?
- upper-class women
  - ethnic minorities in Western society
  - white men
  - people from the urban working class

*ANSWER:* c

## Chapter 1 - The Evolution of Psychology

229. Which of the following “newer” areas of psychology is MOST similar to the “older” school of thought known as functionalism?
- a. evolutionary psychology
  - b. humanistic psychology
  - c. clinical psychology
  - d. positive psychology

*ANSWER:* a

230. Which of the following career settings is MOST common for a psychologist?
- a. elementary schools
  - b. colleges or universities
  - c. hospitals or clinics
  - d. private practice

*ANSWER:* d

231. Which of the following approaches do researchers in psychology take to address the fact that our experiences of the world are highly subjective?
- a. They also try to remain somewhat subjective.
  - b. They try to simplify their research problems.
  - c. They consistently apply the scientific method.
  - d. They emphasize the study of internal mechanisms.

*ANSWER:* c

232. If you reward yourself for achieving study goals, which of the following concepts are you applying?
- a. empiricism
  - b. positive psychology
  - c. unconscious motivation
  - d. behaviour modification

*ANSWER:* d

233. According to research, what proportion of crucial ideas from a lecture are found in the average student’s notes?
- a. nearly 80%
  - b. approximately 50%
  - c. less than 40%
  - d. no more than 25%

*ANSWER:* c

## Chapter 1 - The Evolution of Psychology

234. Discuss the contributions of structuralism and functionalism to the evolution of psychology as a discipline.

*ANSWER:*

Both perspectives reflect the early view that consciousness is the appropriate subject matter for the new science, but they differed in regard to how consciousness should be studied. With Wilhelm Wundt, the structuralists believed that consciousness should be broken down into its basic elements through introspection. This approach generated numerous laboratory studies of sensory and perceptual phenomena. Structuralism eventually died out due to the inconsistent results of introspective studies. Along with William James, the functionalists emphasized the adaptive purposes of consciousness, arguing that psychologists should look at the continuous flow of thought rather than its static elements. Its practical and applied focus generated advances in the study of mental testing, child development, and gender differences. Functionalism, too, gradually faded away, but left applied psychology and behaviourism as its enduring descendants.

235. Compare and contrast the psychoanalytic, behaviourist, and humanist assumptions about human nature.

*ANSWER:*

Psychoanalysts view humans as essentially “bad” (primitive, animalistic, sexual, and irrational) and unconsciously driven to behave in certain ways. This is a pessimistic view of humanity. Behaviourists view human nature as nonexistent. Rather, behaviour develops under the control of the environment. Since behaviour is regarded as conditioned reactions to observable stimuli, the implication is that there is no such thing as free will. Humanists view humans as essentially “good” and unique among species because they have free will (conscious and rational), a natural potential for growth, and a basic need to fulfill this potential. This is an optimistic view of humanity.

## Chapter 1 - The Evolution of Psychology

236. Provide a definition for “psychology,” and then describe the field of psychology by referring to at least three different areas of research and two different areas of applied psychology.

*ANSWER:*

Definition: Psychology is the scientific study of behaviour and the physiological and cognitive processes that underlie it, and it is also the profession that applies the accumulated knowledge of this science to practical problems. (This portion of the answer should probably be graded in terms of understanding the concept, rather than a word-for-word repetition of the text’s definition.)

Three distinct areas of research: (must describe three of the seven available)

Developmental: human development across the life span

Social: interpersonal behaviour and the influence of social forces on behaviour

Experimental: traditional core topics, sensation, perception, learning, motivation, and emotion

Physiological: examines the role of genetics, the nervous system, and biochemistry for behaviour

Cognitive: focus on higher mental processes like memory, reasoning, language, and information processing

Personality: consistency of behaviour across situations as a result of “personality”

Psychometrics: measurement of behaviour, mental testing, statistics

Two areas of applied psychology: (must describe two of the four available)

Clinical: evaluation, diagnosis, and treatment of serious mental disorders as well as less severe problems

Counselling: focus on assessment and treatment of people dealing with everyday problems such as difficulties with the family, marital difficulties, or problems with careers

Educational/School: creating, assessing, and training within the educational system; may provide some counselling for students

Industrial/Organizational: focus is on business or work environment, improving efficiency, morale, job satisfaction, and productivity

237. Your text identifies three unifying themes that relate to psychology as a field of study. Identify each of these themes and show how each theme might be relevant in investigating clinical depression.

*ANSWER:*

Psychology is empirical, is theoretically diverse, and develops in a sociohistorical context.

Answers to the remainder of this question will require students to come up with applications of these themes that go beyond the information in the text. Some points that might be covered include clearly defining depression and specifying the population to be observed and studied (empirical); looking for possible biological, social, and environmental causes of, or treatments for, depression (theoretically diverse); and changing perceptions of depression from a hidden disorder to one that has advertisements for treatments in magazines and on television (sociohistorical context).

## Chapter 1 - The Evolution of Psychology

238. Imagine that you have been asked to speak to a group of Grade 10 students who have signed up for a study skills seminar offered by a local youth group. Based on the information provided in the Personal Application, what are ten concrete points that you would make in your presentation?

*ANSWER:*

Good answers to this question should include positive advice (such as setting up a study schedule, rewarding studying and regular classroom attendance) and some “myth clarification” (such as “never changing answers on multiple-choice tests”).

239. The Critical Thinking Application in your text lists four skills that are exhibited by critical thinkers. Identify these four skills and show how they might be used by someone who was trying to decide whether to use a new miracle diet that is advertised on TV.

*ANSWER:* Critical thinkers

- understand and use the principles of scientific investigation. (How can the risks and benefits, or the effectiveness of the diet be determined?)
- apply the rules of formal and informal logic. (If this diet is effective, then why don't more people know about it?)
- carefully evaluate the quality of information. (What are the qualifications of the people promoting the diet? Are they trustworthy?)
- analyze arguments for the soundness of the conclusions. (Are the claims of the diet proponents supported by the evidence?)

240. According to Wilhelm Wundt, psychology's primary focus should be the scientific study of mental processes.

- a. True
- b. False

*ANSWER:* True

241. Functionalists relied heavily on the method of introspection to understand the nature and function of conscious processes.

- a. True
- b. False

*ANSWER:* False

242. A strict behaviourist would view nature as more important than nurture in determining an individual's observable responses to a given stimulus.

- a. True
- b. False

*ANSWER:* False

## Chapter 1 - The Evolution of Psychology

243. One of the main criticisms raised concerning both behaviourism and psychoanalytic theory is that these views are dehumanizing.

- a. True
- b. False

*ANSWER:* True

244. Cultural psychologists have determined that basic social and perceptual processes are identical across ethnic groups.

- a. True
- b. False

*ANSWER:* False

245. The goal of positive psychology is to better understand the adaptive, creative, and fulfilling aspects of life.

- a. True
- b. False

*ANSWER:* True

246. Psychiatrists typically have both a Ph.D. in psychology and an M.D. degree.

- a. True
- b. False

*ANSWER:* False

247. Empiricism means scientists draw conclusions based on documented observations.

- a. True
- b. False

*ANSWER:* True

248. The SQ3R method tends to be most beneficial for students who have below-average or average reading skills.

- a. True
- b. False

*ANSWER:* True

249. Empirical studies consistently indicate that, in the long run, changing answers on multiple-choice tests results in a lower overall test score.

- a. True
- b. False

*ANSWER:* False

## Chapter 1 - The Evolution of Psychology

250. The task of psychology, according to \_\_\_\_\_, is to investigate how the elements of consciousness are related to each other.

*ANSWER:* structuralism

251. The idea that psychology should only study observable events is the cornerstone of the school of psychology known as \_\_\_\_\_.

*ANSWER:* behaviourism

252. B. F. Skinner's conclusion that "free will is an illusion" was based on his belief that people are under the control of their \_\_\_\_\_.

*ANSWER:* environment  
external stimuli

253. The first applied arm of psychology to emerge was \_\_\_\_\_ psychology.

*ANSWER:* clinical

254. Noam Chomsky's work on language was part of a surge of interest in the \_\_\_\_\_ perspective that occurred in the 1950s and 1960s.

*ANSWER:* cognitive

255. Examining behaviour in terms of its adaptive value for a given species over a number of generations is consistent with the \_\_\_\_\_ approach to psychology.

*ANSWER:* evolutionary

256. A psychologist who studies attitude formation and change would probably be considered a \_\_\_\_\_ psychologist.

*ANSWER:* social

257. Apparently unrelated observations can sometimes be linked together and explained through the use of a well-constructed \_\_\_\_\_.

*ANSWER:* theory

258. Socially shared values and norms that are transmitted across generations are components of \_\_\_\_\_.

*ANSWER:* culture

259. According to modern cognitive psychologists, critical thinking has two main components: the cognitive component and the \_\_\_\_\_ component.

*ANSWER:* emotional  
affective

## Chapter 2 - The Research Enterprise in Psychology

1. Tina and Jake are conducting a study to look at what happens to skydivers when they jump out of an airplane. Tina is measuring the heart rates and cortisol levels of the participants, before and after a jump. Jake is interviewing the participants so that they can describe their experiences. Which of the following terms describes Jake's component of the study?
- qualitative
  - retrospective
  - theoretical
  - quantitative

*ANSWER:* a

2. Tina and Jake are conducting a study to look at what happens to skydivers when they jump out of an airplane. Tina is measuring the heart rates and cortisol levels of the participants, before and after a jump. Jake is interviewing the participants so that they can describe their experiences. Which of the following terms describes Tina's component of the study?
- qualitative
  - quantitative
  - retrospective
  - theoretical

*ANSWER:* b

3. Which science goal is a researcher pursuing by studying child development in order to help teachers develop better teaching methods?
- measurement and description
  - application and control
  - understanding and prediction
  - construction and revision

*ANSWER:* b

4. Which science goal is a researcher pursuing by studying stress reactions in elderly people in order to determine risk factors for subsequent heart attacks and depression?
- construction and revision
  - measurement and description
  - understanding and prediction
  - application and control

*ANSWER:* c

## Chapter 2 - The Research Enterprise in Psychology

5. Which science goal is a researcher pursuing by creating an operational definition of creativity?
- construction and revision
  - application and control
  - understanding and prediction
  - measurement and description

*ANSWER: d*

6. With which goal of science is scientists' work most closely associated when they attempt to explain WHY something happened?
- application and control
  - measurement and description
  - construction and revision
  - understanding and prediction

*ANSWER: d*

7. Which science goal is reflected in psychologists' hopes that their research will help to solve some practical problem?
- understanding and prediction
  - measurement and description
  - construction and revision
  - application and control

*ANSWER: d*

8. Which term refers to a tentative statement about the relationship between two or more variables?
- hypothesis
  - research method
  - cause
  - theory

*ANSWER: a*

9. Mrs. Sanjay, an elementary school teacher, believes that girls are smarter than boys. She predicts that the girls in her class will learn more than the boys during the school year. At the end of the year, her prediction could be supported or rejected. What would we call her prediction?
- a fact
  - a hypothesis
  - an opinion
  - a theory

*ANSWER: b*

## Chapter 2 - The Research Enterprise in Psychology

10. In terms of the scientific method, what are variables?
- factors that change unpredictably within a study
  - measures of variability within a study
  - measurable items that are controlled or observed in a study
  - factors that are affected by experimental manipulation

*ANSWER: c*

11. If Patrick hypothesizes that minor sleep deprivation will enhance his video-game playing skills, then what are the variables in his hypothesis?
- any factors, other than sleep deprivation, that affect his measurements
  - sleep deprivation and video-game skills
  - his scores on his favourite video games
  - varying amounts of sleep deprivation

*ANSWER: b*

12. What is a theory?
- a system of interrelated ideas used to explain a set of observations
  - an objective description of behaviour
  - the application of research to practical problems
  - a statement about the relationship between two or more variables

*ANSWER: a*

13. With which goal of science are scientific theories most directly associated?
- application and control
  - understanding and prediction
  - construction and revision
  - measurement and description

*ANSWER: b*

14. Dr. Tremblay is a clinical psychologist who notes that an unusually large number of depressed or anxious people tend to gain weight. She offers an explanation that the hormones associated with stress lead to changes in metabolism that cause weight gain. What is the term for her explanation?
- a variable
  - an educated opinion
  - a verifiable fact
  - a theory

*ANSWER: d*

## Chapter 2 - The Research Enterprise in Psychology

15. Theresa is going to conduct a study as part of her honours thesis for her psychology degree. What will her first step be if she follows the steps associated with the scientific method?
- develop a theory
  - formulate a testable hypothesis
  - select the research method and design the study
  - collect the data

*ANSWER: b*

16. In scientific investigations, a researcher must clearly outline the variables under study by precisely describing how they will be measured or controlled. What are these descriptions called?
- independent variables
  - objective definitions
  - operational definitions
  - dependent variables

*ANSWER: c*

17. Dr. McDougall is a researcher who measures blood alcohol level to determine intoxication. In this example, how is “blood alcohol level” being used?
- as a hypothetical variable
  - as an independent variable
  - as an operational definition
  - as a covariant

*ANSWER: c*

18. Theresa has decided to test whether listening to music while studying improves retention of the studied information. Now that she knows what she wants to test, what is the next step in the scientific method?
- selecting a research method and designing the study
  - collecting the data
  - formulating a testable hypothesis
  - analyzing the data and drawing conclusions

*ANSWER: a*

19. Psychologists use a variety of data collection techniques. Which of the following is well suited for studying attitudes?
- direct observations
  - psychological tests
  - physiological recordings
  - questionnaires

*ANSWER: d*

## Chapter 2 - The Research Enterprise in Psychology

20. Monica is conducting a study to determine whether there are IQ differences between people who go to private school and people who go to public school. Which data collection technique should she use?
- physiological recordings
  - questionnaires
  - psychological tests
  - direct observations

*ANSWER: c*

21. In the Featured Study by Dutton and Aron (1974), the authors hypothesized that an attractive woman (who was a research confederate) would be perceived as more attractive by men on a “fear-arousing” bridge, than by men on a “control” bridge. Further, if a man crossed the “fear-arousing” bridge prior to meeting a woman, he would be more likely to phone her later. In this study, what is the dependent variable?
- whether a male subject crossed a bridge, or not
  - the baseline attractiveness of the confederate
  - the “fear-arousing” bridge
  - whether the subjects phoned the confederate

*ANSWER: d*

22. In the Featured Study by Dutton and Aron (1974), the authors hypothesized that an attractive woman (who was a research confederate) would be perceived as more attractive by men on a “fear-arousing” bridge, than by men on a “control” bridge. Further, if a man crossed the “fear-arousing” bridge prior to meeting a woman, he would be more likely to phone her later. In this study, what is the independent variable?
- whether the subjects phoned the confederate
  - which bridge a subject crossed
  - the “control” bridge
  - the baseline attractiveness of the confederate

*ANSWER: b*

23. While researching the effects music listening has on study retention, Theresa has documented her own study habits and music listening, and has tested herself weekly for retention. As she continues using the scientific method, what is her next step?
- analyzing the data and drawing conclusions
  - selecting a research method and designing the study
  - reporting the findings
  - collecting the data

*ANSWER: a*

## Chapter 2 - The Research Enterprise in Psychology

24. Most typically, how do researchers report their findings?

- a. in a journal
- b. in a book
- c. by holding a press conference
- d. in a scientific magazine

*ANSWER: a*

25. What are the two main advantages of the scientific approach?

- a. the use of common sense, and easy acceptance of the research findings of others
- b. the use of common sense, and intolerance of error
- c. clarity, and easy acceptance of the research findings of others
- d. precision, and intolerance of error

*ANSWER: d*

26. With which major advantage of the scientific approach are operational definitions most closely associated?

- a. the commonsense approach
- b. intolerance of error
- c. clarity and precision
- d. tolerance of error

*ANSWER: c*

27. What are the two main types of research methods used in psychology?

- a. experimental and case study research methods
- b. descriptive/correlational and case study research methods
- c. descriptive and correlational research methods
- d. experimental and descriptive/correlational research methods

*ANSWER: d*

28. What research method is being used if a researcher manipulates a variable under carefully controlled conditions and observes whether any changes occur in a second variable?

- a. correlational method
- b. descriptive method
- c. experimental method
- d. observational method

*ANSWER: c*

## Chapter 2 - The Research Enterprise in Psychology

29. In the experimental method, the investigator manipulates a variable under carefully controlled conditions. What does the researcher do next?
- correlate the resulting behaviour
  - survey participants to learn their assessment of the variable
  - observe whether any changes occur in a second variable
  - observe behaviour in its natural environment

*ANSWER: c*

30. In experimental research, which variable is manipulated by the researcher so that its impact on another variable may be assessed?
- controlled variable
  - independent variable
  - extraneous variable
  - dependent variable

*ANSWER: b*

31. Theresa has conducted research on the effects listening to music has on study retention. In this case, what is "listening to music"?
- extraneous variable
  - dependent variable
  - independent variable
  - controlled variable

*ANSWER: c*

32. In experimental research, what is the variable that is measured because it is thought to be affected by the manipulation of another variable?
- independent variable
  - extraneous variable
  - controlled variable
  - dependent variable

*ANSWER: d*

33. In experimental research, which variable is measured during data collection?
- dependent variable
  - primary variable
  - independent variable
  - secondary variable

*ANSWER: a*

## Chapter 2 - The Research Enterprise in Psychology

34. If a researcher varies the loudness of music in a factory to observe its effect on the rate of productivity of the employees, what is the independent variable?
- loudness of music
  - factory setting
  - employees
  - rate of productivity

*ANSWER:* a

35. If a researcher varies the loudness of music in a factory to observe its effect on the rate of productivity of the employees, what is the dependent variable?
- loudness of music
  - rate of productivity
  - factory setting
  - the employees

*ANSWER:* b

36. Dr. Ostrofsky is investigating the effect of high room temperatures on aggressive behaviour in preschoolers. Half of the children are in a classroom where the temperature is 31°C (hot) and half are in a classroom where the temperature is 21°C degrees (normal). Dr. Ostrofsky measures the number of hitting incidents that occur in each classroom. In this study, what is the term for the temperature of the room?
- control group
  - dependent variable
  - independent variable
  - experimental group

*ANSWER:* c

37. Dr. Santiago is investigating the effect of warm room temperature on aggressive behaviour in preschoolers. Half of the children are in a classroom where the temperature is 31°C (hot) and half are in a classroom where the temperature is 21°C (normal). Dr. Santiago measures the number of hitting incidents that occur in each classroom. In this study, what is the term for the number of hitting incidents?
- control group
  - experimental group
  - independent variable
  - dependent variable

*ANSWER:* d

## Chapter 2 - The Research Enterprise in Psychology

38. In experimental research, what happens to subjects in the experimental group?
- They do not receive the dependent variable.
  - They receive some special treatment in regard to the independent variable.
  - They do not receive some special treatment in regard to the independent variable.
  - They receive the dependent variable.

*ANSWER:* b

39. In experimental research, which subjects receive some special treatment in regard to the independent variable?
- those in the observational group
  - those in the control group
  - those in the experimental group
  - those in the correlational group

*ANSWER:* c

40. In experimental research, which subjects do NOT receive some special treatment in regard to the independent variable?
- those in the correlational group
  - those in the observational group
  - those in the control group
  - those in the experimental group

*ANSWER:* c

41. In a study that examines the effects of stress on memory, which group would NOT be put under stress?
- the experimental group
  - the control group
  - the independent group
  - the dependent group

*ANSWER:* b

42. In a study that examines the effects of stress on memory, which group would be put under stress?
- the experimental group
  - the independent group
  - the control group
  - the dependent group

*ANSWER:* a

## Chapter 2 - The Research Enterprise in Psychology

43. In a study that examines the effects of a low-fat diet on mood, which group would receive a low-fat diet?
- the experimental group
  - the independent group
  - the dependent group
  - the control group

*ANSWER: a*

44. In a study that examines the effects of a low-fat diet on mood, which group would receive a normal diet?
- the experimental group
  - the independent group
  - the control group
  - the dependent group

*ANSWER: c*

45. What conditions differ between the experimental and control groups?
- nothing; conditions are perfectly controlled between the two groups
  - only the dependent variable
  - only the independent variable
  - both the dependent and independent variables

*ANSWER: c*

46. Dr. Engelhart is investigating the effect of high room temperature on aggressive behaviour in preschoolers. Half of the children are in a classroom where the temperature is 31°C (hot) and half are in a classroom where the temperature is 21°C (normal). Dr. Engelhart measures the number of hitting incidents that occur in each classroom. In this study, which group is in the hot classroom?
- the control group
  - the experimental group
  - the independent group
  - the dependent group

*ANSWER: b*

47. Dr. Wawanosh is investigating the effect of high room temperature on aggressive behaviour in preschoolers. Half of the children are in a classroom where the temperature is 31°C (hot) and half are in a classroom where the temperature is 21°C (normal). Dr. Wawanosh measures the number of hitting incidents that occur in each classroom. In this study, which group is in the classroom with the normal temperature?
- the control group
  - the independent group
  - the dependent group
  - the experimental group

*ANSWER: a*

## Chapter 2 - The Research Enterprise in Psychology

48. Dr. Ishtar is investigating the effect of music on the productivity of employees in a factory. Half of the employees listen to music while working and half do not listen to music. Dr. Ishtar measures the productivity of each employee. In this study, which group listens to music?
- the experimental group
  - the independent group
  - the dependent group
  - the control group

*ANSWER: a*

49. Dr. O'Hara is investigating the effect of music on the productivity of employees in a factory. Half of the employees listen to music while working and half do not listen to music. Dr. O'Hara measures the productivity of each employee. In this study, which group does NOT listen to music?
- the experimental group
  - the dependent group
  - the control group
  - the independent group

*ANSWER: c*

50. What do we call variables, other than the independent variable, that seem likely to influence the behaviour of subjects in a study?
- dependent variables
  - control variables
  - extraneous variables
  - random variables

*ANSWER: c*

51. A researcher tries to make sure that subjects in the experimental and control groups are very similar to each other. This is done in order to reduce the effects of which type of variables?
- independent variables
  - random variables
  - dependent variables
  - extraneous variables

*ANSWER: d*

## Chapter 2 - The Research Enterprise in Psychology

52. As part of a study examining the role of different teaching methods on children's math abilities, Dr. Garneau tested the children using a standardized math test. In Year 1, the standard teaching method was used. In Year 2, a new teaching method was used. In Year 1, the test was administered in October, near the beginning of the school year. In Year 2, the test was administered in May, near the end of the school year. Although Dr. Garneau's results suggest that children in Year 2 demonstrated more math skills than children in Year 1, why are Dr. Garneau's results not very useful?
- There was no control group.
  - Results due to teaching method are confounded by the time of year the children were tested.
  - Children in Year 2 had the benefit of a different teaching method, so you can't compare them to children in Year 1.
  - Different children were used in each group, and this is a confound.

*ANSWER:* b

53. What procedure would you use to ensure that experimental and control groups will be similar in most ways?
- Allow the control group to be larger than the experimental group.
  - Extensive interviewing and checklists allow you to document all potential differences.
  - Operational definitions of similarity must be created.
  - Random assignment allows groups to be fairly similar.

*ANSWER:* d

54. Which of the following is NOT a typical variation of the experimental method?
- using an experimental group only and no control group
  - manipulating more than one independent variable
  - using one group of subjects who serve as both the experimental group and as their own control
  - measuring more than one dependent variable

*ANSWER:* a

55. Tamara is conducting a study using two independent variables (music and lighting) and one dependent variable (blood pressure). Which of the following effects can she look for when she analyzes her data?
- effects of blood pressure on perception of music and lighting
  - effects of lighting on perception of music
  - interactive effects of music and lighting on blood pressure
  - interactive effects of blood pressure on perception of music and lighting

*ANSWER:* b

## Chapter 2 - The Research Enterprise in Psychology

56. Pamela is conducting a study examining test scores before and after memory training, and she will compare the results for men to results for women. What do we call the comparison of men's and women's results?
- correlation effects
  - between-subjects design
  - interaction effects
  - within-subjects design

*ANSWER:* b

57. Pamela is conducting a study examining test scores before and after memory training, and she will compare the results for men to results for women. What do we call the comparison of results before training to results after training?
- within-subjects design
  - correlation effects
  - between-subjects design
  - interaction effects

*ANSWER:* a

58. Which research method allows you to draw conclusions concerning cause-and-effect relationships?
- experimental method
  - correlational method
  - survey method
  - descriptive method

*ANSWER:* a

59. Compared to the other scientific research methods, what is the principal advantage of the experimental method?
- It allows for a description of behaviour.
  - It permits conclusions about cause-and-effect relationships.
  - It observes behaviour in its natural setting.
  - It can easily be used to study all research questions.

*ANSWER:* b

60. Which of the following is a disadvantage or limitation of the experimental research method?
- It frequently takes place under artificial circumstances.
  - The researcher has little control over the situation.
  - It does not allow for conclusions concerning cause-and-effect relationships.
  - It does not allow for a description of behaviour.

*ANSWER:* a

## Chapter 2 - The Research Enterprise in Psychology

61. Which of the following is a disadvantage or limitation of the experimental research method?
- The researcher has little control over the situation.
  - It does not allow for a description of behaviour.
  - It does not allow for conclusions concerning cause-and-effect relationships.
  - For practical or ethical reasons it cannot be used to study some research questions.

*ANSWER: d*

62. Which research method would likely be chosen when it is impractical to manipulate the variables of interest?
- an experimental method
  - a common-sense method
  - the logical method
  - a descriptive/correlational method

*ANSWER: d*

63. What do descriptive and correlational research methods allow researchers to do?
- exert precise control over the variables being studied
  - draw conclusions concerning cause-and-effect relationships
  - manipulate several variables at the same time
  - examine whether there is an association between variables being studied

*ANSWER: d*

64. What do naturalistic observations, case studies, and surveys all have in common?
- They involve manipulating the variables of interest in the study.
  - They show cause-and-effect relationships.
  - They take place in an artificial setting.
  - They involve describing behaviour.

*ANSWER: d*

65. What is the research method in which a researcher engages in careful recording of behaviour without intervening directly with the subjects?
- case study method
  - survey method
  - naturalistic observation method
  - correlation method

*ANSWER: c*

## Chapter 2 - The Research Enterprise in Psychology

66. What does the researcher do when using the naturalistic observation method?
- conduct an in-depth investigation of an individual subject
  - engage in careful surveillance of behaviour without intervening directly with subjects
  - manipulate a variable under carefully controlled conditions
  - use questionnaires or interviews to gather information about specific aspects of participants' behaviour

*ANSWER: b*

67. A researcher sits on a park bench and records the number of joggers who are wearing headphones. What research method is this?
- naturalistic observation method
  - experimental method
  - survey method
  - case study method

*ANSWER: a*

68. What is the research method in which a researcher conducts an in-depth investigation of an individual subject?
- case study method
  - survey method
  - naturalistic observation method
  - correlational method

*ANSWER: a*

69. What does the researcher do when using the case study method?
- manipulate a variable under carefully controlled conditions
  - use questionnaires or interviews to gather information about specific aspects of participants' behaviour
  - conduct an in-depth investigation of an individual subject
  - engage in careful observation of behaviour without intervening directly with subjects

*ANSWER: c*

70. If Dr. Conrad is interested in an in-depth study concerning the long-term consequences of serious injury on the psychological adjustment of a patient and his family, then which of the following research methods would Dr. Conrad be most likely to use?
- case study method
  - experimental method
  - naturalistic observation method
  - survey method

*ANSWER: a*

## Chapter 2 - The Research Enterprise in Psychology

71. For which of the following methods might a researcher employ a number of techniques such as interviews, direct observations, and psychological testing?
- a survey
  - naturalistic observation
  - a correlation
  - a case study

*ANSWER:* d

72. What is the research method in which a researcher uses questionnaires or interviews to gather information about specific aspects of behaviour in a sample of participants?
- naturalistic observation method
  - survey method
  - case study method
  - correlation method

*ANSWER:* b

73. What does a researcher do when using the survey method?
- conduct an in-depth investigation of an individual subject
  - manipulate a variable under carefully controlled conditions
  - use questionnaires or interviews to gather information about participants' behaviour
  - engage in careful observation of behaviour without intervening directly with subjects

*ANSWER:* c

74. If researchers were interested in studying common attitudes toward "animal rights issues," which of the following would they be most likely to use?
- a case study
  - a correlation
  - a survey
  - a naturalistic observation

*ANSWER:* c

75. What is the principal advantage of descriptive/correlational research methods?
- They allow the researcher a high level of control over the variables of interest.
  - They can examine research questions that because of practical and ethical reasons cannot be studied with other methods.
  - They permit conclusions concerning cause-and-effect relationships.
  - They often observe behaviour in artificial situations.

*ANSWER:* b

## Chapter 2 - The Research Enterprise in Psychology

76. Dr. Rosenfeld plans to study the relationship between people's smoking behaviour and their tendency to have minor physical illnesses (such as colds or the flu). Why might she be most likely to choose correlational research for this study?
- Correlational studies allow the researcher to draw strong cause-and-effect conclusions.
  - The university does not allow smoking in the psychology building.
  - It is not practical or ethical to manipulate people's smoking behaviour.
  - Correlational studies are always the "first choice" of researchers.

*ANSWER: c*

77. What is the principal disadvantage of the descriptive and correlational research methods?
- Because of practical or ethical reasons, they cannot be used to study some research questions.
  - They do not allow the researcher to describe behaviour.
  - They frequently observe behaviour in artificial situations.
  - Because researchers cannot control variables of interest, conclusions concerning cause-and-effect relationships are not appropriate.

*ANSWER: d*

78. What is the primary reason that descriptive and correlational research cannot determine conclusively that variables have a cause-and-effect relationship?
- The researcher observes behaviour under artificial situations.
  - The data collected frequently comes from direct observations or statements made by subjects.
  - Only an experimental group is used.
  - The researcher cannot control events or manipulate variables.

*ANSWER: d*

79. Henri wants to determine whether infant birth weight predicts the age at which children begin to walk and run. Which of the following designs would be most appropriate for this research?
- case study
  - naturalistic observation
  - experimental method
  - correlational method

*ANSWER: d*

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80. Eline wants to determine whether scented candles can help people relax. She plans to take two groups of students who have just finished difficult exams, and have one group sit in a room with scented candles while the other group sits in a room without scented candles. Both groups will be monitored for heart rate. Which type of design is Eline planning for her research?
- case study
  - correlational method
  - naturalistic observation
  - experimental method

*ANSWER: d*

81. What are descriptive statistics?
- numerical indexes of the degree of relationship between two variables
  - indicators of the probability that the observed findings are due to chance
  - calculations used to organize and summarize data
  - summaries used to interpret data and draw conclusions

*ANSWER: c*

82. Which of the following is NOT a measure of central tendency?
- mode
  - median
  - mean
  - medium

*ANSWER: d*

83. What is the term for the most frequent score in a distribution?
- mean
  - medium
  - median
  - mode

*ANSWER: d*

84. What is the median of the following distribution of scores: 1, 2, 3, 7, 7?
- 3
  - 4
  - 5
  - 7

*ANSWER: a*

## Chapter 2 - The Research Enterprise in Psychology

85. What is the mode of the following distribution of scores: 1, 2, 3, 7, 7?

- a. 3
- b. 4
- c. 5
- d. 7

*ANSWER:* d

86. What is the mean of the following distribution of scores: 1, 2, 3, 7, 7?

- a. 3
- b. 4
- c. 5
- d. 7

*ANSWER:* b

87. Which term describes the following distribution of scores: 1, 2, 3, 7, 7?

- a. symmetrical tendency
- b. negatively skewed
- c. non-central tendency
- d. positively skewed

*ANSWER:* b

88. Which measure of central tendency is most sensitive to (or most influenced by) extreme scores in a distribution?

- a. median
- b. medium
- c. mode
- d. mean

*ANSWER:* d

89. Which term is used to describe how much the scores in a data set differ from each other and from the mean?

- a. correlation
- b. mode
- c. variability
- d. central tendency

*ANSWER:* c

## Chapter 2 - The Research Enterprise in Psychology

90. Which of the following is an index of the amount of variability in a set of data?
- a. correlation coefficient
  - b. central tendency
  - c. statistical significance
  - d. standard deviation

*ANSWER: d*

91. If test scores for your midterm are normally distributed, what percentage of people scored higher than the mean?
- a. 66 percent
  - b. 50 percent
  - c. 33 percent
  - d. 25 percent

*ANSWER: b*

92. If your test score is at the 70th percentile, what proportion of the class got a higher score than you did?
- a. 3 percent
  - b. 7 percent
  - c. 30 percent
  - d. 70 percent

*ANSWER: c*

93. Which of the following statements illustrates a correlation between two variables?
- a. Scores on one variable are related to scores on the second variable.
  - b. Scores on either variable cause scores on the other variable.
  - c. Scores on one variable are different from the scores on the second variable.
  - d. Scores on one variable are independent from the scores on the second variable.

*ANSWER: a*

94. What do we call a numerical index of the degree of relationship between two variables?
- a. variable coefficient
  - b. experimental coefficient
  - c. correlation coefficient
  - d. causation coefficient

*ANSWER: c*

## Chapter 2 - The Research Enterprise in Psychology

95. If two variables have a positive correlation, then you should expect that low scores on one variable would predict which type of score on the other variable?
- a. a low score
  - b. a high score
  - c. a positive score
  - d. a negative score

*ANSWER:* a

96. As adults age, their physical strength declines. What type of correlation exists between age and physical strength?
- a. a strong correlation
  - b. a negative correlation
  - c. a weak correlation
  - d. a positive correlation

*ANSWER:* b

97. If there is a relationship between amount of coffee consumed daily and number of hours slept, such that people who drink a lot of coffee tend to sleep very little (and people who drink little coffee tend to sleep a lot), what correlation exists between coffee consumption and sleep?
- a. a negative correlation
  - b. a positive correlation
  - c. a decreasing correlation
  - d. an increasing correlation

*ANSWER:* a

98. What is the range of possible values for a correlation coefficient?
- a. between -10.00 and +10.00
  - b. between -1.00 and +1.00
  - c. between 0 and +1.00
  - d. between 0 percent and 100 percent

*ANSWER:* b

99. What does a large correlation coefficient (either positive or negative) indicate?
- a. A third factor or variable is responsible for the relationship between the two variables.
  - b. A change in one variable causes a change in the second variable.
  - c. The scores on the two variables are nearly identical.
  - d. One variable can be used to predict the other variable.

*ANSWER:* d

## Chapter 2 - The Research Enterprise in Psychology

100. Which of the following correlation coefficients indicates the strongest relationship between two variables?
- 1.51
  - .80
  - 0
  - +.50

ANSWER: b

101. Which of the following statements is NOT correct concerning the correlation coefficient?
- The strength of the relationship between the two variables is described by the mathematical value.
  - A value near zero indicates no relationship between the two variables.
  - High values indicate that the two variables have a cause-and-effect relationship.
  - The type of relationship between the two variables is described by whether the value is positive or negative.

ANSWER: c

102. If one variable can be reliably predicted from another variable, what can be said about the correlation between those two variables?
- It is strong.
  - It is weak.
  - It is negative.
  - It is positive.

ANSWER: a

103. If A and B are highly correlated, which statement most accurately describes the relationship between A and B?
- The score on A causes the score on B.
  - The score on B causes the score on A.
  - Both A and B are caused by a third variable.
  - The score on A can be used to predict the score on B.

ANSWER: d

104. Which pair of terms related to the goals of science is most clearly associated with the concept of correlation?
- description and understanding
  - understanding and prediction
  - description and prediction
  - prediction and application

ANSWER: c

## Chapter 2 - The Research Enterprise in Psychology

105. What are inferential statistics?

- a. data used to organize and summarize data
- b. numerical indexes of the degree of relationship between two variables
- c. calculations used to interpret data and draw conclusions
- d. indicators of the variability of a population under study

*ANSWER: c*

106. What do researchers use to determine whether the observed difference between the two groups in the study was large enough to support the hypothesis?

- a. descriptive statistics
- b. correlational statistics
- c. mathematical statistics
- d. inferential statistics

*ANSWER: d*

107. What does it mean when research results are said to be statistically significant?

- a. The observed findings are interesting.
- b. The observed findings are important.
- c. The probability that the observed findings are due to chance is very low.
- d. The probability that the observed findings are scientific is very high.

*ANSWER: c*

108. Which of the following is NOT a common methodological flaw to consider when evaluating scientific research?

- a. subject effect
- b. placebo effect
- c. social desirability bias
- d. sampling bias

*ANSWER: a*

109. What type of studies involves the repetition of a study to see whether the earlier results can be duplicated?

- a. duplication studies
- b. replication studies
- c. clarification studies
- d. verification studies

*ANSWER: b*

## Chapter 2 - The Research Enterprise in Psychology

110. If there are a lot of conflicting results on a particular topic, which of the following methods would allow all those results to be compared and analyzed as a whole?
- inferential statistics
  - meta-analysis
  - experiment
  - measures of central tendency

*ANSWER: b*

111. What is the term for the group of individuals actually observed in a research study?
- target group
  - population
  - demographic
  - sample

*ANSWER: d*

112. When a research project uses a sample that is not representative of the population from which it was drawn, what effect occurs?
- sampling bias
  - experimenter bias
  - response set
  - placebo effect

*ANSWER: a*

113. Dr. Arrabella surveyed students in his finance class about their attitudes concerning the Canada Pension Plan and concluded that young adults across Canada doubt that they will ever receive Canada Pension benefits. Why might his conclusion be flawed?
- He knew his subjects before he surveyed them.
  - His students were not a representative sample of young adults.
  - He did not survey the entire population of young adults.
  - His students were a random sample.

*ANSWER: b*

114. In scientific research, what is the result called when participants' expectations lead them to experience some change even though they received an empty, fake, or ineffectual treatment?
- experimenter bias
  - subject bias
  - the placebo effect
  - demand characteristics

*ANSWER: c*

## Chapter 2 - The Research Enterprise in Psychology

115. Dr. Coulombe is conducting an experiment on the effect of alcohol consumption on reaction time. Half of the subjects drink alcoholic drinks and half drink non-alcoholic versions of the same drinks. Which type of research flaw should be minimized by this research design?
- experimenter expectancy
  - self-report bias
  - the placebo effect
  - sampling bias

*ANSWER: c*

116. In which of the following studies would social desirability bias be most likely to affect results?
- a survey about water use and recycling habits
  - an experimental analysis of looking-times for a variety of faces
  - a naturalistic observation of shoppers in a mall
  - a correlational study examining the relationship between age and metabolism

*ANSWER: a*

117. In which of the scientific research methods are distortions in self-report most likely to be of concern to the researcher?
- survey method
  - correlational method
  - experimental method
  - naturalistic observation method

*ANSWER: a*

118. Todd is filling out a psychological test, and he doesn't understand a lot of the questions. He decides to just choose "all of the above" for every answer. What does this example illustrate?
- experimenter bias
  - halo effect
  - response set
  - social desirability bias

*ANSWER: c*

119. What is the term used to describe a situation where a researcher's expectations or preferences about the outcome of a study influence the results of the study?
- subject bias
  - the placebo effect
  - experimenter bias
  - the sampling effect

*ANSWER: c*

## Chapter 2 - The Research Enterprise in Psychology

120. Which of the following is a research strategy that minimizes the potential methodological problems associated with the placebo effect and experimenter bias?
- blind sample procedure
  - single blind procedure
  - neutral sample procedure
  - double blind procedure

*ANSWER: d*

121. If you were designing a study that would be run online, so that you would collect all your data over the Internet with participants that you never meet, which of the following research flaws would be minimized?
- sampling bias
  - response set
  - halo effect
  - experimenter bias

*ANSWER: d*

122. What is the primary ethical dilemma that psychologists encounter regarding the use of deception in research?
- whether the deception affects all participants equally
  - whether subjects believe the deception
  - whether there is a possibility of inflicting harm on subjects
  - whether deception is induced by the researcher or by participants

*ANSWER: c*

123. Which of the following statements regarding the use of deception in psychological research is FALSE?
- Participants in research involving the use of deception generally report that they enjoyed the experience.
  - Critics of deception believe that the deception may result in subjects becoming less trusting of others.
  - Critics of deception believe that the conclusions from studies involving deception are not valid.
  - Defenders of deception believe that some research questions can be studied only by using deception.

*ANSWER: c*

124. Which of the following is one of the Canadian Psychological Association (CPA) ethical principles?
- prohibition of payments for research participation, in order to avoid exploitation
  - prohibition of the use of deception in research
  - protection for the dignity, privacy, and personal liberty of research participants
  - detailed regulations regarding the appropriate housing and care of animals in research

*ANSWER: c*

## Chapter 2 - The Research Enterprise in Psychology

125. According to the ethical guidelines for psychological research with humans, if you agree to be a participant in a research study then which of the following must be true?
- You will not be exposed to harmful or dangerous treatments without your knowledge.
  - You waive the right to privacy.
  - You have to commit to participating in the entire research study.
  - You will not be exposed to deception.

*ANSWER:* a

126. According to the ethical guidelines for conducting psychological research with animals, what is the current position on exposing animals to harmful or painful procedures?
- It is justified if the research design requires the harmful or painful procedures.
  - It is justified for lower animals but not for primates.
  - It cannot be justified unless the potential benefits of the research are substantial.
  - It is never justified.

*ANSWER:* c

127. Which statement regarding the use of animals in psychological research is most accurate?
- While ethical principles govern the treatment of humans in research, there are no ethical principles for conducting animal research.
  - Animals are to be used in research if there is evidence that the results will benefit both humans and other animals.
  - Animals are used as subjects only for procedures that are too harmful for human participants.
  - Psychologists, if given a choice, always prefer to conduct animal research instead of human research.

*ANSWER:* b

128. The various methods and procedures used in conducting psychological research and evaluating the research of other psychologists are consistent with which unifying theme in psychology?
- Psychology is theoretically diverse.
  - Psychology is empirical.
  - Our behaviour is determined by multiple causes.
  - Our behaviour is shaped by our cultural heritage.

*ANSWER:* b

129. The double blind procedure was developed by researchers because of which unifying theme in psychology?
- Psychology is empirical.
  - Psychology evolves in a sociohistorical context.
  - Our behaviour is shaped by our cultural heritage.
  - Our experience of the world is highly subjective.

*ANSWER:* d

## Chapter 2 - The Research Enterprise in Psychology

130. What do we call a periodical that publishes technical and scholarly material in a specific field?

- a. magazine
- b. blog
- c. publication
- d. journal

*ANSWER: d*

131. Which of the following is true of most journal articles in psychology?

- a. They are descriptions of newly developed theories.
- b. They are reviews that summarize and reconcile the findings from a large number of studies.
- c. They are criticisms of previously published research.
- d. They are reports that describe original empirical studies.

*ANSWER: d*

132. Which of the following is NOT possible with the use of PsycINFO?

- a. searching for research articles authored by a specific individual
- b. searching for research articles related to a specific topic
- c. seeing online a complete version of a specific research article published in a journal
- d. seeing online a brief summary of a specific research article published in a journal

*ANSWER: c*

133. Which section of a journal article involving psychological research provides a brief summary to the research project?

- a. abstract
- b. introduction
- c. results
- d. discussion

*ANSWER: a*

134. Which section of a journal article describing psychological research contains the author's interpretation and evaluation of the data?

- a. conclusion
- b. references
- c. results
- d. discussion

*ANSWER: d*

## Chapter 2 - The Research Enterprise in Psychology

135. Which of the following is reflected by the organization or standard format of journal articles describing psychological research?
- the steps involved in conducting scientific research
  - the unifying themes of psychology
  - the preferences of the specific researcher
  - the goals of science

*ANSWER:* a

136. Jarrod explains his opinion against buying a certain model of car by noting that even though the model is popular and highly rated by numerous organizations, his cousin has that model and has had a lot of problems. How is Jarrod making his decision?
- He is basing his opinion on anecdotal evidence.
  - He is basing his opinion on firsthand information.
  - He is using the evidence-based decision-making procedure.
  - He is using critical thinking skills to reach an opinion.

*ANSWER:* a

137. What do we call Beth's prediction that exposure to strangers will increase heart rate?
- the hypothesis
  - the correlation
  - the methodology
  - the theory

*ANSWER:* a

138. What is the operational definition of a stress response in Beth's study?
- increase in heart rate
  - heart rate monitors
  - fear
  - exposure to strangers

*ANSWER:* a

139. What type of study is Beth conducting?
- experiment
  - case study
  - correlational study
  - naturalistic observation

*ANSWER:* a

## Chapter 2 - The Research Enterprise in Psychology

140. If Beth wants to determine whether there are significant differences between conditions in her study, which type of statistics should she use?
- a. measures of central tendency
  - b. descriptive statistics
  - c. correlation coefficients
  - d. inferential statistics

*ANSWER:* d

141. If Beth's report were organized like a journal article, which sections has she completed writing?
- a. discussion and abstract
  - b. introduction and methods
  - c. abstract and introduction
  - d. discussion and methods

*ANSWER:* b

## Chapter 2 - The Research Enterprise in Psychology

1. Which goal of science is most closely associated with determining how to measure fear or identify lying?
  - a. understanding and prediction
  - b. measurement and description
  - c. application and control
  - d. testing and reporting

*ANSWER:* b

2. What do we call any measurable conditions, events, characteristics, or behaviours that are controlled or observed in a study?
  - a. confounds
  - b. variables
  - c. correlations
  - d. hypotheses

*ANSWER:* b

3. Forensic profilers use information about known serial killers to make statements about the likely next steps of a new killer and to anticipate a pattern of behaviour. Which goal of the scientific enterprise does this reflect?
  - a. application and control
  - b. measurement and description
  - c. testing and reporting
  - d. understanding and prediction

*ANSWER:* d

4. Which goals of science are reflected in the use of reinforcement principles to modify a child's unruly behaviour?
  - a. understanding and prediction
  - b. application and control
  - c. measurement and description
  - d. testing and reporting

*ANSWER:* b

5. What is a theory?
  - a. a system of interrelated ideas used to explain a set of observations
  - b. a preliminary proposal that has yet to be tested
  - c. a statement of research results that have been proven correct
  - d. a tentative statement about the relationship between two or more variables

*ANSWER:* a

## Chapter 2 - The Research Enterprise in Psychology

6. There are multiple goals in science, and researchers move between goals at various points in their research. If a researcher has a lot of data about the measurement of fear reactions and uses those data to generate a theory about fear, how have the researcher's goals changed?
- from application to control
  - from control to description
  - from description to understanding
  - from understanding to application

*ANSWER: c*

7. If Dr. Smith has tested a hypothesis and the findings have failed to support the hypothesis, what influence will this have on Dr. Smith's theory?
- It will support the theory because hypotheses attempt to disprove theories.
  - It will have little effect on the theory because hypotheses are merely predictions based on the theory.
  - It will require that the theory be reconsidered because hypotheses allow the theory to be tested.
  - It will cause the theory to be rejected because the hypothesis, and therefore the theory, is unsupported.

*ANSWER: c*

8. Which of the following patterns is typical of theory construction?
- a gradual iterative process that is always subject to revision
  - a process that results in concrete findings that are accepted by other scientists
  - a standard step-like process that quickly moves toward the truth
  - a circular process that is self-fulfilling

*ANSWER: a*

9. Dr. Marqueta predicts that people who have received bad news will seek out other people because "misery loves company." Which of the following terms characterizes Dr. Marqueta's prediction about the behaviour of people?
- theory
  - hypothesis
  - analysis
  - application

*ANSWER: b*

## Chapter 2 - The Research Enterprise in Psychology

10. What is a hypothesis?
- a conclusion drawn from an experiment
  - a system by which an experiment is designed
  - a system of interrelated ideas used to explain a set of observations
  - a tentative statement about the relationship between two or more variables

ANSWER: d

11. Which of the following is a testable hypothesis?
- Fear is defined as an emotional reaction to a change in stimuli.
  - Fear is an adaptive response that keeps us safe.
  - Fearful children are less likely to be injured when playing at school.
  - There are likely differences in how people experience fear.

ANSWER: c

12. Dr. Licciardi predicts that if people are observed while they perform a complex task, they will make more errors. Which of the following terms is Dr. Licciardi's prediction an example of?
- theory
  - inferential statistics
  - hypothesis
  - operational definition

ANSWER: c

13. Dr. Malm predicts that if teachers ignore students who act up in class, fewer students will act up in class. What is the scientific term for Dr. Malm's prediction?
- operational definition
  - inferential statistics
  - hypothesis
  - theory

ANSWER: c

14. A researcher is measuring the heart rate of subjects in a study about anxiety, because heart rate changes in a predictable way when people are anxious. In this study, what is heart rate?
- negatively correlated with anxiety
  - independent variable
  - confounded variable
  - operational definition of anxiety

ANSWER: d

## Chapter 2 - The Research Enterprise in Psychology

15. Several researchers are working on different experiments that are designed to test whether a person's confidence can be changed over time. They want to be able to compare their results when they are done. They agree that they will all use the same test in order to measure confidence. Which of the following have the researchers done?
- They agreed to use the same independent variable.
  - They agreed to use the same hypothesis.
  - They agreed on an operational definition of confidence.
  - They agreed to remove a confounding variable.

*ANSWER: c*

16. Which of the following is an operational definition of aggression?
- Aggression is an emotional response rather than a cognitive response.
  - Aggression is caused by fear.
  - Aggression will lead victims to become more aggressive.
  - Aggression is measured by the number of times one person hits another person.

*ANSWER: d*

17. Dr. Dieringer wants to study attachment patterns in single-parent families. She plans to define the strength of attachment as the time it takes for the parent to respond when the infant starts to cry. Why is this definition important?
- It allows others to understand exactly what Dr. Dieringer means by "attachment."
  - It allows Dr. Dieringer to generate a scientific hypothesis.
  - It prevents research assistants from violating ethical guidelines for psychological research.
  - It requires a double-blind research design.

*ANSWER: a*

18. Terry has a theory and has formulated a testable hypothesis. What is the next step that Terry needs to take in the scientific method?
- choosing the statistical procedures
  - selecting the research methods
  - refining the theory based on the hypothesis
  - collecting the data

*ANSWER: b*

## Chapter 2 - The Research Enterprise in Psychology

19. Dr. Hessels is examining how different people respond to frightening events. She will have participants walk through a haunted house at a local amusement park, and each participant will be outfitted with a heart monitor. She will use the changes in heart rate as a measure of stress. What are two ways that such changes in heart rate can be described?
- an operational definition and an independent variable
  - confounded variable and a physiological recording
  - a physiological recording and an independent variable
  - an operational definition and a dependent variable

*ANSWER:* d

20. In the Featured Study, some individuals crossed a high, fear-arousing bridge, while others crossed a low, non-frightening bridge. In this study, what do we call the type of bridge?
- naturalistic observation
  - dependent variable
  - operational definition
  - independent variable

*ANSWER:* d

21. In the Featured Study, individuals who had just recently crossed a bridge were met by either a male or a female confederate of the researcher. What do you call the type of confederate in this study?
- confounding variable
  - independent variable
  - extraneous variable
  - dependent variable

*ANSWER:* b

22. The Thematic Apperception Test (TAT) is a projective test that contains ambiguous stimuli that are to be interpreted by the participant. In the Featured Study, participants crossed a bridge and then completed the TAT. How did the researchers use participants' responses to the TAT in this study?
- as a dependent variable
  - as a confounding variable
  - as an extraneous variable
  - as an independent variable

*ANSWER:* a

## Chapter 2 - The Research Enterprise in Psychology

23. Which of the following activities would be particularly useful for making someone more attractive to a potential date, according to the results of the Featured Study on the effects of arousal on attraction?
- a soothing evening of chamomile tea and soft jazz music
  - doing something that you already enjoy to reduce anxiety
  - an athletic event of moderate intensity
  - a trip to an amusement park, followed by a horror movie

*ANSWER:* d

24. Amanda tells you about her date with Brett the night before. They went to the local amusement park, where they rode roller-coasters, attempted a climbing wall, and went into the House of Horrors. At first, Amanda wasn't that interested in Brett, but by the end of the night she found herself very attracted to him. What insights could you provide, given the results of the Featured Study on the effects of arousal on attraction?
- She must really be in love, because people who experience fear-inducing stimuli often end up showing fear or revulsion to people nearby.
  - She must have feelings for Brett, because she experienced arousal even while doing scary things.
  - She may have interpreted her physical arousal as attraction, because the sensations are similar.
  - She doesn't really have any interest in Brett, but her emotions were reversed by fear.

*ANSWER:* c

25. During which stage of the scientific method would a researcher provide data to the general public?
- analyzing the data
  - drawing conclusions
  - reporting the findings
  - debriefing participants

*ANSWER:* c

26. What is a scientific journal?
- a personal diary kept by a scientist
  - a detailed record of the daily procedures followed in conducting a study
  - a periodical that publishes technical and scholarly articles
  - a collection of biographies of famous scientists

*ANSWER:* c

## Chapter 2 - The Research Enterprise in Psychology

27. A group of students are administered a series of written questions designed to assess their attitudes, opinions, and behaviour related to studying. What is this method called?
- a. a psychological test
  - b. a questionnaire
  - c. a paper-based interview
  - d. a direct observation

*ANSWER:* b

28. A psychologist monitors changes in the subject's heart rate as the subject watches a violent movie. What is this data-collection technique called?
- a. archival records
  - b. direct observation
  - c. psychological testing
  - d. physiological recording

*ANSWER:* d

29. Ted uses a personality test as one of the dependent measures in his study. What data-collection technique is Ted using?
- a. direct observation
  - b. survey
  - c. case study
  - d. psychological test

*ANSWER:* d

30. Jackson is working with a company to help it develop more effective training programs for its employees. He has spent a great deal of time reviewing all the documentation the company has about previous training opportunities it has provided for its employees. What research technique is Jackson using?
- a. meta-analysis
  - b. direct observation
  - c. psychological testing
  - d. archival research

*ANSWER:* d

## Chapter 2 - The Research Enterprise in Psychology

31. Of the following pairs, which pair contains two data-collection techniques that are most likely to involve direct contact between the researcher and the research participant?
- direct observation and interviews
  - questionnaires and interviews
  - archival research and questionnaires
  - archival research and psychological testing

*ANSWER:* a

32. Ling answered a series of written questions that asked about her attitudes and opinions on a number of current issues. What is this method of data collection called?
- a questionnaire
  - archival research
  - a standardized psychological test
  - direct observation

*ANSWER:* a

33. Which of the following is most likely to lead to the discarding of research results?
- creating operational definitions
  - data analysis
  - hypothesis generation
  - publishing in a journal

*ANSWER:* d

34. Which of the following is a general term for the manner in which a researcher collects empirical data?
- statistical procedure
  - hypothesis testing
  - research method
  - archival recording

*ANSWER:* c

## Chapter 2 - The Research Enterprise in Psychology

35. What does a researcher do when conducting an experiment?
- in-depth investigation of an individual subject through detailed documentation
  - observation of behaviour as it occurs in its natural environment
  - systematic observation or measurement of two variables to see whether there is an association between them
  - manipulation of a variable under carefully controlled conditions and observation of whether there are changes in a second variable as a result

*ANSWER:* d

36. Which approach is defined by manipulating a variable under carefully controlled conditions and observing the changes in a second variable?
- experimental approach
  - survey approach
  - testing approach
  - correlational approach

*ANSWER:* a

37. In an experiment, what do you call the variable that is controlled or manipulated by the researcher?
- stimulus variable
  - dependent variable
  - control variable
  - independent variable

*ANSWER:* d

38. What is an independent variable in an experiment?
- a variable that provides an alternative explanation for the results of the experiment
  - a variable that is held constant across experimental conditions
  - a variable that the experimenter believes will change in value because of systematic correlations that exist in the experiment
  - a variable deliberately manipulated by the experimenter

*ANSWER:* d

## Chapter 2 - The Research Enterprise in Psychology

39. A group of researchers investigates the effects of a vitamin supplement on animal memory. During the first part of the study, the animals learn to run a maze while they are not receiving the supplement; in the second part of the study, the animals learn to run a different maze while they are receiving the supplement. In each case, the researchers count how many trials it takes before the animals can run the maze pattern without making any errors. What is the independent variable in this study?
- the number of trials it takes to run the maze without making any errors
  - the trials in which the supplement is used
  - the presence or absence of the supplement in the animal's diet
  - the two different mazes used

*ANSWER: c*

40. A group of researchers wanted to determine if people will eat more food in a room that is decorated with red than in a room that is decorated with blue. Half the participants in this study ate in a red room and half ate in a blue room. The researchers then measured how much food was consumed in each of the two rooms. What is the independent variable in this study?
- the colour of the decorations in the room
  - the amount of food consumed in the red room
  - the amount of food consumed in the blue room
  - the participants in each group

*ANSWER: a*

41. Researchers who were studying plant growth raised plants in two separate rooms. One room had taped conversations playing 24 hours a day; the other room was silent. The researchers found that the plants grew better in the room that had the conversations playing. In this study, what would you call the type of room (silent versus conversation)?
- placebo
  - independent variable
  - dependent variable
  - extraneous variable

*ANSWER: b*

## Chapter 2 - The Research Enterprise in Psychology

42. Researchers who were studying memory had participants learn a list of words after consuming a soft drink with caffeine or a decaffeinated version of the same soft drink. The researchers then counted the number of words that were recalled from the list. In this study, what would you call the type of beverage (caffeinated or decaffeinated)?
- extraneous variable
  - dependent variable
  - confounding variable
  - independent variable

*ANSWER: d*

43. What is a dependent variable?
- a variable that changes value because of the systematic manipulation in an experiment
  - a variable deliberately manipulated by an experimenter
  - a variable that the experimenter is depending on to cause something to happen in an experiment
  - a variable held constant across experimental conditions

*ANSWER: a*

44. Researchers tested the physical coordination skills of 25-year-old males who had been sleep deprived for 24, 36, or 48 hours. In this study, what is the dependent variable?
- the length of time the participants had been sleep deprived
  - the physical coordination of the control group
  - the male-only group of participants
  - the physical coordination skills of participants

*ANSWER: d*

45. A group of researchers wants to determine if people are more likely to follow directions if the person giving the directions is in a uniform. Half the participants are directed to a parking spot by a uniformed security guard; the other half are directed to a parking spot by an individual wearing blue jeans and a T-shirt. In this study, what is the dependent variable?
- the parking lot
  - the number of participants who park in the spot they are directed to
  - the type of clothing worn by the person giving the directions
  - the directions given

*ANSWER: b*

## Chapter 2 - The Research Enterprise in Psychology

46. A group of researchers conducts a study to determine if a child's performance is affected by the presence of other children. First, the children are taken to a room with no other children and timed while they complete a puzzle. Later, the same children are taken to a room with four other children and timed while they complete a similar puzzle. In this study, what do you call the length of time it takes to complete the puzzle?
- extraneous variable
  - control variable
  - dependent variable
  - independent variable

*ANSWER:* c

47. An industrial designer wants to determine if the new design for a piece of office equipment will result in fewer errors. The designer sets up a machine with the old design in one room, and a machine with the new design in a second room. He counts how many errors are made using each of the two machines. In this study, what do you call the number of errors made?
- extraneous variable
  - dependent variable
  - independent variable
  - control variable

*ANSWER:* b

48. If we view an experiment as an attempt to establish a cause–effect relationship, which of the following can be viewed as the “cause” in an experiment?
- the independent variable
  - the dependent variable
  - the hypothesis
  - the theory

*ANSWER:* a

49. A researcher found that clients who were randomly assigned to same-gender groups participated more in group therapy sessions than clients who were randomly assigned to mixed-gender groups. In this experiment, what is the dependent variable?
- whether or not the group was mixed-gender
  - how much the clients' mental health improved
  - the clients' attitudes toward group therapy
  - the amount of participation in the group therapy sessions

*ANSWER:* d

## Chapter 2 - The Research Enterprise in Psychology

50. Nula is conducting a study in which one group is exposed to loud music while completing a writing assignment and the other group has quiet conditions. Further, Nula examines the effect of gender within these groups. Therefore, she is examining the effects of both noise and gender on participants' performance on a writing task. Which of the following reflects the type of variables present in this study?
- one independent variable and two dependent variables
  - one control variable and two independent variables
  - one independent variable, one control variable, and one dependent variable
  - two independent variables and one dependent variable

*ANSWER: d*

51. What differs between an experimental group and a control group?
- The characteristics of the participants.
  - Only the experimental group is measured for the dependent variable.
  - Nothing except the experience of the independent variable.
  - Only the control group experiences the independent variable.

*ANSWER: c*

52. In an experiment designed to test memory processes, one group was asked to group the items on a list into categories while trying to memorize them. A second group was told to rhyme each of the words on the list. In this study, which group is the control group?
- the group that was told to categorize
  - the group in which the participants remember the most items from the list
  - the group that was told to rhyme
  - a third group that was not given special instructions

*ANSWER: d*

53. In a study designed to test the effects of a new drug developed to treat Alzheimer's disease, half the patients were given the actual drug while the other half of the patients were given a placebo (sugar pill). In this study, which group is the control group?
- the group that showed no evidence of an improvement in their memory
  - the group that received the actual drug
  - the group that received the placebo
  - no control group in this study

*ANSWER: c*

## Chapter 2 - The Research Enterprise in Psychology

54. Phong and Mikaela both take part in a research study that is investigating the effects of sleep deprivation on reaction time. Phong is kept awake for 24 hours straight, while Mikaela follows her normal sleep routine. Which group is Phong in?
- the independent variable group
  - the control group
  - the dependent variable group
  - the experimental group

*ANSWER:* d

55. What is the purpose of the control group?
- to isolate the effect of the independent variable on the dependent variable
  - to correlate the dependent variable with the independent variables
  - to make statistical significance more likely
  - to make the experiment more complex

*ANSWER:* a

56. A researcher wants to see if a protein-enriched diet will enhance the maze-running performance of rats. One group of rats is fed the high-protein diet for the duration of the study; the other group continues to receive standard rat food. What types of groups are represented in this study?
- The high-protein group is an experimental group; the standard food group is a control group.
  - Both groups are experimental groups.
  - Both groups are control groups.
  - The high-protein group is a control group; the standard food group is an experimental group.

*ANSWER:* a

57. A researcher has children watch 30 minutes of violent television, and then counts the number of times they hit each other afterward in a one-hour play period as a measure of aggression. Which of the following can you conclude from this study?
- TV violence causes violent behaviour in children.
  - TV violence is correlated with violent behaviour in children.
  - You can't conclude anything until you know the rates of violence displayed by children.
  - You can't conclude anything because you have nothing to compare to the aggression after the TV viewing.

*ANSWER:* b

## Chapter 2 - The Research Enterprise in Psychology

58. A group of researchers wanted to determine whether children would behave more aggressively after watching television programming. One third of the children in the study watched a violent television show and one third of the children watched a non-violent television program. If the remaining children are in a control group, what should happen to them?
- Half should watch a violent show and half should watch a non-violent show.
  - They should listen to the radio.
  - They should be the group monitored for violent behaviour.
  - They should not watch a television show.

*ANSWER:* d

59. Jack believes that patrons in his bar will be more likely to leave a tip if the tip jar already has some money in it. To test this belief, he has the tip jar empty about half the time when a customer approaches the bar; the rest of the time he ensures there is at least \$5.00 in the jar when a customer approaches. In Jack's experiment, which is the control group?
- the patrons who see an empty tip jar
  - all the patrons who leave the bar without tipping
  - the patrons who see a tip jar that contains at least \$5.00
  - all the patrons who leave a tip when they leave the bar

*ANSWER:* a

60. Dr. Prutherow believes that people who are under stress will develop more colds than people who are not under stress. When he randomly selected ten participants and exposed them to high levels of stress, he found that nine of the participants developed colds. What critical piece is missing from Dr. Prutherow's study?
- a dependent variable
  - a testable hypothesis
  - a group without stress
  - a group without colds

*ANSWER:* c

61. What is an extraneous variable?
- the same thing as a dependent variable
  - a variable, other than the independent variable, that may influence the dependent variable
  - a variable that is completely irrelevant to both the independent and dependent variables
  - a variable that affects the control group but not the experimental group

*ANSWER:* b

## Chapter 2 - The Research Enterprise in Psychology

62. Mandy thinks that people who work hard will always succeed. She grew up in a very wealthy neighbourhood and noticed that all of her friends who worked hard became successful. In this example, which of the following is true of wealth and hard work?
- They are correlated.
  - They are confounded.
  - They are independent.
  - They are dependent.

*ANSWER: b*

63. A researcher is studying two groups of children. One group includes children who are 10 years old and the other group includes children who are 5 years old. Which of the following variables would be confounded with age in this study?
- gender
  - height
  - aggression
  - income

*ANSWER: b*

64. Diaz conducts a decision-making experiment to determine if people reason more logically when they have more time to decide. All the participants who are under 40 are allowed 15 minutes to reach a decision about a problem; all the participants who are over 40 are allowed 20 minutes to reach a decision about the same problem. What is the problem with this experimental design?
- The age of the participants is confounded with the independent variable.
  - There are two control groups and no experimental group.
  - There is no dependent variable in the experiment.
  - The time allowed for the decision is confounded with the independent variable.

*ANSWER: a*

65. Which of the following is most important for reducing the likelihood of extraneous variables?
- experimental methods
  - correlational methods
  - random assignment
  - random sampling

*ANSWER: c*

## Chapter 2 - The Research Enterprise in Psychology

66. What is random assignment?

- a. Subjects are free to choose which group or condition they would like to be in.
- b. All variables have an equal chance of being assigned to the experimental condition.
- c. All people have an equal likelihood of being selected from the study.
- d. All subjects have an equal chance of being assigned to any of the groups or conditions.

*ANSWER: d*

67. Dr. Kalmagura plans on introducing a new exam review procedure in his chemistry classes. To check the effectiveness of the new procedure, he is going to have half his students try the new technique for one semester, while the remaining students review in the way they have always done in the past. He asks each student to decide whether they would like to use the new technique or the standard technique. What procedure is illustrated in this example?

- a. a double-blind research design
- b. informed consent in research
- c. the use of non-random assignment
- d. naturalistic observation

*ANSWER: c*

68. Braeden received a poor performance evaluation in his job last year. Since then, Braeden has started working through his lunch hour, taken on four special projects, and enrolled in night classes to upgrade his computer skills. Why will it be hard for Braeden to figure out the cause if he receives a better evaluation at his next performance?

- a. He failed to use a double-blind procedure to test his hypothesis.
- b. None of the actions he took are likely to be related to his overall job performance.
- c. The three actions he took are confounded with each other.
- d. He didn't formulate a research hypothesis before implementing the changes.

*ANSWER: c*

69. In a study of the effect of fatigue on task performance, participants were asked to complete a series of puzzles. One day, all participants completed puzzles after 24 hours without sleep. On another day, the same participants completed puzzles after sleeping for at least eight hours. What research design is used in this study?

- a. between-subjects design
- b. within-subjects design
- c. single-blind design
- d. interaction design

*ANSWER: c*

## Chapter 2 - The Research Enterprise in Psychology

70. Dr. Shingwauk designed an experiment in which participants listened to a persuasive speech delivered either by a very tall person or a person of average height. In addition, the speeches were delivered by people wearing either business clothes or casual clothes. Dr. Shingwauk asked listeners to fill out a survey about impressions of the speaker's credibility. In this study, what is Dr. Shingwauk looking to determine?
- Does a double-blind procedure lead to greater credibility of speakers, independent of the effects of appearance?
  - Do height and clothing style interact to influence judgments of credibility?
  - Does persuasion interact with any other factors?
  - Does persuasion influence our perception of height and clothing?

ANSWER: b

71. What does it mean when there is an interaction between two variables?
- The measurement of the dependent variable depends on the effect of the independent variable.
  - The measurement of one dependent variable gets added to the measurement of another.
  - The effects of one independent variable get added to the effects of another.
  - The effects of one independent variable depend on the effects of another.

ANSWER: d

72. What is the main advantage associated with the experimental method?
- its precise control
  - its ability to be generalized to multiple contexts
  - its ability to duplicate real life in the laboratory
  - its appeal to participants

ANSWER: a

73. Which research method gives researchers the ability to infer a cause-and-effect relationship?
- correlational
  - experimental
  - case history
  - empirical

ANSWER: b

## Chapter 2 - The Research Enterprise in Psychology

74. Which of the following is a disadvantage of the experimental method?

- a. Experiments often can't be done for practical or ethical reasons.
- b. Only one variable can be studied at a time.
- c. Length of time necessary to complete the study.
- d. Inability to generate cause-and-effect conclusions.

*ANSWER:* a

75. Shelley is a researcher who studies disabilities as a result of head injuries. She has chosen to use non-experimental methods because of some of the limitations of experiments. Which of the following limits would most likely cause problems for Shelley's research?

- a. It is not ethical to conduct experiments with people with disabilities.
- b. People cannot be randomly assigned to a group that experiences a head injury.
- c. Disability cannot be operationally defined.
- d. Experiments cannot be used to study interaction effects.

*ANSWER:* a

76. What do researchers do when conducting descriptive or correlational research?

- a. They simultaneously manipulate two or more independent variables.
- b. They systematically describe patterns of behaviour and discover relationships among variables.
- c. They manipulate a variable under carefully controlled conditions and observe whether there are changes in a second variable as a result.
- d. They expose subjects to two closely related treatment conditions.

*ANSWER:* b

77. Donnie wants to know whether attractive waiters make more tips. He has a group of people rate the attractiveness of five different waiters, and he gets the waiters to tell him how much money they make in tips every night for a month. What type of research design has Donnie used?

- a. quasi-experimental design
- b. correlational design
- c. experimental design
- d. case study design

*ANSWER:* b

## Chapter 2 - The Research Enterprise in Psychology

78. What do naturalistic observation, case studies, and surveys all have in common?

- a. They can show causal relationships.
- b. The results obtained cannot be analyzed statistically.
- c. They do not directly observe behaviour.
- d. They do not manipulate the variables under study.

*ANSWER:* d

79. A researcher goes to a playground for an hour each day for two weeks and makes notes when children are playing together. He records the number of times that a girl and a boy are playing together, when boys play only with other boys, and when girls play only with other girls. Which research method is the researcher using?

- a. experiment
- b. naturalistic observation
- c. correlation
- d. case study

*ANSWER:* b

80. What do we call recording all instances of an event for a particular time period (such as how many times an older brother strikes his younger brother during a given week) without the subjects' awareness?

- a. naturalistic observation
- b. compiling a case study
- c. creating an archive
- d. correlational research

*ANSWER:* a

81. You are sitting on a park bench in a major metropolitan area from 7 a.m. to 7 p.m. and you note the number of people who walk by, whether or not they litter, and their sex. What type of research method are you using?

- a. naturalistic observation
- b. case study
- c. correlation
- d. casual observation

*ANSWER:* a

## Chapter 2 - The Research Enterprise in Psychology

82. A group of researchers wanted to investigate allegations of sexual harassment on a company's assembly line. To make their observations, the researchers took jobs working on the assembly line and pretended to be new employees. What type of research is being conducted in this example?
- correlational research
  - case study
  - unethical research
  - naturalistic observation

*ANSWER: d*

83. A local hospital wanted to assess the way its patients were being treated. The hospital hired several researchers to act as patients and record the way hospital personnel handled the admitting and preliminary evaluation procedures. What sort of research is being conducted in this example?
- naturalistic observation
  - correlational research
  - reactivity
  - case study

*ANSWER: a*

84. Jolyn believed that there were gender differences in driving habits. To test this hypothesis, she stood near a quiet intersection. Jolyn recorded the gender of each driver who approached a stop sign, and also whether the individual came to a complete stop before proceeding into the intersection. What sort of research is Jolyn conducting?
- psychological testing
  - naturalistic observation
  - experiment with two dependent variables
  - case study research

*ANSWER: b*

85. What is a distinct advantage of naturalistic observation?
- It allows behaviour to be studied in realistic settings.
  - It allows for random sampling.
  - It reduces reactivity among participants.
  - There is a wider range of statistical procedures that can be used.

*ANSWER: a*

## Chapter 2 - The Research Enterprise in Psychology

86. Which of the following is a major problem with naturalistic observation?
- It works well with animals but is virtually useless for studying human behaviour.
  - Researchers have a difficult time determining whether a setting is truly natural.
  - It is limited by the constraints of random sampling and random assignment.
  - It is difficult to observe behaviour without having an influence on that behaviour.

*ANSWER: d*

87. Stephanie is observing a group of adolescents at the mall and documenting their rate of swearing. The group keeps looking over at Stephanie and pointing at her, and they get louder and more obnoxious the longer she observes them. Which of the following terms describes Stephanie's effect on the group?
- demand characteristics
  - disrupting
  - reactivity
  - confounding

*ANSWER: c*

88. Which of the following techniques is most likely to prove useful in determining why one particular child is afraid to go to school?
- descriptive study
  - case study
  - naturalistic observation
  - experiment

*ANSWER: b*

89. Dr. Kincaid was interested in the topic of musical genius. In the initial part of the investigation, Dr. Kincaid carefully observed and compiled detailed files on three individuals who were musical geniuses. What sort of research is Dr. Kincaid conducting?
- correlational
  - survey
  - naturalistic observation
  - case study

*ANSWER: d*

## Chapter 2 - The Research Enterprise in Psychology

90. In which of the following would there be the greatest risk of effects of subjectivity and selective attention?
- conducting a placebo-control trial
  - compiling a case study
  - running experimental studies
  - conducting surveys

*ANSWER: b*

91. NASA wanted to know if extended periods of weightlessness would have an impact on long-term circulatory function. The agency located seven former astronauts who had spent more than one month in space under conditions of weightlessness, and tested all aspects of their cardiovascular function. What sort of research did NASA conduct in this situation?
- experimental research
  - survey research
  - case study research
  - naturalistic observation

*ANSWER: c*

92. One of your friends is writing a research paper and wants to obtain information about the depth of personal information people typically reveal during a first date. Directly observing a large number of people during a first date will be difficult, so your friend asks for your advice on the best way to collect this type of data. What would be the best research option for your friend to use?
- case study
  - survey
  - archival research
  - double-blind observational study

*ANSWER: b*

93. Estavan received a questionnaire in the mail asking about his general buying habits. He was asked to identify the specific products that he typically buys, and the amount of each product that he typically uses. Which type of research will Estavan have taken part in if he completes the questionnaire and returns it?
- archival research
  - naturalistic observation
  - survey method
  - case study approach

*ANSWER: c*

## Chapter 2 - The Research Enterprise in Psychology

94. Which of the following types of research allows psychologists to study the widest range of phenomena?
- descriptive research
  - introspective research
  - developmental research
  - experimental research

*ANSWER:* a

95. Trevor plans to study the relationship between individuals' responses to highly stressful situations and their overall health. He decides he must use correlational research, rather than experimental research, to investigate this problem. What is the most likely reason that Trevor chose a correlational method?
- Correlational studies have higher internal validity than experiments.
  - Correlational research can be used to investigate factors that would be unethical to manipulate in an experimental study.
  - Correlational studies tend to be more accurate than experiments.
  - Correlational research can be used to study direct relationships, but not inverse or indirect relationships.

*ANSWER:* b

96. Maria plans to study the relationship between self-esteem and being raised in a single-parent or a two-parent family. She decides she must use correlational research, rather than experimental research, to investigate this problem. What is the likely reason that Maria chose a correlational method?
- Correlational studies can be used to study either positive or negative relationships, whereas experiments can be used to study only positive relationships.
  - Correlational studies have higher internal validity than experiments.
  - Correlational methods tend to be more accurate than experiments.
  - Correlational studies can be used to investigate factors that would be impossible to manipulate in an experimental study.

*ANSWER:* d

97. What is perhaps the greatest disadvantage or limitation associated with descriptive research methods?
- the inability to identify cause-and-effect relationships
  - the fact that these methods usually focus attention too narrowly on a single variable
  - the restriction to very small samples
  - an insensitivity to ethical concerns

*ANSWER:* a

## Chapter 2 - The Research Enterprise in Psychology

98. Eric just completed a correlational study, and his results reveal that people who take more showers have higher income. Eric wonders whether certain types of jobs might both pay more and cause people to get dirtier. Which of the following terms reflects Eric's interpretation of his results?
- reactivity
  - third variable problem
  - sampling bias
  - interaction effects

*ANSWER:* b

99. Your professor handed out a list of all the grades for all four exams in your class. In which of the following situations would you use descriptive statistics?
- You want to know your average in this course.
  - You want to know whether your score on the most recent exams is significantly higher than your previous exams.
  - You want to know whether your exam score is significantly higher than your friend's.
  - You want to know whether your grade in this course is higher than your grade in another course.

*ANSWER:* a

100. What type of statistics would you use if you wanted to summarize and organize your data?
- computational
  - mathematical
  - descriptive
  - inferential

*ANSWER:* c

101. What is the score that falls exactly in the centre of a distribution of scores, such that half the scores fall below that score and half the scores fall above it?
- median
  - mean
  - standard deviation
  - mode

*ANSWER:* a

## Chapter 2 - The Research Enterprise in Psychology

102. What is the median of the following set of numbers?: 1, 2, 2, 3, 4, 4, 4

- a. 1
- b. 2
- c. 3
- d. 4

*ANSWER: c*

103. Kaley added up the amount of money she made on four paycheques and then divided that number by four. Which of the following measures of central tendency did Kaley use?

- a. mode
- b. mean
- c. median
- d. midpoint

*ANSWER: b*

104. What does the mode of a group of scores represent?

- a. its association with another group of scores
- b. the midpoint
- c. its central tendency
- d. its variability

*ANSWER: c*

105. Tian tells you that 17 out of the 30 students enrolled in his English class scored exactly 62 points on the last exam. Which of the following states the same concept?

- a. The standard deviation for that exam was 62 points.
- b. The mode for that exam was 62 points.
- c. The mean for that exam was 62 points.
- d. The median for that exam was 62 points.

*ANSWER: b*

## Chapter 2 - The Research Enterprise in Psychology

106. When the scores for a recent chemistry exam were calculated, the mean was 60 and the median was 65. Later, the professor discovered that one score had been recorded incorrectly; it had been entered into the computer as a 5, instead of as a 50. What will happen to the mean and median once the score is entered correctly?
- The mean for the exam will change, but the median will stay the same.
  - Neither the mean nor the median for the exam will be affected.
  - The median for the exam will change, but the mean will stay the same.
  - Both the mean and the median for the exam will change.

*ANSWER:* a

107. Carla earned 78 points on her statistics exam. Ten of the students in her class earned higher scores than she did, and ten students earned lower scores than she did. Based on this information, what can you conclude about Carla's score?
- It is the mean for her class.
  - It is the median for her class.
  - It is the standardized score for her class.
  - It is the mode for her class.

*ANSWER:* b

108. In Margaritte's sociology discussion group, four of the five students are between the ages of 19 and 23; the fifth student is 54 years old. Which statistic should Margaritte use if she wants to report the statistic that best represents the typical age for her discussion group?
- The mean or the median because these numbers are typically the same.
  - The mean or the standard deviation so that additional statistics can be calculated.
  - The median or the mode because these numbers will best represent the typical class member.
  - The mean or the mode because these numbers are not affected by extreme scores in the distribution.

*ANSWER:* c

109. Which of the following can be said about a distribution of scores where the mean is lower than the median and mode?
- The median and mode must be the same.
  - The standard deviation is high.
  - The distribution is positively skewed.
  - The distribution is negatively skewed.

*ANSWER:* d

## Chapter 2 - The Research Enterprise in Psychology

110. What does the standard deviation tell you about the variability in a data set?
- When variability is high, the standard deviation is small.
  - The standard deviation does not reflect the variability in the data set.
  - A large standard deviation means that there is a great degree of variability in the data set.
  - As variability increases in a data set, the standard deviation becomes more variable as well.

*ANSWER:* c

111. Dr. Greyeagle calculated descriptive statistics for the age of residents in a nursing home. She reported the mean age as 75 years, with a standard deviation of 10 years. Later she found that she had made an error in her calculations. One resident's age was entered as 27 when it should have been 72. What will happen to the standard deviation when this correction is made?
- It will decrease.
  - It will increase.
  - It will not change.
  - It will increase, but only if the mean remains the same.

*ANSWER:* a

112. Carmella is in a class where the scores on the second midterm exam ranged from 75 to 85 points. Conrad is taking the same course, but in his section the scores ranged from 50 to 98 points. In this example, what can be said about the standard deviations in the two classes?
- The standard deviation will be lower in Carmella's class.
  - The standard deviations will be negatively correlated.
  - The standard deviation will be less predictable in Carmella's class.
  - The standard deviation will be higher in Carmella's class.

*ANSWER:* a

113. If the distribution of test scores for a midterm is normal, approximately what percentage of the class should have a score that falls within two standard deviations of the mean?
- 34 percent
  - 68 percent
  - 95 percent
  - 99 percent

*ANSWER:* c

## Chapter 2 - The Research Enterprise in Psychology

114. Terry's midterm test score falls at the 10th percentile. How many classmates scored the same or lower than Terry?
- a. 0 percent
  - b. 10 percent
  - c. 90 percent
  - d. 100 percent

*ANSWER:* b

115. If you wanted to predict test scores based on amount of time spent studying, which statistic would you need to use?
- a. variance
  - b. correlation coefficient
  - c. standard deviation
  - d. central tendency

*ANSWER:* b

116. What does the correlation coefficient measure?
- a. the central tendency
  - b. the degree of relationship between two variables
  - c. the difference between the largest and smallest scores in a data set
  - d. the amount of variability in a data set

*ANSWER:* b

117. What would we likely find if we were to measure the height and weight of 100 adult women and calculate a correlation coefficient on the data??
- a. Height and weight are negatively correlated.
  - b. Height and weight are increasingly correlated.
  - c. Height and weight are positively correlated.
  - d. Height and weight are uncorrelated.

*ANSWER:* c

## Chapter 2 - The Research Enterprise in Psychology

118. Suppose a researcher discovered a  $+0.87$  correlation between the length of a person's toes and the number of shoes the person owns. In general, who would you predict to own the most shoes?
- people with large toes
  - people with medium-sized toes
  - people with either very large or very small toes
  - people with small toes

ANSWER: a

119. Dr. Macator predicts that people will act more aggressively during the heat waves of summer than they will during the cold spells of winter. Which of the following reflects Dr. Macator's prediction?
- Temperature and aggression are uncorrelated.
  - Temperature and aggression are negatively correlated.
  - Temperature and aggression are positively correlated.
  - Temperature is independently correlated with aggression.

ANSWER: c

120. The Ministry of Health found that people who used diet drugs had more heart valve defects than people who had not taken any diet drug. Which of the following reflects this finding?
- Heart valve defects and diet drug use are independent of one another.
  - Heart valve defects are positively correlated with the use of diet drugs.
  - Heart valve defects and use of diet drugs are negatively correlated.
  - Heart valve defects and diet drug use are interactive variables, with no correlational relationship.

ANSWER: b

121. Imagine that the personality traits of openness and extraversion are positively correlated. Andrea just took two tests that measure openness and extraversion, respectively. If Andrea's score in openness is extremely low, what would you predict about her extraversion score?
- She would most likely score at the low end of the extraversion scale.
  - It is impossible to predict how she is likely to score on the extraversion scale without more information.
  - Her extraversion score would be corrected based on her openness score.
  - She would most likely score around the mean of the extraversion scale.

ANSWER: a

## Chapter 2 - The Research Enterprise in Psychology

122. Dr. Vishnu has found that students who score higher than 85 percent on the first midterm tend to earn scores of 75 percent or better on the final exam, while students who score less than 60 percent on the first midterm often end up with a failing grade on the final exam. What can be said about the relationship between scores?
- Students who do poorly on the first midterm do not improve.
  - Students who do poorly on the first midterm give up and study less for the final.
  - Scores on the first midterm and the final exam are positively correlated.
  - Scores on the first midterm and the final exam are negatively correlated.

*ANSWER:* c

123. Suppose a researcher discovered a strong negative correlation between the length of people's hair and the amount of money they paid for their automobile. In general, what could you predict about people's hair length if you know that they paid very little for their cars?
- They have very long hair.
  - They have either very long or very short hair.
  - They have mid-length hair.
  - They have very short hair.

*ANSWER:* a

124. Mice who received caffeine in their diets made fewer errors in a maze-running task than mice who had not received caffeine. What does this suggest about the use of caffeine and maze-running errors among mice?
- They are positively correlated.
  - They are weakly correlated.
  - They are uncorrelated.
  - They are negatively correlated.

*ANSWER:* d

125. As the size of a crowd increases, people are less likely to help someone who is in distress. What is the relationship between the number of people in a crowd and the likelihood of helping?
- They are negatively correlated.
  - They are indirectly correlated.
  - They are uncorrelated.
  - They are positively correlated.

*ANSWER:* a

## Chapter 2 - The Research Enterprise in Psychology

126. Imagine that the personality traits of conscientiousness and extraversion are negatively correlated. Vladimir's scores fit the typical pattern. If Vladimir's score in conscientiousness is extremely low, how would he score on extraversion?
- He would probably score close to the median on the extraversion scale.
  - He would most likely score at the low end of the extraversion scale.
  - It is impossible to predict how he is likely to score on the extraversion scale without more information.
  - He would most likely score at the high end of the extraversion scale.

*ANSWER: d*

127. Suppose that students who work fewer hours at their jobs tend to have higher grade point averages and also tend to get more sleep. What would the correlation coefficient be if we were to correlate the two variables of grade point average and number of hours of sleep?
- greater than 1, but less than 2
  - equal to 0
  - less than zero, but greater than  $-1$
  - greater than 0, but less than 1

*ANSWER: d*

128. Dr. Hackle has found that no matter how students score on the first midterm, all the students in her class tend to score between 75 percent and 80 percent on her final exam. Which of the following values would best represent the correlation between the grades?
- near 1
  - near  $-1$
  - near 0
  - near 2

*ANSWER: c*

129. What is represented by a correlation coefficient of zero?
- absence of a linear correlation between two variables
  - a negative correlation between two variables
  - a perfect linear correlation between two variables
  - a positive correlation between two variables

*ANSWER: a*

## Chapter 2 - The Research Enterprise in Psychology

130. Of the following, which correlation coefficient indicates the strongest relationship between the two variables being measured?

- a. +3.45
- b. +0.65
- c. 0.00
- d. -0.89

*ANSWER:* d

131. Of the following, which correlation coefficient indicates the weakest relationship between the two variables being measured?

- a. +0.95
- b. +0.01
- c. -0.69
- d. -4.50

*ANSWER:* b

132. Of the following correlation coefficients, which one would allow the most accurate predictions of one variable based on the other variable?

- a. +1.23
- b. +0.65
- c. 0.00
- d. -0.79

*ANSWER:* d

133. Of the following correlation coefficients, which one would yield the LEAST accurate predictions of one variable based on the other variable?

- a. +0.99
- b. +0.17
- c. 0.00
- d. -0.49

*ANSWER:* c

## Chapter 2 - The Research Enterprise in Psychology

134. Dr. Zelke surveys 50 university students to discover the relationship between textbook price and ratings of readability. Dr. Zelke finds that for these two variables, the correlation coefficient is  $-0.70$ . What does this indicate?
- More expensive books tend to receive lower readability ratings than less expensive books.
  - Increasing the price of a book will lead people to think that it is more readable.
  - Less expensive books tend to receive lower readability ratings than more expensive books.
  - There is no relationship between book price and ratings of readability.

ANSWER: a

135. What could we conclude if the correlation coefficient between amount of exposure to television violence and aggressive behaviour was found to be  $+0.43$ ?
- Watching television violence tends to cause aggressive behaviour.
  - People who watch the most television violence tend to be the most aggressive.
  - Television violence is uncorrelated with aggressive behaviour.
  - People who watch the most television violence tend to be the least aggressive.

ANSWER: b

136. Which of the following statements about correlations is NOT correct?
- A and B correlate  $+1.00$ ; therefore, they are causally related.
  - A and B correlate  $+1.00$ ; if you know A, you can predict B without error.
  - A and B correlate  $-1.00$ ; if you know A, you can predict B without error.
  - A correlation of  $+0.90$  gives better predictability than a correlation of  $+0.60$ .

ANSWER: a

137. Which of the following situations is an example of using inferential statistics?
- A public poll reports that 75 percent of the population supports picnics.
  - The government reports that it must implement a 5 percent cut in spending.
  - The national bank reports that consumer debt is significantly higher than last year at this time.
  - A teacher indicates that most students scored between 55 and 65 on the test.

ANSWER: c

## Chapter 2 - The Research Enterprise in Psychology

138. You've been keeping records of your car's gas consumption for the past three years. In which of the following situations would you use inferential statistics?
- You want to know your car's average gas consumption.
  - You want to know whether this week's gas consumption is typical for your car.
  - You want to know the highest and lowest consumption across the three years.
  - You want to know whether winter consumption is significantly different from summer consumption.

*ANSWER:* d

139. What do we call statistics that are used to interpret data and draw conclusions?
- significant
  - descriptive
  - numerical
  - inferential

*ANSWER:* d

140. Which type of statistic allows us to determine whether the results of an experiment occur due to chance?
- standard deviation
  - measures of central tendency
  - descriptive
  - inferential

*ANSWER:* d

141. Paul just completed data analysis for his recent study, and the inferential statistics reveal that there is a 0.04 probability that his results occurred by chance. What can Paul state about his study?
- The results are meaningful.
  - The results are statistically significant.
  - The results are inconclusive.
  - The results are unreliable.

*ANSWER:* b

142. What does it mean to say that the results of an experiment are "statistically significant"?
- The results had practical significance.
  - Differences in measurements of the dependent variable resulted from chance variations.
  - Different results for the experimental and control groups were not due to chance.
  - The results were important enough to publish.

*ANSWER:* c

## Chapter 2 - The Research Enterprise in Psychology

143. Paulo tells you that he just completed an experiment in his botany class, and the results he obtained were statistically significant. What does this mean?
- His results were likely to be caused by a single strong variable.
  - His results were unlikely to be a consequence of chance variations in his sample.
  - His results are important and will likely have an impact in the field of botany.
  - His results will be of interest to people, even if they are not botanists.

*ANSWER:* b

144. Masali conducted a study in which she measured the response time for males and females to complete a spatial task. She found that the mean response time was 1.48 minutes for males and 1.63 minutes for females. What must Masali do to be confident that an actual difference exists between males and females?
- calculate a correlation coefficient
  - calculate an inferential statistic
  - obtain a larger sample
  - evaluate the descriptive statistics

*ANSWER:* b

145. Dr. Arnold conducted a study where he found significant results. Dr. Bernhardt found those results interesting, and he conducted the same study in his own lab, but did not find significant results. After discussing their results at a conference, the two researchers found a few minor differences between their procedures that could explain their different results. This led to the development of new theories. What aspect of scientific evaluation is depicted in this series of events?
- peer-reviewed publication
  - experimenter bias
  - meta-analysis
  - replication

*ANSWER:* d

146. Dr. Aiken was interested in whether a particular effect was reliable, so he took a number of published studies and conducted special statistical procedures in order to compare the results across all of those studies. He found that the effect was very reliable across a variety of samples and situations. What type of procedure did Dr. Arnold conduct?
- peer-review
  - random sampling
  - meta-analysis
  - replication

*ANSWER:* c

## Chapter 2 - The Research Enterprise in Psychology

147. Which of the following is present in most research studies but absent in meta-analysis?

- a. statistical analysis
- b. direct contact with participants
- c. a sample
- d. data

*ANSWER: b*

148. In research terms, what is a sample?

- a. a subset of the population who actually participate in a research study
- b. a group of people to whom the conclusion of the study will apply
- c. a group that contains fewer than 50 people or animals
- d. all the volunteers who express an interest in the study

*ANSWER: a*

149. To determine whether students would like more courses scheduled in the late-afternoon and evening hours, the Student Services department sends questionnaires to 50 students selected at random from the 5,000 who are registered at the campus. In this instance, what do we call the 5,000 students who are registered at the campus?

- a. an independent variable
- b. the biased sample
- c. the population
- d. the representative sample

*ANSWER: c*

150. To discover whether residents of a city are in favour of building a new sports stadium, the team's owner randomly selected and interviewed 500 of the city's 500,000 residents. In this instance, what do we call the 500 people whom the owner interviewed?

- a. the representative sample
- b. the biased sample
- c. the population
- d. the dependent variable

*ANSWER: a*

## Chapter 2 - The Research Enterprise in Psychology

151. If a researcher is particularly concerned about making sure that her results will generalize to the population as a whole, which of the following must she do?
- ensure that all the variables have been operationally defined
  - conduct a meta-analysis
  - use a double-blind procedure
  - draw a representative sample from the population of interest

*ANSWER:* d

152. A researcher who is conducting a survey about the concerns of average Canadians recruits participants through ads in a Toronto newspaper. What type of sample has the researcher created?
- a random sample
  - a biased sample
  - a representative sample
  - a binary sample

*ANSWER:* b

153. How should a researcher select subjects for a study in order to generate results that are generalizable?
- Subjects should all be chosen from the same geographical area and socio-economic class.
  - Subjects should be allowed to choose which group they would like to be in.
  - Subjects should be from WEIRD societies.
  - Subjects should be carefully chosen so that they are a representative sample of the population.

*ANSWER:* d

154. Why is sampling bias a problem?
- It makes it impossible to use inferential statistics.
  - It limits the generalizability of the findings.
  - It makes the effect of the independent variable appear to be bigger than it really is.
  - It makes it difficult to avoid a confounding of variables.

*ANSWER:* b

## Chapter 2 - The Research Enterprise in Psychology

155. Dr. Stills is interested in people's reactions to a controversial jury verdict. Dr. Stills calls people at their home between the hours of 1:00 p.m. and 3:30 p.m. on a Tuesday afternoon. In this example, what type of sample has Dr. Stills most likely selected?
- a. a biased sample
  - b. a redundant sample
  - c. a bimodal sample
  - d. a representative sample

*ANSWER:* a

156. What are WEIRD societies?
- a. Groups that are considered to be minorities in North America
  - b. Groups that tend to have non-conformist results in psychology studies
  - c. Groups that are limited to a single race or ethnic group
  - d. Groups that are typically overrepresented in psychology research

*ANSWER:* d

157. What does the W stand for in WEIRD societies?
- a. Western
  - b. White
  - c. Well-educated
  - d. Wealthy

*ANSWER:* a

158. Tammy expects that she will be more likely to get a job offer if she wears red to her interviews. She wore red to each of her interviews and she got offered a job. Which of the following might have influenced Tammy's likelihood of being offered a job?
- a. placebo effect
  - b. socially desirable responding
  - c. halo effect
  - d. experimenter bias

*ANSWER:* a

## Chapter 2 - The Research Enterprise in Psychology

159. Dr. Limmex is trying to get government approval for a new drug to treat anxiety. Dr. Limmex claims that 14 percent of the people who took this new drug reported reduced anxiety; however, other researchers claim that 14 percent of patients who receive no treatment also report reductions in their anxiety levels. What could explain patient improvement in Dr. Limmex's study?
- improper assignment to groups
  - non-representative sampling
  - placebo effects
  - self-report bias

*ANSWER: c*

160. In an investigation of the effects of caffeine on concentration, half the participants were given colas that contained caffeine and half were given decaffeinated colas. In this study, what is decaffeinated cola?
- a random factor
  - a confounding variable
  - a dependent variable
  - a placebo

*ANSWER: d*

161. Dr. Voegeli is testing the effects of a new diet supplement on the endurance levels of several groups of athletes. One group receives 50 ml per day of the supplement. A second group receives 50 ml per day of a substance that has no active component, but looks and tastes just like the supplement. A third group receives nothing at all. In this case, what would we call the second group?
- the experimental group
  - the comparison group
  - the control group
  - the placebo control group

*ANSWER: d*

162. Darla has sent out a survey in which she is asking people to provide information about their attitudes on a number of sensitive subjects. Why might Darla expect responses to the survey to be somewhat distorted?
- because of sampling bias
  - because of social desirability bias
  - because of experimenter bias
  - because of meta-analysis

*ANSWER: b*

## Chapter 2 - The Research Enterprise in Psychology

163. How do subjects tend to answer questions about themselves when they are being influenced by the social desirability bias?

- a. in a socially approved manner
- b. in a socially rebellious manner
- c. by agreeing with nearly every statement
- d. by answering in a selfish manner

*ANSWER:* a

164. Which of the following researchers is most likely to encounter social desirability bias?

- a. Ahmed, who documents case studies of musical geniuses
- b. Barry, who tests the effectiveness of new drugs
- c. Celine, who conducts surveys about parenting behaviours
- d. Diane, who does field research with endangered species

*ANSWER:* c

165. Subjects' self-reports often indicate that they are healthier, happier, and less prejudiced than other types of evidence would suggest. What is the most likely explanation for these sorts of results?

- a. response set
- b. faulty memory
- c. social desirability bias
- d. experimenter bias

*ANSWER:* c

166. Reinhold is filling out a psychological test, and as he reads each question he thinks about the way most other people would probably respond. When he answers, he selects the alternative that he thinks will present the most favourable impression. What tendency will Reinhold's answers reflect?

- a. placebo effect
- b. social desirability bias
- c. non-representative sampling
- d. negative response set

*ANSWER:* b

## Chapter 2 - The Research Enterprise in Psychology

167. What do we call the tendency to respond to questions in a manner unrelated to the content of a question?
- placebo effect
  - experimenter bias
  - response set
  - social desirability bias

*ANSWER: c*

168. Konrad dislikes completing questionnaires, so each time he fills one out he always circles the same answer, such as “strongly agree” or “strongly disagree.” What tendency does Konrad’s behaviour reflect?
- placebo effect
  - sampling bias
  - social desirability
  - response set

*ANSWER: d*

169. Malinda is filling out a survey for a marketing agency in order to be eligible for a grand prize drawing. She doesn’t actually read many of the questions, and simply answers “yes” to everything. What do we call this tendency?
- placebo effect
  - interaction effect
  - social desirability bias
  - response set

*ANSWER: d*

170. Sanja just bought a new car and is filling out a customer satisfaction survey. She loves her new car, and this leads her to fill out a glowing review. She indicated that she was “very satisfied” with the gas consumption of the car, even though it is much higher than her old car and she is paying more money than she would like. Which of the following terms reflects this positive review of a negative trait?
- social desirability bias
  - response set
  - experimenter bias
  - halo effect

*ANSWER: d*

## Chapter 2 - The Research Enterprise in Psychology

171. Kim received a very positive performance evaluation from her supervisor. She expected the review to be strong, because she had worked hard and knew that she had performed well. She was surprised, however, to see that she got an “excellent” rating for punctuality. She knows she has been late to work repeatedly, and her supervisor was aware of it. Which of the following best explains this inaccurate positive evaluation?
- halo effect
  - social desirability bias
  - experimenter bias
  - placebo effect

*ANSWER:* a

172. Which of the following is an example of experimenter bias?
- An experimenter explicitly instructs subjects to complete tasks in a particular order, rather than allowing them to choose the order of completion.
  - An experimenter tries to make a favourable impression on the research subjects by being friendly and by providing a great deal of information.
  - An experimenter conducts her study in a completely objective manner.
  - An experimenter’s belief in his own hypothesis affects either the subjects’ behaviour or his observations of the subjects.

*ANSWER:* d

173. What is the typical consequence of experimenter bias?
- The effects of the bias confirm the experimenter’s expectations.
  - The results of the study are not statistically significant.
  - There is evidence of the placebo effect in the results of the experimental group.
  - Experimenters often doubt their results when they first see them.

*ANSWER:* a

174. Melvin and Leigh are interviewing students at their campus to determine if the students agree or disagree with a proposed policy change. Melvin believes the proposed policy change is a good idea, but Leigh believes the change will be bad for students. Nearly all the students who Melvin interviewed supported the policy change, but nearly all the students who Leigh interviewed disapproved of the change. Which of the following research problems could account for the different results?
- placebo effects
  - response set
  - confounded dependent variables
  - experimenter bias

*ANSWER:* d

## Chapter 2 - The Research Enterprise in Psychology

175. What method is often used to control for experimenter bias effects in research?

- a. non-representative sample
- b. placebo control group
- c. socially desirable procedure
- d. double-blind procedure

*ANSWER:* d

176. In which of the following studies would it be impossible to implement a double-blind procedure?

- a. a study on the effects of a new pain medication
- b. a study that tests whether yoga influences mood
- c. an experiment that requires informed consent
- d. an experiment that has a completely representative sample

*ANSWER:* a

177. Dr. Hugo designs an experiment to test the effectiveness of a new antidepressant. Half of the participants will receive the drug and half will receive a sugar pill, but neither the participants nor the researchers who administer the drug will know who is receiving the drug and who is receiving the sugar pill. What has Dr. Hugo designed?

- a. a double-blind research study
- b. an unethical research procedure
- c. a study that will minimize self-report bias
- d. an experimental study with two confounded variables

*ANSWER:* a

178. Scarlett is a graduate student who is observing children playing together after watching a film. She knows that some children saw a film that contained graphic scenes of violence and some children saw a non-violent film, but she doesn't know which film each child she is observing watched. What would we call this type of procedure?

- a. correlational
- b. blind
- c. confounded
- d. double-blind

*ANSWER:* b

## Chapter 2 - The Research Enterprise in Psychology

179. Dr. Pine is testing a new drug and has a placebo-control group. When he provides the drugs to patients and when he interviews them about side effects, he never knows whether the patient got the drug or the placebo. What is the most likely reason that Dr. Pine chose this type of research design?

- a. It reduces the impact of experimenter bias.
- b. It prevents the halo effect.
- c. It minimizes the possibility of self-report bias.
- d. It ensures that the sample is not biased.

*ANSWER: a*

180. Which of the following statements is most accurate?

- a. In recent years, there has been a steady increase in the use of deception in psychological research.
- b. Although deception has been used in the past, it has recently been banned by the American Psychological Association and the Canadian Psychological Association.
- c. Deception has been fairly common in psychological research since the 1960s.
- d. Deception has never been used in psychological research.

*ANSWER: c*

181. Which of the following is NOT one of the arguments that critics have used against the use of deception in psychological research?

- a. Lying is inherently immoral.
- b. Subjects may feel foolish when the true purpose of the study is revealed.
- c. The results of studies that use deception are inaccurate and untrustworthy.
- d. The subjects' ability to trust others may be undermined.

*ANSWER: c*

182. Zigfried Rosenblat, Jr. took part in a study on sexual deviance last year. He was somewhat dismayed when he read an article in a weekly journal discussing sexual deviance in which one patient was referred to as ZRJ. Although the article claimed all names had been disguised to protect personal identities, Zigfried is convinced he is the individual described in the article. In this case, which ethical principle did the researchers likely violate?

- a. responsible caring
- b. responsibility to society
- c. respect for the dignity of persons
- d. integrity in relationships

*ANSWER: c*

## Chapter 2 - The Research Enterprise in Psychology

183. Which of the following is generally accepted regarding the use of animals in research under Canadian ethical guidelines?

- a. Animals can be used in research laboratories, but only in observational studies, not experimental studies.
- b. Animals can be used for any form of research, regardless of the dangers associated with that research.
- c. Animals are used in research only when there is a strong expectation that the results will benefit both humans and animals.
- d. Animals can be used in research but can be harmed only when there is clear evidence that the results will lead to treatments or cures for existing human or animal disorders.

*ANSWER: c*

184. Why must Canadian researchers adhere to ethical guidelines that are set by the Tri-Council?

- a. to be promoted within their university
- b. to have their research funded by the national granting agencies
- c. to have their research approved by independent provincial ethical boards
- d. to avoid criminal prosecution

*ANSWER: b*

185. Which of your text's unifying themes is illustrated by the fact that researchers focus their attention on findings that are unlikely to have occurred by chance?

- a. Psychology is theoretically diverse.
- b. People's experience of the world is highly subjective.
- c. Behaviour is determined by multiple causes.
- d. Psychology is empirical.

*ANSWER: d*

186. Psychology researchers publish the results of their studies so that other experts can evaluate and scrutinize those results. Which of your text's unifying themes is illustrated by this practice?

- a. People's experience of the world is highly subjective.
- b. Behaviour is determined by multiple causes.
- c. Psychology is empirical.
- d. Psychology is theoretically diverse.

*ANSWER: c*

## Chapter 2 - The Research Enterprise in Psychology

187. Which of your text's unifying themes is illustrated by the fact that subjects sometimes report beneficial effects from a placebo treatment?
- a. Behaviour is shaped by our cultural heritage.
  - b. Heredity and environment jointly influence behaviour.
  - c. Psychology is empirical.
  - d. People's experience of the world is highly subjective.

*ANSWER:* d

188. Which of your text's unifying themes is illustrated by the fact that research results can be affected by experimenter bias?
- a. Psychology is theoretically diverse.
  - b. People's experience of the world is highly subjective.
  - c. Behaviour is shaped by our cultural heritage.
  - d. Behaviour is determined by multiple causes.

*ANSWER:* b

189. Who is the target audience for articles published in technical and scholarly journals?
- a. professionals in that field
  - b. the general public
  - c. anyone with an interest in the topic
  - d. students majoring in that field

*ANSWER:* a

190. Although there are several types of journal articles, which type is most common within psychology?
- a. manuscripts that propose new theories that are intended to stimulate research
  - b. reports that describe original, empirical studies
  - c. articles that describe and evaluate new treatment methods for psychological disorders
  - d. papers that summarize and reconcile the findings from a large number of studies on a specific issue

*ANSWER:* b

## Chapter 2 - The Research Enterprise in Psychology

191. What is the major difference between review articles and articles that report original empirical studies?
- Review articles summarize findings from a large number of studies on a specific topic, whereas most empirical articles are more limited in scope.
  - Review articles are published in books while empirical articles are published in journals.
  - Review articles are used to evaluate new techniques, whereas empirical articles report new research results.
  - Review articles are reviewed by experts before they are published in the journal, unlike most empirical articles.

ANSWER: a

192. Where would you look to find a database of research literature in psychology, and brief summaries of individual research studies?
- Canadian Psychological Association home page
  - Psychological Review*
  - Psychology Today*
  - PsycINFO*

ANSWER: d

193. What is the benefit of reading an abstract?
- It can be quickly scanned to determine whether the rest of the article is relevant for your purposes.
  - It shows a detailed description of the research methods that the researchers used.
  - It provides you with all of the results and detailed statistics, so you can determine whether the results are significant.
  - It summarizes all the research that led the researchers to their current hypothesis.

ANSWER: a

194. In which section of a journal article would you look for the hypotheses for a research study?
- results
  - methodology
  - references
  - introduction

ANSWER: d

## Chapter 2 - The Research Enterprise in Psychology

195. Where in a journal article would you look for the data obtained in a research study, along with the statistical analyses?
- discussion
  - results
  - method
  - abstract

*ANSWER:* b

196. What is provided in the reference list at the end of a research article?
- abstracts for all the previous research studies by the same authors
  - list of related articles on the same topic by a variety of authors
  - bibliographic information for any studies referred to in the article
  - the author's phone number, address, and website

*ANSWER:* c

197. When we say that persons are using anecdotal evidence to support their claims, what do we mean?
- The evidence is not true.
  - The evidence is based on social desirability bias.
  - The evidence was collected from a variety of sources.
  - The evidence is based on personal experiences.

*ANSWER:* d

198. What can we conclude from studies that have investigated the influence of anecdotal information?
- People are not influenced by anecdotal information, and tend to view it as non-representative and biased.
  - People tend to be influenced by anecdotal information, even when they are forewarned that the information is not representative.
  - People are influenced by anecdotal evidence only when they have not been forewarned that it may be misleading.
  - People are influenced by anecdotal evidence only when it is provided by someone they know and trust.

*ANSWER:* b

## Chapter 2 - The Research Enterprise in Psychology

199. Annabel wants a new phone. She has narrowed her choice down to two models. Alfred tells Annabel, “*Consumer Reports* did extensive testing and rated the X5 as the highest overall. The same article indicated that the uPhone is unreliable.” Francine tells Annabel, “My uncle had the X5 and had problems with it. He switched to the uPhone and loves it.” Which phone is Annabel likely to buy, based on results reported in the Critical Thinking Application?
- The uPhone, because she will be more persuaded by the anecdotal evidence.
  - The X5, because she will be more persuaded by objective evidence.
  - Neither phone, because she would prefer to do her own research rather than rely on subjective opinions.
  - Neither phone, because the two reports her friends provided conflict with each other.

ANSWER: a

## Chapter 2 - The Research Enterprise in Psychology

### Dr. Amalie

Dr. Amalie is a social psychologist who is interested in the effects of group size on efficiency and on the satisfaction of individual group members. In a study conducted by Dr. Amalie's research team, three different group sizes were used. Large groups had 20 people, medium groups had ten people, and small groups had four people. There were ten sessions run with each type of group, and each group contained different individuals, so the total number of groups was 30 and the total number of participants was 340. All participants were students at the school where Dr. Amalie works. The groups were told that they needed to come to agreement about which movie to select for an upcoming student movie night. The time that it took each group to come to a decision was recorded. Afterward, each subject was asked to rate his or her satisfaction with the group's decision (on a scale from 1 to 10, where 10 is totally satisfied).

The results were as follows:

Mean time required to come to an agreement (all differences are statistically significant):

Large groups: 20.7 minutes

Medium groups: 16.4 minutes

Small groups: 10.3 minutes

Mean satisfaction rating for individuals (all differences are statistically significant):

In large groups: 4.6

In medium groups: 7.5

In small groups: 8.8

200. In this study, what is the operational definition of efficiency?

- a. difference between speed and satisfaction
- b. size of the group
- c. satisfaction ratings
- d. speed of decision

ANSWER: d

201. Which type of study did Dr. Amalie's research team conduct?

- a. experiment
- b. double-blind procedure
- c. case study
- d. naturalistic observation

ANSWER: a

## Chapter 2 - The Research Enterprise in Psychology

202. Which of the following is a measure of central tendency from this study?
- The satisfaction rating for large groups is 4.6.
  - The difference in decision time between small groups and large groups is 10.4 minutes.
  - There was a total of 340 participants in the study.
  - The range of potential satisfaction scores is from 1 to 10.

ANSWER: a

203. What conclusion can you draw from the results of this study?
- Smaller groups are more likely to be influenced by the opinion of one individual.
  - Group size is confounded with satisfaction ratings.
  - Medium-sized groups have only a moderate amount of disagreement.
  - Larger groups take longer to come to a decision.

ANSWER: d

204. What is the independent variable in this study?
- satisfaction of individual group members
  - efficiency, as measured by speed of decision making
  - group size
  - comparing multiple groups

ANSWER: c

205. How many dependent variables are used in this study?
- 1
  - 2
  - 3
  - 10

ANSWER: b

206. There appears to be a correlation between efficiency and satisfaction, such that the less time required to make a decision, the greater the satisfaction of the group members. Which of the following correlation coefficients would reflect this relationship?
- +0.85
  - +0.05
  - 0.00
  - 0.79

ANSWER: d

## Chapter 2 - The Research Enterprise in Psychology

207. Which of the following is important to the scientific method because the scientific method is intolerant of error?
- a. naturalistic observation
  - b. placebo effects
  - c. replication
  - d. hypotheses

*ANSWER: c*

208. Which method do researchers use precisely because our experience of the world is highly subjective?
- a. psychoanalytic methods
  - b. independent variables
  - c. double-blind procedure
  - d. case studies

*ANSWER: c*

209. Which of the following sets of concepts is NOT a closely related set?
- a. correlation, sample, journal
  - b. method, results, discussion
  - c. experiment, independent variable, control group
  - d. mean, median, mode

*ANSWER: a*

210. Imagine that a group of researchers designed a study to test the effectiveness of subliminal-message weight-loss tapes. Half the participants receive real tapes, and half receive similar tapes with the subliminal messages removed. The experimenter keeps track of which participant is in which group. All the participants are told that their tapes contain subliminal messages. What type of study is this?
- a. anecdotal research
  - b. case study
  - c. double-blind procedure
  - d. single-blind study

*ANSWER: d*

## Chapter 2 - The Research Enterprise in Psychology

211. Imagine that a group of researchers conducted a study designed to test the effectiveness of subliminal-message weight-loss tapes. Suppose the researchers found that everyone lost weight during the study, even those who were given tapes without any subliminal messages. What could we conclude from the results?
- The independent and dependent variables in the study are negatively correlated.
  - There is evidence that the study contained confounding variables.
  - There is evidence of a placebo effect.
  - Subliminal tapes are effective in promoting weight loss.

*ANSWER:* c

212. Dr. Klassen is conducting a study on attitudes about drug use. She wants to administer a survey. Which of the following groups of issues should she pay most attention to when she is designing her study?
- random sampling, use of a control group, inferential statistics
  - representative sampling, self-report bias, response set
  - representative sampling, experimenter bias, ethics regarding deception
  - random assignment, experimenter bias, placebo effects

*ANSWER:* b

213. Dr. Friesen wants to investigate whether store clerks behave in a discriminatory manner toward teenagers. He is trying to decide between using naturalistic observation and using a questionnaire. What would be the best choice?
- Questionnaires, because clerks would become angry and refuse to participate if they knew you were spying on them.
  - Naturalistic observation, because you can record behaviour and avoid self-report bias.
  - Questionnaires, because you'll be able to make cause-and-effect statements.
  - Naturalistic observation, because clerks would likely refuse to respond to questionnaires.

*ANSWER:* b

214. Design a simple experiment to investigate the effects of television violence on children's aggressive behaviour, being sure to identify the independent and dependent variables, and the experimental and control groups.

*ANSWER:* There are numerous possible experimental designs. Make sure there is an explicit, testable hypothesis; that "television violence" and "aggressive behaviour" are operationally defined; that children are randomly assigned to groups; and that the control group is exposed to nonviolent television rather than to no television at all.

215. Design a simple descriptive/correlational study to investigate the relationship between television violence and children's aggressive behaviour.

*ANSWER:* Again, there are numerous possibilities. Make certain that both variables are operationally defined; that a specific descriptive/correlational method (such as naturalistic observation or survey) is selected; and that causation is neither stated nor implied.

## Chapter 2 - The Research Enterprise in Psychology

216. What are the relative weaknesses and strengths of descriptive/correlational research as opposed to experimental research? Under what conditions would a psychologist choose one method as opposed to the other?

*ANSWER:* Experimental research is the more powerful of the two methods, in that it allows precise control over the independent variable and therefore yields cause-and-effect conclusions. On the other hand, experiments may be somewhat artificial and often cannot be done for ethical reasons. Descriptive/correlational studies are conducted in the subjects' natural environment, they are easier and faster to do than experiments, and they can be done ethically in many circumstances in which experiments cannot. However, the researcher has little control over extraneous variables, and so cause-and-effect conclusions cannot be drawn. The choice between the two methods is a function of practical and ethical considerations.

217. What is the difference between a positive correlation and a negative correlation? List some specific variables that you predict would be positively correlated, and variables that would be negatively correlated, with alcohol consumption by college students.

*ANSWER:* Positive correlation: As scores on variable X increase, scores on variable Y tend to increase, too. Examples are alcohol consumption and body weight, and alcohol consumption and number of missed classes.

Negative correlation: As scores on variable X increase, scores on variable Y tend to decrease. Examples are alcohol consumption and coordination, and alcohol consumption and grade point average.

218. Describe the problems in research associated with placebo effects and experimenter bias, and explain how you would attempt to prevent these problems within a research design.

*ANSWER:* Placebo effects: Participants may expect an effect of an experimental treatment, and so will feel an effect or show a change in behaviour. This change is due to expectancy, not to manipulation of the independent variable. You would deal with this problem by having a placebo control group (a group that gets an inert version of the independent variable) so that you can compare the change in the experimental group to the change in a group that received a placebo.

Experimenter bias: Researchers may unwittingly lead participants to respond in a particular way, or may interpret their data in a particular way that confirms their pre-existing hypotheses. In order to avoid this effect, it is recommended that the studies be designed as single-blind (where the experimenter doesn't know which condition the participants are in) or double-blind (where neither the experimenters nor the participants know who is in which group). [NOTE: A double-blind study may also control for some aspects of placebo effects, so long as both active and inert versions of the independent variable are given.]

## Chapter 3 - The Biological Bases of Behaviour

1. Which cells in the nervous system receive, integrate, and transmit information?

- a. glia
- b. synapses
- c. terminal buttons
- d. neurons

*ANSWER:* d

2. What do neurons do?

- a. receive, integrate, and transmit information
- b. provide support for the other cells in the nervous system
- c. insulate the other cells in the nervous system
- d. connect the other cells in the nervous system

*ANSWER:* a

3. If you needed to send a message from the brain to your big toe, which of the following cells would be used?

- a. receptor
- b. neuron
- c. glial cell
- d. epithelial cell

*ANSWER:* b

4. What is the role of the soma or cell body of a neuron?

- a. It releases neurotransmitters.
- b. It transmits signals toward other neurons.
- c. It contains the cell nucleus.
- d. It receives information from other neurons.

*ANSWER:* c

5. Which part of the neuron has branched extensions that are specialized to receive information?

- a. axons
- b. terminal buttons
- c. somas
- d. dendrites

*ANSWER:* d

### Chapter 3 - The Biological Bases of Behaviour

6. What is the main function of dendrites?

- a. to receive information
- b. to transmit information
- c. to support and insulate the neuron
- d. to release neurotransmitters

*ANSWER:* a

7. Which part of the neuron typically receives information, and which part of the neuron typically sends information?

- a. Dendrites receive, and the soma sends.
- b. The axon receives, and the soma sends.
- c. The axon receives, and dendrites send.
- d. Dendrites receive, and the axon sends.

*ANSWER:* d

8. Which of the following is the correct order for information to pass through a neuron?

- a. axon, soma, dendrite
- b. dendrite, axon, soma
- c. dendrite, soma, axon
- d. axon, dendrite, soma

*ANSWER:* c

9. Which part of a neuron transmits information away from the neuron and toward another neuron?

- a. synapse
- b. soma
- c. axon
- d. dendrite

*ANSWER:* c

10. What is the main function of the axon?

- a. to break down neurotransmitters
- b. to transmit information
- c. to support and insulate the neuron
- d. to receive information

*ANSWER:* b

### Chapter 3 - The Biological Bases of Behaviour

11. What is the name for the insulation that covers some axons and increases the speed of transmission of the neural impulse?
- neurotransmitter sheath
  - terminal cover
  - myelin sheath
  - glia wrap

*ANSWER:* c

12. If you know that someone has a disorder that results from a loss of myelin in the nervous system, which of the following would be a key problem in that disorder?
- blockage of important receptors
  - neurons that depolarize too easily
  - lack of neurotransmitters
  - poor transmission of signals along the axon

*ANSWER:* d

13. When a synapse is created, which of the following becomes possible?
- destruction of dendrites
  - blockage of neurotransmission
  - increase in myelination
  - communication between two neurons

*ANSWER:* d

14. Where are terminal buttons located?
- at the end of dendrites
  - at the end of axons
  - on the soma
  - in the synaptic cleft

*ANSWER:* b

15. What are the chemicals that are secreted from the terminal buttons into the synapse?
- action potentials
  - hormones
  - myelin
  - neurotransmitters

*ANSWER:* d

### Chapter 3 - The Biological Bases of Behaviour

16. Which cells in the nervous system provide support and insulation for other cells?
- glial cells
  - terminal cells
  - neurons
  - synapse cells

*ANSWER:* a

17. What is the main role of glial cells?
- to receive information from other cells
  - to transmit information to other cells
  - to provide support for other cells in the nervous system
  - to transfer information within the nervous system

*ANSWER:* c

18. By what type of process are neural impulses transmitted through the nervous system?
- a chemical process
  - an electrical process
  - a biological process
  - an electrochemical process

*ANSWER:* d

19. A neuron is currently not receiving any input. What kind of charge does that neuron have?
- It has a stable positive charge.
  - It has an unstable negative charge.
  - It has an unstable positive charge.
  - It has a stable negative charge.

*ANSWER:* d

20. What happens to a neuron's electrical charge as it is stimulated by an excitatory neurotransmitter and starts to receive information?
- It immediately becomes positive.
  - It becomes more negative.
  - It becomes less negative and may become positive.
  - It immediately affects the next neuron.

*ANSWER:* c

### Chapter 3 - The Biological Bases of Behaviour

21. What occurs when the electrical charge inside a neuron becomes positive and travels along the axon?
- a. a resting potential
  - b. an action potential
  - c. a chemical potential
  - d. an electrical potential

*ANSWER: b*

22. What happens to a neuron's electrical charge when a neuron is firing its action potential?
- a. It becomes positive and travels along the dendrite.
  - b. It becomes negative and travels along the axon.
  - c. It becomes negative and travels along the dendrite.
  - d. It becomes positive and travels along the axon.

*ANSWER: d*

23. Which of the following is true of a neuron after it fires an action potential?
- a. It cannot fire another action potential until at least five minutes have elapsed.
  - b. It can continue firing the original action potential for an extended period of time.
  - c. It can immediately fire additional action potentials.
  - d. It cannot immediately fire another action potential.

*ANSWER: d*

24. Comparing a neuron to a gun that holds only a single bullet, which of the following is similar to the time it takes to reload the gun?
- a. It has a relative refractory period.
  - b. It has a relative firing rate.
  - c. It has an absolute refractory period.
  - d. It has an absolute firing rate.

*ANSWER: c*

25. What does the "all-or-none law" refer to?
- a. A neuron transmits a consistent impulse each time it fires an action potential.
  - b. The neuron is selective regarding the type of other neuron it responds to.
  - c. A neuron is either working properly, or it has become necrotic.
  - d. All neurons in a chain are active or none are active.

*ANSWER: a*

### Chapter 3 - The Biological Bases of Behaviour

26. What is the law that states that a neuron fires an action potential at only one level of intensity?
- the refractory law
  - the all-or-none law
  - the threshold law
  - the action law

*ANSWER:* b

27. What do we call the microscopic gap between the terminal buttons of one neuron and the cell membrane of another neuron?
- presynaptic space
  - synaptic cleft
  - neurotransmitter cleft
  - postsynaptic space

*ANSWER:* b

28. An action potential has just arrived at the terminal buttons of a neuron. Which of the following events will occur immediately?
- Neurotransmitters will be taken up by the postsynaptic neuron.
  - Neurotransmitters will be pulled back into the presynaptic neuron.
  - Neurotransmitters will be manufactured in the synaptic vesicles.
  - Neurotransmitters will be released into the synaptic cleft.

*ANSWER:* d

29. Which of the following situations is most likely to lead to the depolarization of a postsynaptic neuron?
- Reuptake has occurred in the synapse.
  - Neurotransmitters have been released into the synapse.
  - The number of excitatory PSPs is greater than the number of inhibitory PSPs.
  - The number of inhibitory PSPs is greater than the number of excitatory PSPs.

*ANSWER:* c

30. As a result of receiving neurotransmitters, the voltage of a postsynaptic receptor has become more negative. What will be the result of this change?
- The presynaptic neuron is less likely to fire again.
  - The presynaptic neuron is more likely to fire again.
  - The postsynaptic neuron is less likely to fire.
  - The postsynaptic neuron is more likely to fire.

*ANSWER:* c

### Chapter 3 - The Biological Bases of Behaviour

31. As a result of receiving neurotransmitters, the voltage of a postsynaptic receptor has become less negative. What will be the result of this change?
- The presynaptic neuron is more likely to fire again.
  - The postsynaptic neuron is less likely to fire.
  - The presynaptic neuron is less likely to fire again.
  - The postsynaptic neuron is more likely to fire.

*ANSWER:* d

32. What is the process through which neurotransmitters are “recycled” to be used again?
- absorption
  - reabsorption
  - uptake
  - reuptake

*ANSWER:* d

33. What would happen if inhibitory postsynaptic potentials did not exist?
- Antagonism would not occur.
  - Neurons would be more likely to depolarize.
  - Neurons would be more resistant to depolarization.
  - Reuptake would not occur.

*ANSWER:* b

34. As a result of brain maturation, a neuron in a network now receives fewer excitatory postsynaptic potentials. Which of the following processes has most likely occurred?
- pruning
  - agonism
  - degeneration
  - antagonism

*ANSWER:* a

35. Which of the following reflects Hebbian learning?
- The synapse between Neuron A and Neuron B has been pruned.
  - Neuron A becomes more efficient at depolarizing Neuron B over time.
  - Neuron A produces more neurotransmitters over time.
  - Neuron A has just created a new synapse with Neuron B.

*ANSWER:* b

### Chapter 3 - The Biological Bases of Behaviour

36. What do we call a chemical that mimics a neurotransmitter and can bind to receptor sites and cause postsynaptic potentials?
- a. an agonist
  - b. an artificial neurotransmitter
  - c. an endogenous neurotransmitter
  - d. an antagonist

*ANSWER:* a

37. In the “lock and key” analogy of synaptic communication, which of the following is the “lock”?
- a. the soma
  - b. the receptor
  - c. the axon
  - d. the neurotransmitter

*ANSWER:* b

38. In the “lock and key” analogy of synaptic communication, which of the following is the “key”?
- a. the axon
  - b. the receptor
  - c. the soma
  - d. the neurotransmitter

*ANSWER:* d

39. In the “lock and key” analogy of synaptic communication, which of the following would function like a piece of gum that is stuck in the lock?
- a. the neurotransmitter
  - b. the receptor
  - c. a synapse
  - d. an antagonist

*ANSWER:* d

40. Which neurotransmitter is released by motor neurons and results in movement of the voluntary muscles?
- a. monoamines
  - b. acetylcholine
  - c. endorphins
  - d. dopamine

*ANSWER:* b

### Chapter 3 - The Biological Bases of Behaviour

41. Eric believes that smoking tobacco is beneficial when he is studying because of its relationship to acetylcholine (ACh). Which of the following outcomes should nicotine cause?
- a. Nicotine is an excitor for ACh, so it should keep him awake.
  - b. Nicotine is an agonist for ACh, so it should facilitate memory and attention.
  - c. Nicotine is an inhibitor for ACh, so it should prevent distraction.
  - d. Nicotine is an antagonist for ACh, so it should block nervousness.

*ANSWER:* b

42. Which of the following neurotransmitters is NOT a monoamine?
- a. dopamine
  - b. norepinephrine
  - c. acetylcholine
  - d. serotonin

*ANSWER:* c

43. Which of the following is most likely to occur if you were to administer a serotonin antagonist?
- a. pain reduction
  - b. increased focus and attention
  - c. schizophrenia
  - d. aggressive behaviour

*ANSWER:* d

44. Which of the following is most likely to occur if you were to administer a serotonin agonist?
- a. stable mood and arousal
  - b. sensitivity to pain
  - c. depression
  - d. schizophrenia

*ANSWER:* a

45. Which of the following is most likely to occur if you were to administer a dopamine antagonist?
- a. addiction
  - b. schizophrenia
  - c. difficulty with movement
  - d. pain reduction

*ANSWER:* c

### Chapter 3 - The Biological Bases of Behaviour

46. Which of the following neurotransmitters is believed to be associated with schizophrenia?
- a. serotonin
  - b. dopamine
  - c. endorphin
  - d. acetylcholine

*ANSWER: b*

47. Which neurotransmitters produce only inhibitory postsynaptic potentials?
- a. GABA and glycine
  - b. serotonin and endorphins
  - c. serotonin and glycine
  - d. GABA and endorphins

*ANSWER: a*

48. Which of the following is characteristic of endorphins?
- a. They have been related to the development of certain psychological disorders.
  - b. They are associated with the movement of voluntary muscles.
  - c. They are associated with sleep and wakefulness.
  - d. They resemble opiates in structure and effect.

*ANSWER: d*

49. Which of the following could be considered an endorphin agonist?
- a. histamine
  - b. cocaine
  - c. morphine
  - d. curare

*ANSWER: c*

50. What are the two major divisions of the nervous system?
- a. central and peripheral
  - b. autonomic and sympathetic
  - c. central and autonomic
  - d. peripheral and somatic

*ANSWER: a*

### Chapter 3 - The Biological Bases of Behaviour

51. Which nervous system is subdivided into the somatic and autonomic nervous systems?
- a. skeletal nervous system
  - b. central nervous system
  - c. sympathetic nervous system
  - d. peripheral nervous system

*ANSWER: d*

52. Handyman Holmes just hit his thumb with a hammer. Which nerve fibres will transmit the sensation to his central nervous system?
- a. sympathetic nerve fibres
  - b. efferent nerve fibres
  - c. autonomic nerve fibres
  - d. afferent nerve fibres

*ANSWER: d*

53. Handyman Holmes just hit his thumb with a hammer. Which nerve fibres will transmit the command from his central nervous system to jerk his hand away?
- a. efferent nerve fibres
  - b. sympathetic nerve fibres
  - c. afferent nerve fibres
  - d. autonomic nerve fibres

*ANSWER: a*

54. How do efferent nerve fibres communicate with the central nervous system (CNS)?
- a. They take messages toward the CNS.
  - b. They relay messages within the CNS.
  - c. They take messages away from the CNS.
  - d. They carry messages both away from and toward the CNS.

*ANSWER: c*

55. Which nervous system carries information from the voluntary skeletal muscles and sensory receptors to the central nervous system and also carries commands from the central nervous system to the muscles?
- a. peripheral nervous system
  - b. parasympathetic nervous system
  - c. autonomic nervous system
  - d. somatic nervous system

*ANSWER: d*

### Chapter 3 - The Biological Bases of Behaviour

56. Which nervous system controls the heart, glands, and smooth muscles?

- a. visceral nervous system
- b. efferent nervous system
- c. somatic nervous system
- d. autonomic nervous system

*ANSWER: d*

57. Which nervous system is responsible for the activation of the “fight or flight” response?

- a. parasympathetic nervous system
- b. efferent nervous system
- c. sympathetic nervous system
- d. afferent nervous system

*ANSWER: c*

58. If the parasympathetic nervous system is currently active, which of the following bodily functions is likely to be occurring?

- a. digestion
- b. cortisol secretion
- c. crying
- d. orgasm

*ANSWER: a*

59. In which nervous system would you find cerebrospinal fluid?

- a. peripheral nervous system
- b. central nervous system
- c. primary nervous system
- d. autonomic nervous system

*ANSWER: b*

60. If you removed the top of the skull, what would you be able to see on top of the brain?

- a. meninges
- b. brain stem
- c. ventricles
- d. CSF

*ANSWER: a*

### Chapter 3 - The Biological Bases of Behaviour

61. If you wanted to monitor the electrical activity of the brain over time, what recording device should you use?
- EEG
  - MRI
  - CT
  - PET

*ANSWER: a*

62. Which of the following techniques would be most useful for research in sleep laboratories?
- transcranial magnetic stimulation
  - electrical stimulation of the brain
  - electroencephalography
  - lesioning

*ANSWER: c*

63. How do lesioning studies relate to studies of patients with brain injuries?
- Lesioning was originally used for research purposes, but is beginning to be accepted as a therapeutic technique.
  - Lesioning is an imaging method that is appropriate for use with patients who may have foreign materials lodged in their wounds.
  - Lesioning is used in animal research to test hypotheses generated from case studies of patients with brain damage.
  - Lesioning is a therapeutic technique designed to reduce symptoms associated with brain damage.

*ANSWER: c*

64. What does electrical stimulation of the brain (ESB) involve?
- monitoring the electrical activity of the brain over time
  - destroying a piece of the brain via small electrodes that are carefully implanted
  - visualizing the three-dimensional structure of the brain
  - sending a weak current into a brain structure to activate that structure

*ANSWER: d*

65. If you hypothesized that damage to a particular region of the brain led to symptoms of anxiety, which of the following techniques would be both useful and ethical to test this hypothesis in human participants?
- electroencephalography
  - electric stimulation of the brain
  - transcranial magnetic stimulation
  - magnetic resonance imaging

*ANSWER: c*

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66. Which of the following pairs of procedures allows researchers to visualize changes in brain activity over time?
- a. positron emission tomography and functional magnetic resonance imaging
  - b. computerized tomography and magnetic resonance imaging
  - c. positron emission tomography and computerized tomography
  - d. magnetic resonance imaging and functional magnetic resonance imaging

*ANSWER: a*

67. Which procedure results in a high-quality three-dimensional picture of the brain?
- a. transcranial magnetic stimulation
  - b. magnetic resonance imaging
  - c. positron emission tomography
  - d. electrical stimulation of the brain

*ANSWER: b*

68. Which method would you use if you needed to know which areas of the brain experienced the greatest blood flow during a particular task?
- a. magnetic resonance imaging
  - b. computerized tomography
  - c. positron emission tomography
  - d. electroencephalography

*ANSWER: c*

69. According to the Featured Study (The Neuroscience of Time Travel), with which sort of task is activity in the hippocampus associated?
- a. all cognitive tasks that involve reading
  - b. empathy and decision-making
  - c. short-term memory
  - d. remembering and imagining

*ANSWER: d*

70. Which of the following processes is the medulla involved in?
- a. relaying sensory information to the cerebral cortex
  - b. sleep and arousal
  - c. coordinating body movements and balance
  - d. controlling essential functions such as breathing

*ANSWER: d*

### Chapter 3 - The Biological Bases of Behaviour

71. If a patient has a stroke that leads to respiratory failure, in which of the following brain areas did the stroke likely occur?
- a. cerebellum
  - b. medulla
  - c. pons
  - d. reticular formation

*ANSWER: b*

72. A gunshot wound in the back of the head caused the victim to be permanently unable to maintain balance and bodily coordination. Which of the following portions of the brain was damaged?
- a. medulla
  - b. cerebrum
  - c. thalamus
  - d. cerebellum

*ANSWER: d*

73. Which of the following structures contains dopamine-releasing neurons and, if it deteriorates, is involved in Parkinson's disease?
- a. midbrain
  - b. forebrain
  - c. limbic system
  - d. hindbrain

*ANSWER: a*

74. As a result of a stroke, Helen has sustained damage to her reticular formation. Which of the following will be difficult for Helen?
- a. relaying sensory information to the cerebral cortex
  - b. coordinating bodily movements and balance
  - c. regulation of sleep, wakefulness, and arousal
  - d. relaying information between the brainstem and cerebellum

*ANSWER: c*

75. Where are the thalamus, hypothalamus, and limbic system all located?
- a. cerebrum
  - b. forebrain
  - c. hindbrain
  - d. midbrain

*ANSWER: b*

### Chapter 3 - The Biological Bases of Behaviour

76. Through which of the following areas will all visual and auditory signals travel?

- a. sensory cortex
- b. thalamus
- c. cerebellum
- d. hypothalamus

*ANSWER: b*

77. Electrical stimulation of which brain structure will result in an animal eating constantly and gaining weight rapidly?

- a. thalamus
- b. frontal lobe
- c. limbic system
- d. hypothalamus

*ANSWER: d*

78. Which of the following is NOT directly regulated or influenced by the hypothalamus?

- a. the autonomic nervous system
- b. feeding
- c. the endocrine system
- d. memory

*ANSWER: d*

79. Which of the following is a loosely connected network of brain structures involved in memory and emotional experiences such as fear and pleasure?

- a. thalamus
- b. hypothalamus
- c. limbic system
- d. reticular formation

*ANSWER: c*

80. If a person's hippocampus is damaged, what would become difficult for that person?

- a. controlling her response to pleasurable stimuli
- b. vision and hearing
- c. controlling her food intake
- d. remembering

*ANSWER: d*

### Chapter 3 - The Biological Bases of Behaviour

81. Which of the following areas allows information to travel between the left and right hemispheres?
- a. thalamus
  - b. corpus callosum
  - c. pons
  - d. limbic system

*ANSWER:* b

82. If the human cortex did not have so many folds, which of the following would be likely?
- a. We would not need the cerebellum.
  - b. We would have faster transmission of action potentials.
  - c. We would lose the ability to inhibit most neural impulses.
  - d. We would need larger skulls to hold the same brain volume.

*ANSWER:* d

83. Which lobe of the brain would be most active for a visual task?
- a. occipital lobe
  - b. frontal lobe
  - c. temporal lobe
  - d. parietal lobe

*ANSWER:* a

84. If the occipital lobe of the brain is stimulated, what would a person be most likely to report?
- a. moving a part of his body
  - b. seeing a flash of light
  - c. smelling an odour
  - d. hearing a sound

*ANSWER:* b

85. Which lobe of the brain would be most active for an auditory task?
- a. temporal lobe
  - b. frontal lobe
  - c. occipital lobe
  - d. parietal lobe

*ANSWER:* a

### Chapter 3 - The Biological Bases of Behaviour

86. Which lobe of the brain would be most active for a task that required you to identify objects by touch?
- a. temporal lobe
  - b. occipital lobe
  - c. frontal lobe
  - d. parietal lobe

*ANSWER:* d

87. Which lobe of the brain would be most active for a task that required a great deal of manual dexterity?
- a. parietal lobe
  - b. temporal lobe
  - c. frontal lobe
  - d. occipital lobe

*ANSWER:* c

88. The next time you have an itch on your foot, where will the perception of the itch be processed?
- a. occipital lobe
  - b. parietal lobe
  - c. frontal lobe
  - d. temporal lobe

*ANSWER:* b

89. If a patient has severe damage to the prefrontal cortex, which of the following would become difficult for that patient?
- a. identifying objects by touch
  - b. planning, paying attention, and getting organized
  - c. hearing sounds
  - d. identifying visually complex materials

*ANSWER:* b

90. Theodore was born blind. What is likely to happen to the visual cortex of Theodore's brain as he develops?
- a. It will receive proportionately less blood and oxygen.
  - b. It will be recruited for processing verbal and other auditory information.
  - c. It will begin to function like a subcortical area rather than a cortical area.
  - d. It will shrink in size and be replaced by a ventricle.

*ANSWER:* b

### Chapter 3 - The Biological Bases of Behaviour

91. Where, in most people, is the area of the brain that is primarily responsible for speech production?
- a. right frontal lobe
  - b. left temporal lobe
  - c. left frontal lobe
  - d. right temporal lobe

*ANSWER: c*

92. John has recovered very well from a recent stroke, except that he can no longer understand the words people are saying to him even though he can hear perfectly well. Which of the following brain areas is likely damaged?
- a. Wernicke's area
  - b. the prefrontal cortex
  - c. the parietal cortex
  - d. Broca's area

*ANSWER: a*

93. An elderly person has a stroke that leaves her unable to talk and part of her body paralyzed. Which part of the body is most likely paralyzed?
- a. right side
  - b. lower body
  - c. upper body
  - d. left side

*ANSWER: a*

94. How could you determine whether a person has had split-brain surgery?
- a. by their speech patterns
  - b. by their performance on visual identification tasks in a laboratory
  - c. by the characteristic patterns of disturbed motor behaviour
  - d. by the increased likelihood of having small seizures

*ANSWER: b*

95. Following split-brain surgery, if an individual has difficulty naming an object that he briefly saw, which visual field would you expect that the object was presented to?
- a. right
  - b. dominant
  - c. nondominant
  - d. left

*ANSWER: d*

### Chapter 3 - The Biological Bases of Behaviour

96. Ellie has had split-brain surgery. If she briefly views “boatXhouse” while focusing on the X, what would Ellie say that she saw?
- a. She saw the word “boat.”
  - b. She did not see a word.
  - c. She saw the word “boathouse.”
  - d. She saw the word “house.”

*ANSWER:* d

97. When an object is placed unseen in the left hand of a person who has had split-brain surgery, which of the following will happen?
- a. He will be able to describe it.
  - b. He will be able to identify the object with his right hand.
  - c. He will not be able to describe it.
  - d. He will drop it.

*ANSWER:* c

98. Which task would NOT be primarily controlled by the right hemisphere?
- a. spatial tasks
  - b. visual recognition
  - c. reading
  - d. musical tasks

*ANSWER:* c

99. Which task is NOT predominantly controlled by the left hemisphere, for most people?
- a. writing
  - b. language
  - c. spatial tasks
  - d. controlling the right side of the body

*ANSWER:* c

100. What is likely to be released if the pituitary gland is activated?
- a. digestive enzymes
  - b. neurotransmitters
  - c. hormones
  - d. tears

*ANSWER:* c

### Chapter 3 - The Biological Bases of Behaviour

101. Why is the pituitary gland known as the “master gland”?
- It regulates brain function.
  - It secretes hormones that control other endocrine glands.
  - It regulates levels of both hormones and neurotransmitters.
  - It secretes testosterone.

*ANSWER: b*

102. Which brain structure controls much of the endocrine system?
- hypothalamus
  - cerebellum
  - thalamus
  - pituitary

*ANSWER: a*

103. Jason and Kyle are friends who are working together on a project. Which of the following hormones is likely to be secreted if they are bonding?
- estrogen
  - testosterone
  - cortisol
  - oxytocin

*ANSWER: d*

104. Which of the following hormones would be released in high volumes around the time of puberty?
- thyroxin
  - gonadotropin
  - oxytocin
  - cortisol

*ANSWER: b*

105. Tom is studying twins to determine the relative contribution of heredity and environment to the development of eating disorders. Which of the following is Tom’s field of study?
- evolutionary psychology
  - ontology
  - behaviour genetics
  - embryology

*ANSWER: c*

### Chapter 3 - The Biological Bases of Behaviour

106. With the exception of eggs and sperm, how many chromosomes are contained in each cell in the human body?
- a. 46
  - b. 23
  - c. 21
  - d. 18

*ANSWER:* a

107. What is the smallest piece of genetic information that is the key functional unit in hereditary transmission?
- a. chromosome
  - b. DNA
  - c. gene
  - d. zygote

*ANSWER:* c

108. If Tom is heterozygous for a specific gene pair, which of the following must be true?
- a. Tom's two genes in the specific gene pair are both recessive.
  - b. Tom's two genes in the specific gene pair are the same.
  - c. Tom's two genes in the specific gene pair are both dominant.
  - d. Tom's two genes in the specific gene pair are different.

*ANSWER:* d

109. If Ellen carries a recessive gene for blue eyes, which of the following must be true?
- a. One of her parents had blue eyes.
  - b. Both of her parents had blue eyes.
  - c. One of her parents carried the recessive gene.
  - d. Neither of her parents carried the recessive gene.

*ANSWER:* c

110. What are you describing if you describe Henry as tall, dark, and handsome?
- a. his homozygous condition
  - b. his heterozygous condition
  - c. his genotype
  - d. his phenotype

*ANSWER:* d

### Chapter 3 - The Biological Bases of Behaviour

111. Isabel has a large family. Which of the following pairs would have equal degrees of relatedness to Isabel?
- a. her father, and her brother
  - b. Her son, and her aunt
  - c. Her brother, and her first cousin
  - d. her grandfather, and her daughter

*ANSWER: a*

112. Which variable is more difficult to isolate in a family study compared to an adoption study?
- a. sex differences
  - b. socioeconomic status
  - c. genetic predisposition
  - d. shared environment

*ANSWER: d*

113. In family studies, how do researchers assess hereditary influence?
- a. by comparing the resemblance of adopted children to both their biological and adoptive parents on specific traits
  - b. by comparing members of one family to unrelated individuals to see how much they resemble one another on specific traits
  - c. by comparing blood relatives to see how much they resemble one another on specific traits
  - d. by comparing the resemblance of identical and fraternal twins on specific traits

*ANSWER: c*

114. If a trait is influenced to some degree by genetic factors, then which of the following pairs should be most similar to one another?
- a. monozygotic twins
  - b. parent and child
  - c. dizygotic twins
  - d. brother and sister

*ANSWER: a*

115. Which research method allows researchers to most easily isolate the effect of both genetics and experience on specific traits?
- a. twin studies
  - b. family studies
  - c. survey studies
  - d. adoption studies

*ANSWER: d*

### Chapter 3 - The Biological Bases of Behaviour

116. Which of the following is suggested by results from family, twin, and adoption studies?
- a. Neither genetics nor experience exerts a predictable influence on human behaviour.
  - b. Genetics exerts the strongest influence on human behaviour.
  - c. Experience exerts the strongest influence on human behaviour.
  - d. Genetics and experience jointly influence human behaviour.

*ANSWER: d*

117. Why would the Human Genome Project not be considered part of the field of behaviour genetics?
- a. The procedures associated with genetic mapping do not consider the role of the environment on behaviour.
  - b. It appears to be impossible to predict behaviours based on genetic substrates.
  - c. It focuses on the genome, not the chromosome.
  - d. It ignores polygenic traits.

*ANSWER: a*

118. Jessica is working on a large research project that follows people who have inherited a gene for a particular disorder. She wants to determine whether diet and exercise will alter the likelihood that those people will experience the symptoms of the disorder. What is Jessica's field of study?
- a. epigenetics
  - b. genetic mapping
  - c. evolutionary psychology
  - d. behaviour genetics

*ANSWER: a*

119. In a village, some people have very few children and some people have a lot of children. According to Darwin, what varies among people in this village?
- a. fertility
  - b. heritability
  - c. fitness
  - d. genotype

*ANSWER: c*

120. A species that lives in the arctic have warm, fluffy coats of fur because those individuals in the species with warm fur lived longer and had more offspring. According to Darwin, what is the mechanism that led to the whole species having warm fur?
- a. evolution
  - b. survival of the fittest
  - c. natural selection
  - d. adaptation

*ANSWER: c*

### Chapter 3 - The Biological Bases of Behaviour

121. The long necks of giraffes and sharp beaks of woodpeckers allow access to food. What is the term used for these physical characteristics?
- adaptations
  - fitness
  - natural selection
  - genotype

*ANSWER:* a

122. Which of the following is an example of gene flow?
- A species becomes smaller because smaller individuals survive famines.
  - A population of animals becomes darker because the paler ones moved away.
  - A species develops spots because of a random mutation.
  - A population of cows becomes larger because a farmer intentionally breeds them for size.

*ANSWER:* b

123. If you know that an organism has a genetic mutation, which of the following do you also know?
- The organism is less fit.
  - The organism is more fit.
  - The organism could pass the mutation on to offspring.
  - The organism will undergo genetic drift.

*ANSWER:* c

124. Schizophrenia may be related to abnormalities in neurotransmitter activity, structural defects in the brain, and genetic vulnerabilities. Which of your textbook's unifying themes are these observations most directly related to?
- Heredity and environment jointly influence behaviour.
  - Behaviour is shaped by cultural heritage.
  - Behaviour is determined by multiple causes.
  - Psychology is empirical.

*ANSWER:* c

125. Which of your textbook's unifying themes in psychology is Darwin's theory of evolution by natural selection most directly related to?
- People's experience of the world is highly subjective.
  - Psychology evolves in a sociohistorical context.
  - Heredity and environment jointly influence behaviour.
  - Psychology is theoretically diverse.

*ANSWER:* c

### Chapter 3 - The Biological Bases of Behaviour

126. What has been demonstrated by research involving tasks such as recognizing words or musical melodies?
- a. Most tasks are controlled by only one hemisphere.
  - b. Right-handed individuals outperform left-handed individuals on verbal tasks.
  - c. On a specific task, the superiority of one hemisphere is usually quite modest.
  - d. The dominant hemisphere is superior to the other hemisphere on most tasks.

*ANSWER: c*

127. You have just read a magazine article that claims that schools should be reformed so that teachers can teach more to the right side of the brain. Which of the following is a reasonable response, given evidence about cerebral specialization?
- a. It would be detrimental to left-brained students.
  - b. It is impractical because it is impossible to teach just one hemisphere at a time.
  - c. It is revolutionary, because it takes into account individual differences in hemispheric specialization.
  - d. It is an excellent suggestion that reflects current understanding of brain functioning.

*ANSWER: b*

128. Which of the following interventions is likely to cause permanent visual damage?
- a. visual deprivation during infancy
  - b. visual deprivation during childhood
  - c. visual deprivation during adolescence
  - d. visual deprivation during adulthood

*ANSWER: a*

129. Terry read a study suggesting that listening to music can lower cortisol levels and reduce the experience of everyday stress. Terry then tells her friend that people with anxiety disorders should just listen to music to get rid of their symptoms. Which of the following errors has Terry made?
- a. confirmation bias
  - b. illusory correlation
  - c. inappropriate extrapolation
  - d. fundamental attribution error

*ANSWER: c*

130. Which nervous system becomes activated and is “in control” when Carly is startled?
- a. the postural nervous system
  - b. the parasympathetic nervous system
  - c. the somatic nervous system
  - d. the sympathetic nervous system

*ANSWER: d*

### Chapter 3 - The Biological Bases of Behaviour

131. Which neurotransmitter is necessary to allow Carly's muscles to move, and to regulate her attention to her surroundings?
- a. serotonin
  - b. norepinephrine
  - c. GABA
  - d. acetylcholine

*ANSWER:* d

132. Which brain area would be activated as Carly plans her weekend?
- a. the hypothalamus
  - b. prefrontal cortex
  - c. visual cortex
  - d. primary somatosensory cortex

*ANSWER:* b

133. As Carly speaks to her dog, which of the following areas is most necessary for that task?
- a. Broca's Area
  - b. Wernicke's Area
  - c. auditory cortex
  - d. somatosensory cortex

*ANSWER:* a

134. Assuming that Carly's startle response would protect her when there is real danger, what would an evolutionary theorist call that response?
- a. a mutation
  - b. an adaptation
  - c. a phenotype
  - d. a homozygous trait

*ANSWER:* b

## Chapter 3 - The Biological Bases of Behaviour

1. Which cells in the nervous system do most of the work of receiving, integrating, and transmitting information?
- neurons
  - glial cells
  - axons
  - dendrites

*ANSWER:* a

2. Which of the following is the most accurate description of the structure and function of all neurons in your central nervous system?
- All neurons contain a cell body and an axon, and may have other structures.
  - All neurons receive information via one or more dendrites and send information via one or more axons.
  - All neurons synapse onto another neuron in order to transmit an electrical signal.
  - All neurons receive and send information.

*ANSWER:* d

3. Which of the following is NOT one of the main functions of neurons?
- integrating information
  - generating information
  - transmitting information
  - receiving information

*ANSWER:* b

4. What are three basic components of most neurons?
- vesicles, terminal buttons, synapses
  - myelin, nodes, axon terminals
  - cell body, axon, dendrites
  - hindbrain, midbrain, forebrain

*ANSWER:* c

5. Which neuronal structures are analogous to branches on a tree?
- dendrites
  - axons
  - nuclei
  - cell bodies

*ANSWER:* a

### Chapter 3 - The Biological Bases of Behaviour

6. On a typical neuron, which structure receives neurochemical information, and which structure sends neurochemical information to other neurons?

- a. Dendrites receive; axons send.
- b. Axons send; synapses receive.
- c. Dendrites receive; synapses send.
- d. Axons receive; dendrites send.

*ANSWER:* a

7. In computers, the keyboard is the component of the computer that receives information. What would the keyboard be equivalent to, in comparing a computer to a neuron?

- a. axon
- b. soma
- c. dendrite
- d. terminal button

*ANSWER:* c

8. Emma has a disorder that includes degeneration of myelin sheaths in her nervous system. Which of the following disorders does Emma most likely have?

- a. Alzheimer's disease
- b. multiple sclerosis
- c. Broca's aphasia
- d. Parkinson's disease

*ANSWER:* b

9. Which of the following is associated with the fastest neural impulses?

- a. unmyelinated dendrites
- b. myelinated axons
- c. shorter axons
- d. multiple dendrites

*ANSWER:* b

### Chapter 3 - The Biological Bases of Behaviour

10. When you want to print something from a computer, a cable carries this signal from the computer to the printer. In comparing a computer and printer to two neurons, what is the neuronal equivalent to the cable?
- a. synapse
  - b. soma
  - c. terminal button
  - d. axon

*ANSWER:* d

11. When you are printing something from your computer, your cable must be securely connected to the printer or else the signal won't get through. If you compared a computer and printer to two neurons, what is the neuronal equivalent of the connection between the cable and the printer?
- a. synapse
  - b. soma
  - c. terminal button
  - d. axon

*ANSWER:* a

12. Which part of the neuron secretes neurotransmitters?
- a. neuromodulators
  - b. dendrites
  - c. myelin sheaths
  - d. terminal buttons

*ANSWER:* d

13. Which of the following is the correct sequence of structures through which information flows in a neuron?
- a. dendrites to axon to soma
  - b. axon to glia to dendrites
  - c. glia to dendrites to axon
  - d. dendrites to soma to axon

*ANSWER:* d

14. What are the cells that provide structural support and insulation for neurons?
- a. synapses
  - b. sheaths
  - c. glia
  - d. soma

*ANSWER:* c

### Chapter 3 - The Biological Bases of Behaviour

15. What is the primary role of glial cells?
- They form the primary components of the spinal cord.
  - They provide support for neurons.
  - They release neurotransmitters.
  - They release neuromodulators.

*ANSWER:* b

16. What would happen if you were to lose all of your glial cells?
- There would be no change in functioning, because neurons are the cells that are important for transmission of information within the nervous system.
  - One hemisphere could not send information to the other hemisphere.
  - Your neurons would no longer have a normal chemical environment, and there would be problems with efficient neurotransmission.
  - You would no longer be able to send neurotransmitters from one cell to another.

*ANSWER:* c

17. Which of the following is a characteristic of both sodium and potassium ions?
- They carry a negative charge.
  - They are concentrated inside the neuron's cell body.
  - They carry a positive charge.
  - They are capable of changing their potentials.

*ANSWER:* c

18. What do we call the tiny electrical charge that exists when a neuron is neither receiving nor sending information?
- resting potential
  - action potential
  - post-synaptic potential
  - inhibitory potential

*ANSWER:* a

19. When a neuron is neither receiving nor sending, what is the approximate voltage of the electrical charge that exists between the inside and the outside of a neuron?
- 700 millivolts
  - 70 millivolts
  - +70 millivolts
  - +700 millivolts

*ANSWER:* b

### Chapter 3 - The Biological Bases of Behaviour

20. Bradley is deeply relaxed and many of his muscles are not moving at all. What does this suggest about many of Bradley's motor neurons?
- They have a voltage of +70 millivolts.
  - They have a voltage of -70 millivolts.
  - They are in a relative refractory period.
  - They are in an absolute refractory period.

*ANSWER:* b

21. When the sodium channels of a neuron open, allowing sodium ions to flow inside, which of the following is most likely to happen next?
- a resting potential
  - an action potential
  - a refractory period
  - reuptake

*ANSWER:* d

22. What is an action potential?
- an electrical signal that travels along the axon of a neuron
  - the small gap that exists between adjacent neurons
  - the tiny electrical charge that exists when a neuron is neither receiving nor sending information
  - the release of neurotransmitters

*ANSWER:* a

23. Tracey became dehydrated during a recent illness, and the levels of sodium in her body were significantly reduced. What would we expect to occur if enough sodium was lost?
- Her nervous system would become highly activated, and action potentials would be generated continuously.
  - More neurotransmitters would be produced in her terminal buttons.
  - Fewer action potentials would occur in her nervous system.
  - Glial cells would start to degenerate and die.

*ANSWER:* c

### Chapter 3 - The Biological Bases of Behaviour

24. A neuron just sent a neural impulse. It will be one to two milliseconds before another neural impulse can be generated. What do we call this brief time increment, when another neural impulse cannot occur?
- a. resting potential
  - b. absolute refractory period
  - c. postsynaptic discharge
  - d. all-or-none period

*ANSWER:* b

25. What is the term for the minimum length of time between action potentials?
- a. relative threshold period
  - b. transduction interval
  - c. absolute refractory period
  - d. synaptic interval

*ANSWER:* c

26. Which of the following is known about action potentials?
- a. They travel more slowly if the incoming stimulation is less intense.
  - b. They are stronger when the incoming stimulation is more intense.
  - c. They are generated in an all-or-none fashion.
  - d. They are seldom strong enough to reach the terminal buttons.

*ANSWER:* c

27. What is the typical speed of an action potential?
- a. at least 600 kilometres/hour
  - b. up to 300 kilometres/hour
  - c. approximately the speed of light (300,000 kilometres/second)
  - d. approximately the speed of sound (1236 kilometres/hour)

*ANSWER:* b

28. Sara is holding Scott's hand during a scary movie. Suddenly she squeezes his hand very hard. When she does this, what will the nerves in Scott's hand do?
- a. release more GABA
  - b. send larger action potentials to his central nervous system
  - c. enter an absolute refractory period
  - d. start to fire at a faster rate

*ANSWER:* d

### Chapter 3 - The Biological Bases of Behaviour

29. Fiona puts her hands into a bucket of lukewarm water; Luke puts his hands into a bucket of ice-cold water. What should we predict about each of their action potentials?
- Only Fiona will experience enough stimulation to trigger an action potential.
  - Luke will have inhibitory action potentials.
  - Their action potentials will differ in rate, due to differences in the intensity of the stimuli.
  - Their action potentials will differ in size, due to differences in the intensity of the stimuli.

*ANSWER: c*

30. Peggy smells a very strong odour; Harry smells an odour that is barely detectable. Based on what is known about neural transmission, what should we predict about each of their action potentials?
- They will be the same size but at different rates.
  - Peggy's will be excitatory, and Harry's will be inhibitory.
  - They will be weaker in Harry's system because the stimulus is less intense.
  - They will be distinguished by the amount of inhibition they exert on synapses.

*ANSWER: a*

31. What do we call the space between a terminal button and a dendrite?
- the transmission gap
  - the midsynaptic potential range
  - the synaptic cleft
  - the neuromodulator

*ANSWER: c*

32. Where are neurotransmitters stored?
- in the dendrites
  - in the mitochondria
  - in the axon
  - in the synaptic vesicles

*ANSWER: d*

33. What do synaptic vesicles do?
- They fuse with the postsynaptic cell.
  - They store neurotransmitters.
  - They block receptors.
  - They manufacture myelin.

*ANSWER: b*

### Chapter 3 - The Biological Bases of Behaviour

34. What happens when a neurotransmitter is released from a presynaptic neuron, but it does not fit into a suitable receptor channel on the postsynaptic neuron?
- The firing potential of the postsynaptic neuron will not be affected.
  - An inhibitory postsynaptic potential will be generated.
  - A graded potential will be generated.
  - The presynaptic neuron will be inhibited.

*ANSWER:* a

35. What is a good analogy for the way in which a neurotransmitter binds to receptor sites?
- the lowering of a drawbridge
  - a key fitting in a lock
  - the pulling of a gun trigger
  - the opening and closing of a window

*ANSWER:* b

36. What type of electric potential increases the likelihood that the postsynaptic neuron will fire?
- all-or-none potential
  - excitatory postsynaptic potential
  - inhibitory postsynaptic potential
  - a resting potential

*ANSWER:* b

37. The voltage at a receptor site has just changed from  $-70$  millivolts to  $-75$  millivolts. What caused the change?
- excitatory postsynaptic potential
  - influx of potassium ions
  - influx of sodium ions
  - inhibitory postsynaptic potential

*ANSWER:* d

38. The voltage at a receptor site has just changed from  $-70$  millivolts to  $-67$  millivolts. What will this lead to?
- an absolute refractory period
  - increased likelihood of an action potential
  - decreased likelihood of an action potential
  - a relative refractory period

*ANSWER:* b

### Chapter 3 - The Biological Bases of Behaviour

39. What do we call the process of absorption of neurotransmitters into the presynaptic neuron?

- a. reuptake
- b. neurotransmission
- c. graded potential
- d. inhibition

ANSWER: a

40. Which of the following is the correct sequence of steps through which neurotransmitters progress during synaptic transmission?

- a. binding, synthesis, release, inactivation, reuptake
- b. synthesis, release, binding, inactivation, reuptake
- c. synthesis, binding, release, reuptake, inactivation
- d. release, synthesis, binding, reuptake, inactivation

ANSWER: b

41. If a brain has several synapses that are not particularly active, those synapses may be eliminated. What is this process called?

- a. synaptic pruning
- b. inhibition
- c. natural selection
- d. long-term potentiation

ANSWER: a

42. At what age do humans tend to have the largest number of synapses?

- a. at birth
- b. at 1 year
- c. at puberty
- d. after physical growth has ended in early adulthood

ANSWER: b

43. According to the Hebbian Learning Rule, if an axon of Cell A is near enough to repeatedly stimulate Cell B (causing it to fire often), then what will happen to Cell B?

- a. Cell B will eventually stop responding to Cell A.
- b. Cell B will merge with Cell A.
- c. Cell B will be pruned because it is redundant with Cell A.
- d. Cell B will become more likely to fire in response to signals from Cell A.

ANSWER: d

### Chapter 3 - The Biological Bases of Behaviour

44. Which of the following neurotransmitters is primarily involved in the activation of motor neurons controlling skeletal muscles?
- GABA
  - acetylcholine
  - serotonin
  - norepinephrine

*ANSWER: b*

45. Jeremy is sitting quietly when the voluntary muscles in his left leg begin to twitch. Which neurotransmitter is likely being released?
- serotonin
  - norepinephrine
  - acetylcholine
  - GABA

*ANSWER: c*

46. When your text states that nicotine functions as an acetylcholine agonist, what does that mean?
- It interacts with acetylcholine to produce a novel effect.
  - It occupies acetylcholine receptor sites, thus blocking the action of the neurotransmitter.
  - It stimulates some acetylcholine synapses.
  - It inhibits some acetylcholine release.

*ANSWER: c*

47. What does an agonist do?
- It extends the absolute refractory period of neural transmission.
  - It blocks the action of neurotransmitters.
  - It mimics the action of a neurotransmitter.
  - It prevents reuptake of neurotransmitters.

*ANSWER: c*

48. Curare blocks the action of acetylcholine by occupying its receptor sites. In this context, what is curare?
- a neurotransmitter
  - an agonist
  - a neuromodulator
  - an antagonist

*ANSWER: d*

### Chapter 3 - The Biological Bases of Behaviour

49. Dr. Jacoby has just discovered a new drug named Z2W that is an antagonist to acetylcholine. What are some likely side effects of this new drug?
- hallucinations and disrupted sleep patterns
  - general stimulation within the body and an increase in heart rate
  - sleepiness and loss of interest in activities
  - motor and memory problems

ANSWER: d

50. Dr. Ferracane has just discovered a new drug named GL8 that produces side effects such as paralysis and memory loss. Based on this information, how might this drug act on the nervous system?
- as an agonist for GABA
  - as an antagonist for GABA
  - as an antagonist for acetylcholine
  - as an agonist for acetylcholine

ANSWER: c

51. What seems to be a primary cause of Parkinson's disease?
- degeneration of neurons that use dopamine as a neurotransmitter
  - degeneration of myelin sheaths
  - antagonistic effects on acetylcholine receptors
  - damage to glial cells

ANSWER: a

52. Garrett has a chronic disease that is slowly destroying the cells that produce serotonin in his brain. Which of the following will likely happen to Garrett as his disease progresses?
- His memory will gradually worsen.
  - He will start to show signs of Parkinson's disease.
  - His sleep and mood will be disrupted.
  - He will begin to experience symptoms of schizophrenia.

ANSWER: c

53. Which of the following disorders is associated with reduced activity at norepinephrine and serotonin receptors?
- depression
  - schizophrenia
  - Parkinson's disease
  - multiple sclerosis

ANSWER: a

### Chapter 3 - The Biological Bases of Behaviour

54. Julia is currently in the midst of a major depression. Which of the following patterns of neurotransmitter activity is most likely to be associated with her symptoms?
- a. reduced levels of GABA
  - b. increased activity at serotonin synapses
  - c. increased levels of dopamine
  - d. reduced activity at norepinephrine synapses

*ANSWER:* d

55. Stuart abuses a drug that is a dopamine agonist. Which of the following is Stuart most likely to experience when he is high?
- a. deep relaxation
  - b. hallucinations
  - c. temporary paralysis
  - d. excessive anxiety

*ANSWER:* b

56. Caitlin has taken a drug that has reduced the levels of GABA in her nervous system. What side effect is Caitlin likely to experience?
- a. motor tics and other involuntary motor movements
  - b. increased levels of anxiety
  - c. depression
  - d. hallucinations

*ANSWER:* b

57. Dr. Athorp has just discovered a new drug named P3X that is an agonist for GABA. What effects will this drug likely have?
- a. hallucinations and disrupted sleep patterns
  - b. general stimulation within the body and an increase in heart rate
  - c. a reduction in pain and a sense of euphoria
  - d. anxiety reduction and general relaxation

*ANSWER:* d

### Chapter 3 - The Biological Bases of Behaviour

58. Which of the following neurotransmitters always has inhibitory effects?

- a. GABA
- b. glutamate
- c. acetylcholine
- d. norepinephrine

*ANSWER: a*

59. Which of the following neurotransmitters has effects on learning and memory, and on long-term potentiation?

- a. GABA
- b. glutamate
- c. acetylcholine
- d. norepinephrine

*ANSWER: b*

60. Opiate drugs bind onto the same receptor sites as the body's own endorphins. What effect, then, do opiate drugs have?

- a. They increase anxiety and agitation.
- b. They inhibit visual sensations.
- c. They produce insomnia.
- d. They relieve pain.

*ANSWER: d*

61. Which of the following neurotransmitters is most similar to the drug heroin?

- a. acetylcholine
- b. dopamine
- c. endorphins
- d. serotonin

*ANSWER: c*

62. If you were making a new drug to treat pain, which type of neurotransmitter would you attempt to mimic?

- a. dopamine
- b. monoamines
- c. acetylcholine
- d. endorphins

*ANSWER: d*

### Chapter 3 - The Biological Bases of Behaviour

63. What are the two most basic divisions of the nervous system?

- a. somatic nervous system and autonomic nervous system
- b. brain and spinal cord
- c. sympathetic division and parasympathetic division
- d. central nervous system and peripheral nervous system

*ANSWER:* d

64. In which part of the nervous system are the nerves in your hands and feet found?

- a. peripheral
- b. vascular
- c. parasympathetic
- d. skeletal

*ANSWER:* a

65. Which major division of the nervous system is comprised of the somatic nervous system and the autonomic nervous system?

- a. skeletal
- b. central
- c. afferent
- d. peripheral

*ANSWER:* d

66. What system allows you both to notice a buzzing near your ear and to swat the mosquito away?

- a. autonomic nervous system
- b. somatic nervous system
- c. limbic system
- d. endocrine system

*ANSWER:* b

### Chapter 3 - The Biological Bases of Behaviour

67. What is the distinction between afferent and efferent nerves?
- Afferent nerves take information to the central nervous system, while efferent nerves take information out from the central nervous system.
  - Afferent nerves are motor neurons, while efferent nerves are sensory neurons.
  - Afferent nerves are in the peripheral nervous system, while efferent nerves are in the central nervous system.
  - Afferent nerves take information to the muscles, while efferent nerves take information to the central nervous system.

*ANSWER:* a

68. Which division of the nervous system is necessary if you need to intentionally stand up or scratch your nose?
- autonomic
  - parasympathetic
  - sympathetic
  - somatic

*ANSWER:* d

69. Through which type of nerves does the brain send messages to the skeletal muscles in the legs when you are walking?
- central
  - afferent
  - efferent
  - sensory

*ANSWER:* c

70. Which part of the nervous system controls digestion and the flow of blood?
- somatic
  - motor
  - autonomic
  - central

*ANSWER:* c

### Chapter 3 - The Biological Bases of Behaviour

71. Which part of the nervous system diverts energy and resources in your body so that you can deal with emergency situations?

- a. central
- b. sympathetic
- c. parasympathetic
- d. somatic

*ANSWER:* b

72. During what type of situations is the sympathetic nervous system in primary control?

- a. stress
- b. sexual
- c. calm
- d. fatigue

*ANSWER:* a

73. Zayed was walking down a dark street when he heard a car backfire. His heart started to race, and he began to perspire in response to this sudden, startling noise. Which division of the nervous system is responsible for his reactions?

- a. sympathetic nervous system
- b. parasympathetic nervous system
- c. central nervous system
- d. somatic nervous system

*ANSWER:* a

74. Karlette took some new medication for her hay fever. The medication made her heart race, and she became agitated and jittery. Which division of the nervous system has been activated by the medication?

- a. peripheral
- b. parasympathetic
- c. somatic
- d. sympathetic

*ANSWER:* d

### Chapter 3 - The Biological Bases of Behaviour

75. Which division of your nervous system handles conservation of body resources, including blood pressure reduction and the promotion of digestion?

- a. central
- b. somatic
- c. parasympathetic
- d. sympathetic

*ANSWER: c*

76. Which division of the nervous system is most likely to be in control of bodily processes during periods of rest and recovery for the body?

- a. parasympathetic
- b. somatic
- c. peripheral
- d. sympathetic

*ANSWER: a*

77. Robyn has just eaten a full meal and is now relaxing. Which specific division of her nervous system is in primary control at this time?

- a. sympathetic nervous system
- b. parasympathetic nervous system
- c. somatic nervous system
- d. peripheral nervous system

*ANSWER: b*

78. Brenda was startled when a large shadow unexpectedly passed across her living room window. When she realized that it was just a cloud passing in front of the full moon, her racing heart began to slow, and her blood pressure started to return to normal. What division of the nervous system controlled the reactions as Brenda began to relax?

- a. somatic nervous system
- b. peripheral nervous system
- c. sympathetic nervous system
- d. parasympathetic nervous system

*ANSWER: d*

### Chapter 3 - The Biological Bases of Behaviour

79. Johann took some medication for his flu symptoms. Later, Johann began to feel a little faint because the medication caused his heart to beat more slowly and his blood pressure to fall. What system was likely activated by the medication?
- parasympathetic nervous system
  - sympathetic nervous system
  - somatic nervous system
  - central nervous system

*ANSWER:* a

80. What does the central nervous system consist of?
- the sympathetic and parasympathetic nervous systems
  - the somatic and autonomic nervous systems
  - the body's sensory and motor neurons
  - the brain and the spinal cord

*ANSWER:* d

81. What are the protective membranes that protect the brain and spinal cord?
- meninges
  - myelin sheaths
  - ventricles
  - glia

*ANSWER:* a

82. Which of the following protects the brain as a whole by providing an internal cushion?
- meninges
  - ventricles filled with CSF
  - myelin sheaths
  - synaptic vesicles

*ANSWER:* b

83. Which of the following is the most accurate representation of the relationship between the brain and spinal cord?
- The spinal cord communicates with the brain, but is separated by the meninges.
  - The spinal cord receives commands from the brain through nerves and cerebrospinal fluid.
  - The spinal cord and brain contribute independently to the central nervous system.
  - The spinal cord is an extension of the brain.

*ANSWER:* d

### Chapter 3 - The Biological Bases of Behaviour

84. If brain damage is suspected, which of the following methods is most likely to be used to assess the damage?
- a. electroencephalograph (EEG)
  - b. transcranial magnetic stimulation (TMS)
  - c. electrocardiograph (ECG)
  - d. electrical stimulation of the brain (ESB)

*ANSWER:* a

85. To confirm a diagnosis of epilepsy, a neurologist needs to record the overall electrical activity in Hillary's brain. What would be the best way for the neurologist to obtain this information?
- a. magnetic resonance imaging (MRI)
  - b. an electroencephalograph (EEG)
  - c. transcranial magnetic stimulation (TMS)
  - d. computerized tomography (CT) scan

*ANSWER:* b

86. Standing outside a football stadium and judging the excitement of the game by the crowd's screams is analogous to "eavesdropping" on the brain using which of the following?
- a. electrical stimulation
  - b. MRI scanning
  - c. CT scanning
  - d. an electroencephalograph

*ANSWER:* d

87. Paul is wide awake and studying for an upcoming exam. While he is studying, his brain activity is being recorded using an electroencephalograph (EEG). Which type of waves is likely to dominate Paul's EEG readings?
- a. high-voltage, high-frequency brain waves
  - b. low-voltage, high-frequency brain waves
  - c. high-voltage, low-frequency brain waves
  - d. low-voltage, low-frequency brain waves

*ANSWER:* b

### Chapter 3 - The Biological Bases of Behaviour

88. Imagine that you are looking at a printout from an electroencephalograph and you see a change from fairly short waves that are close together to waves that are tall and farther apart. What could you infer has happened to the person whose waves have been recorded?
- She fell asleep.
  - She is having a seizure.
  - She is studying.
  - She is experiencing anxiety.

*ANSWER:* a

89. Dr. Smith destroys a small piece of tissue in the forebrain of a rat in order to determine whether that area is important for maze-learning. What is this technique called?
- case study method
  - tomography
  - transcranial stimulation
  - lesioning

*ANSWER:* d

90. Which of the following research techniques is least likely to be used to study the human brain?
- electrical brain stimulation
  - transcranial magnetic stimulation
  - lesioning
  - positron emission tomography

*ANSWER:* c

91. Electrical stimulation of its lateral hypothalamus causes an animal to overeat and become obese. Therefore, what could we expect to be produced by lesioning the lateral hypothalamus?
- no effect on eating or body weight
  - overeating and obesity
  - undereating and weight loss
  - alternating periods of overeating and undereating

*ANSWER:* c

### Chapter 3 - The Biological Bases of Behaviour

92. Taylor has to have brain surgery to remove a tumour from her temporal lobe. During the surgery, the surgeon plans to map out specific brain function in the areas adjacent to the tumour. What method is the surgeon most likely to use to map the brain?
- electrical stimulation of the brain (ESB)
  - positron emission tomography (PET) scanning
  - stereotaxic lesioning
  - computerized tomography (CT) scanning

*ANSWER:* a

93. Which technique results in effects that are similar to that of lesioning?
- stereotaxic plotting (STP)
  - transcranial magnetic stimulation (TMS)
  - electrical stimulation of the brain (ESB)
  - magnetic resonance imaging (MRI)

*ANSWER:* b

94. Sigourney's doctors think she might have a tumour, and they would like to use a technique that will provide them with an accurate image of her brain structure. What technique are they most likely to use?
- electrical stimulation of the brain (ESB)
  - positron emission tomography (PET) scan
  - computerized tomography (CT) scan
  - electroencephalograph (EEG) recording

*ANSWER:* c

95. For which of the following techniques would the patient be required to consume radioactive chemicals?
- magnetic resonance imaging
  - positron emission tomography
  - electroencephalography
  - computerized tomography

*ANSWER:* b

### Chapter 3 - The Biological Bases of Behaviour

96. Which of the following techniques is likely to be most useful for identifying the activity of a specific neurotransmitter in the brain?
- computerized tomography
  - positron emission tomography
  - electrographic tomography
  - magnetic resonance imaging

*ANSWER:* b

97. Ricardo just came back from seeing a neurologist. Ricardo tells you that he will be having a test in which images of his brain will be recorded after he drinks a radioactive sugar solution. What test will his neurologist be using?
- a computerized tomography (CT) scan
  - a magnetic resonance imaging (MRI) scan
  - a positron emission tomography (PET) scan
  - transcranial magnetic stimulation (TMS)

*ANSWER:* c

98. Milo's doctors believe he might have some specific brain damage, but before they make their final diagnosis, they want to study very high-resolution, three-dimensional images of Milo's brain structures. Which technique are the doctors most likely to use in this case?
- an electroencephalograph (EEG) recording
  - a computerized tomography (CT) scan
  - a positron emission tomography (PET) scan
  - a magnetic resonance imaging (MRI) scan

*ANSWER:* d

99. What is the key advantage to using fMRI rather than an MRI?
- the ability to assess brain activity
  - reduced discomfort for patients
  - better spatial resolution
  - reduced costs

*ANSWER:* a

### Chapter 3 - The Biological Bases of Behaviour

100. In the Featured Study that examined brain regions associated with memory, why would the researchers have used fMRI technology for their study?
- It would have allowed them to look at precise locations of activity during different types of cognitive tasks.
  - It would have allowed them to have the best spatial resolution, compared to other types of imaging.
  - It would have allowed participants to move freely during the tasks.
  - It is the only type of imaging that has good temporal resolution for assessing changes in brain function.

*ANSWER:* a

101. Based on evidence from the Featured Study on the neuroscience of time travel, which of the following brain areas would you expect to be active when you are imagining what you will do tomorrow, but not particularly active when you are remembering what you did yesterday?
- temporal cortex
  - parietal regions
  - medial left prefrontal cortex
  - right hippocampus

*ANSWER:* d

102. Which brain area would you stimulate if you wanted to alter alertness or wakefulness?
- pons
  - cerebellum
  - medulla
  - thalamus

*ANSWER:* a

103. Which brain structure controls unconscious but essential functions such as breathing and circulation?
- corpus callosum
  - pons
  - medulla
  - cerebellum

*ANSWER:* c

### Chapter 3 - The Biological Bases of Behaviour

104. Ian has been in a coma since he was in a serious car accident. He is still on life support because he is unable to breathe on his own. Which area of Ian's brain is likely damaged?

- a. medulla
- b. hypothalamus
- c. pons
- d. cerebellum

*ANSWER:* a

105. A victim who is shot in the head died instantly because the bullet entered a portion of the hindbrain that regulates breathing. Which portion would that be?

- a. cerebellum
- b. pons
- c. medulla
- d. thalamus

*ANSWER:* c

106. Which of the following is a hindbrain structure involved with sleep and arousal?

- a. pons
- b. cerebellum
- c. thalamus
- d. hypothalamus

*ANSWER:* a

107. What is the primary function of the cerebellum?

- a. coordinating body movement
- b. storing semantic memory
- c. processing visual information
- d. controlling blood pressure

*ANSWER:* a

108. What is the most likely consequence of damage to the cerebellum?

- a. eating irregularities
- b. impairment of short-term memory
- c. difficulties in judging distance
- d. problems with coordination of movement

*ANSWER:* d

### Chapter 3 - The Biological Bases of Behaviour

109. The drunk-driving suspect was unable to walk a straight line with her eyes closed because activity in one of her brain structures was depressed by alcohol. Given this symptom, which brain structure is impaired?

- a. corpus callosum
- b. hypothalamus
- c. medulla
- d. cerebellum

*ANSWER:* d

110. Wanda fell down some stairs and hit her head. Prior to her accident she was an excellent flute player, but she now has difficulty coordinating the finger movements required in complex musical pieces. Which of the following brain areas was likely damaged in the fall?

- a. reticular formation
- b. cerebellum
- c. amygdala
- d. temporal lobe

*ANSWER:* b

111. Gaspar was a world-class diver until he hit his head on the diving board during one of his dives. He now has difficulty coordinating the movements required for various tucks and rotations. Which of the following areas of Gaspar's brain is likely damaged?

- a. temporal lobes
- b. medulla
- c. cerebellum
- d. pons

*ANSWER:* c

112. In which of the following areas of the brain is the dopamine system involved in Parkinson's disease located?

- a. forebrain
- b. midbrain
- c. brainstem
- d. hindbrain

*ANSWER:* b

### Chapter 3 - The Biological Bases of Behaviour

113. Dr. Bashir has implanted electrodes in the brain of a rabbit. When currents of different frequencies are passed through the electrodes, the rabbit will fall into a deep sleep or suddenly awaken. Based on this information, where are the electrodes most likely implanted?

- a. cerebellum
- b. hippocampus
- c. medulla
- d. reticular formation

*ANSWER:* d

114. Erin suffered a brain injury, and her neurologist has told her that there is damage to her reticular formation. Which of the following symptoms is Erin most likely to experience?

- a. difficulty with language perception
- b. disruption of her sleep and wake cycles
- c. inability to initiate movement
- d. inability to accurately locate objects in space

*ANSWER:* b

115. Which brain structure appears to play an active role in integrating sensory information?

- a. hypothalamus
- b. cerebrum
- c. limbic system
- d. thalamus

*ANSWER:* d

116. Uma just caught sight of a red hummingbird. The neural impulses from her eye will eventually travel to her primary visual cortex, but which brain area must they first pass through?

- a. thalamus
- b. occipital lobe
- c. hypothalamus
- d. hippocampus

*ANSWER:* a

### Chapter 3 - The Biological Bases of Behaviour

117. What is the function of the hypothalamus?
- a. inhibit emotional reactions like anger and fear
  - b. regulate sensory integration
  - c. integrate sensory information with motor impulses
  - d. regulate basic biological needs

*ANSWER:* d

118. Juan is in a state of high arousal. His heart is beating quickly, and he is perspiring. Which brain area is largely responsible for controlling these automatic survival responses?
- a. reticular formation
  - b. thalamus
  - c. hippocampus
  - d. hypothalamus

*ANSWER:* d

119. If you destroy one particular area of its brain, a rat will lose all interest in food and may well starve to death. Which area is it?
- a. thalamus
  - b. cerebellum
  - c. medulla
  - d. hypothalamus

*ANSWER:* d

120. If a person has a brain tumour that results in a disruption of his or her eating behaviour, which of the following areas is the most likely location of the tumour?
- a. thalamus
  - b. hypothalamus
  - c. brainstem
  - d. cerebellum

*ANSWER:* b

### Chapter 3 - The Biological Bases of Behaviour

121. By altering brain structures, an evil scientist has created supervillains who have specialized powers or abilities. One of these supervillains seldom feels hungry or thirsty and can go for days without feeling the need to eat or drink. Which brain area has likely been altered?

- a. thalamus
- b. hypothalamus
- c. cerebellum
- d. medulla

*ANSWER:* b

122. Which of the following brain structures is most closely associated with the regulation of emotion?

- a. cerebellum
- b. reticular formation
- c. brainstem
- d. limbic system

*ANSWER:* d

123. Aretha had severe epilepsy, and surgeons removed portions of her hippocampus to control the severity of her seizures. What ability is likely to be affected by Aretha's surgery?

- a. controlling her urges to eat and drink
- b. forming new memories
- c. expressing emotions appropriately
- d. interpreting sensory information accurately

*ANSWER:* b

124. By altering brain structures, an evil scientist has created supervillains who have specialized powers or abilities. One of these supervillains has a fantastic memory and is able to form new memories incredibly well. In this case, which brain structure was likely altered?

- a. pons
- b. hippocampus
- c. hypothalamus
- d. amygdala

*ANSWER:* b

### Chapter 3 - The Biological Bases of Behaviour

125. Madeleine has learned to fear thunder and lightning storms. Which area of her brain was likely very active when Madeleine's fear was first acquired?
- a. left temporal lobe
  - b. amygdala
  - c. Wernicke's area
  - d. cerebellum

*ANSWER:* b

126. By altering brain structures, an evil scientist has created supervillains who have specialized powers or abilities. One of these supervillains is absolutely fearless and willing to undertake extremely dangerous missions. In this case, what brain structure was most likely altered?
- a. amygdala
  - b. occipital lobes
  - c. cerebellum
  - d. medulla

*ANSWER:* a

127. Where do "pleasure centres" in the brain appear to be most heavily concentrated?
- a. brainstem
  - b. corpus callosum
  - c. endocrine system
  - d. limbic system

*ANSWER:* d

128. Research has identified a "pleasure centre" in rat brains, and researchers have determined that rats will press a lever thousands of times in order to have a tiny electrode stimulate this area of the brain. What brain area is it?
- a. hypothalamus
  - b. corpus callosum
  - c. frontal lobe
  - d. brainstem

*ANSWER:* a

### Chapter 3 - The Biological Bases of Behaviour

129. If you connect an electrode to a device that will deliver stimulation directly to the brain, where should you insert the electrode in order to cause a sensation of pleasure?
- a. posterior hippocampus
  - b. cerebral cortex
  - c. medial forebrain bundle
  - d. amygdala

*ANSWER: c*

130. What is the largest and most complex part of the human brain?
- a. cerebellum
  - b. brainstem
  - c. limbic system
  - d. cerebrum

*ANSWER: d*

131. Which brain structure is responsible for the human ability to engage in higher mental activity such as thinking and philosophizing?
- a. limbic system
  - b. corpus callosum
  - c. cerebellum
  - d. cerebrum

*ANSWER: d*

132. Which structure connects the two cerebral hemispheres?
- a. pineal gland
  - b. pons
  - c. corpus callosum
  - d. thalamus

*ANSWER: c*

133. Vivian has been experiencing unexplained flashes of light and colour, even when her eyes are closed. She recently saw a neurologist who located a small brain tumour. Where is Vivian's tumour likely to be located?
- a. right frontal lobe
  - b. temporal lobe
  - c. occipital lobe
  - d. left parietal lobe

*ANSWER: c*

### Chapter 3 - The Biological Bases of Behaviour

134. When Taryk slipped on the stairs and hit his head, he saw “stars” for several minutes. The “stars” were most likely a result of activity in which area of the brain?
- a. parietal cortex
  - b. occipital lobes
  - c. temporal lobes
  - d. prefrontal cortex

*ANSWER:* b

135. Which lobe of the brain is primarily responsible for processing bodily sensations, like tickling?
- a. frontal
  - b. temporal
  - c. parietal
  - d. occipital

*ANSWER:* c

136. Which lobe of the brain, when electrically stimulated, causes people to report physical sensations as if they had been touched?
- a. parietal
  - b. temporal
  - c. occipital
  - d. frontal

*ANSWER:* a

137. Padraigh woke up one day, unable to reach properly for objects, even though he could both see them and feel them. His doctor determined that Padraigh had a stroke and that the damage was confined to one portion of his brain. Which part is most likely damaged?
- a. temporal lobe
  - b. frontal lobe
  - c. parietal lobe
  - d. occipital lobe

*ANSWER:* c

### Chapter 3 - The Biological Bases of Behaviour

138. With which of the following can you expect to have problems if you have damaged your temporal lobe?

- a. hearing
- b. sight
- c. touch
- d. taste

*ANSWER:* a

139. Sharif suffered a stroke recently, and now he finds he constantly hears a buzzing sound in his ear. Where is the damage located?

- a. right frontal lobe
- b. occipital lobes
- c. left parietal lobe
- d. temporal lobe

*ANSWER:* d

140. Which of the following is strongly correlated with the amount of motor cortex devoted to each body area?

- a. size of the body area
- b. location of the body area
- c. size of the muscles in the body area
- d. diversity of movements of the body area

*ANSWER:* d

141. If a monkey's mirror neurons fire when the monkey picks up a grape, when will those same neurons also fire?

- a. When the monkey tastes grapes or even grape juice
- b. When the monkey smells a grape
- c. When the monkey sees a grape
- d. When the monkey sees another monkey pick up a grape

*ANSWER:* d

142. If a monkey's mirror neuron fires when he sees another monkey reaching for a stick, in what other situation should that same neuron fire?

- a. when the monkey gets hit with a stick
- b. when the monkey drops the stick
- c. when the monkey also reaches for a stick
- d. when the monkey thinks about a stick

*ANSWER:* a

### Chapter 3 - The Biological Bases of Behaviour

143. Stefan has suffered brain damage, and as a result, he shows deficits in attention, planning, and getting organized.

Which area was likely damaged?

- a. medial forebrain bundle
- b. primary sensory cortex
- c. prefrontal cortex
- d. limbic system

*ANSWER: c*

144. Some theorists believe that the brain contains a sort of “executive control system,” which is responsible for monitoring, directing, and organizing thought processes. In which area of the brain would you find this system?

- a. prefrontal cortex
- b. medial forebrain bundle
- c. limbic system
- d. thalamus

*ANSWER: a*

145. In primary motor cortex, which of the following has the largest area of representation?

- a. legs
- b. eyes
- c. arms
- d. lips

*ANSWER: d*

146. If one group of animals is raised in a stimulating environment and another group of animals is raised in a boring environment, which of the following should be enhanced in the brains of animals raised in the stimulating environment?

- a. specificity
- b. dendritic branching
- c. demylenization
- d. distance between neurons

*ANSWER: b*

### Chapter 3 - The Biological Bases of Behaviour

147. Which of the following is characteristic of stem cells?
- a. They fire in response to an action or to seeing that same action.
  - b. They are critical for the perception of pain and other bodily sensations.
  - c. They are able to resist the effects of plasticity.
  - d. They can be induced to become a specialized cell anywhere in the body.

ANSWER: d

148. What will be difficult for you if you experience damage to Broca's area?
- a. controlling your arms and legs
  - b. being creative
  - c. hearing
  - d. speaking

ANSWER: d

149. What is the area of the frontal lobe that plays an important role in the production of speech?
- a. Sperry's area
  - b. Broca's area
  - c. Wernicke's area
  - d. Hebb's area

ANSWER: b

150. Zeke has no problem understanding what other people say to him, but he has difficulty producing spoken language. If Zeke's problem stems from damage to the cerebral cortex, where do you expect the damage to be?
- a. right parietal lobe
  - b. left parietal lobe
  - c. right frontal lobe
  - d. left frontal lobe

ANSWER: d

151. If you have difficulty understanding the meaning of speech as a consequence of brain damage, where is the damage most likely to be located?
- a. Broca's area
  - b. corpus callosum
  - c. pituitary gland
  - d. Wernicke's area

ANSWER: d

### Chapter 3 - The Biological Bases of Behaviour

152. Monique is not able to understand spoken language. If Monique's problem stems from damage to the cerebral cortex, where is the damage most likely to be?
- a. left temporal lobe
  - b. right temporal lobe
  - c. left frontal lobe
  - d. right frontal lobe

*ANSWER:* a

153. What has traditionally been the main reason for the characterization of the left hemisphere as the "dominant" hemisphere?
- a. evidence that the left hemisphere usually processes complex information
  - b. evidence that the left hemisphere usually processes language
  - c. the fact that the majority of people are right-handed
  - d. evidence that patients use only their left hemisphere for processing information after split-brain surgery

*ANSWER:* b

154. What is the main function of Wernicke's area?
- a. speech comprehension
  - b. speech production
  - c. sensory integration
  - d. motor integration

*ANSWER:* a

155. If you knew that a surgeon was about to do a surgery to disconnect the cerebral hemispheres, which of the following patients is she most likely to operate on?
- a. a patient in a coma
  - b. a patient with epilepsy
  - c. a patient with schizophrenia
  - d. a patient with antisocial personality disorder

*ANSWER:* b

156. Which of the following would be MOST likely to be impaired as a result of damage to the right hemisphere?
- a. language comprehension
  - b. sensations from the right side of the body
  - c. vision from the left eye
  - d. control of the left leg

*ANSWER:* d

### Chapter 3 - The Biological Bases of Behaviour

157. If you present a sound in the right ear, where will that sound be processed first?

- a. right temporal lobe
- b. left temporal lobe
- c. right parietal lobe
- d. left parietal lobe

*ANSWER:* b

158. Because the speech centre is generally located in the left hemisphere of the brain, what would a split-brain patient be unable to describe or name?

- a. an object seen in the left visual field
- b. an object felt with the right hand
- c. an object seen in the right visual field
- d. an object presented directly in front of him or her

*ANSWER:* a

159. If you sent the word “banana” to the left hemisphere and the word “cucumber” to the right hemisphere in a patient with a severed corpus callosum, which of the following would the patient be able to name verbally?

- a. both items
- b. neither item
- c. only the banana
- d. only the cucumber

*ANSWER:* c

160. Imagine that a picture of a spoon is briefly flashed in the left visual field of an individual with a severed corpus callosum. At the same time, a picture of a cup is briefly flashed in the right visual field. What would this individual likely say based on Roger Sperry’s work with split-brain patients?

- a. “I saw a spoon resting in a cup.”
- b. “I saw a cup.”
- c. “I saw a spoon.”
- d. “I didn’t see anything.”

*ANSWER:* b

### Chapter 3 - The Biological Bases of Behaviour

161. Imagine that a picture of a blue circle is briefly flashed in the left visual field of an individual with a severed corpus callosum. At the same time, a picture of a red square is briefly flashed in the right visual field. What would this individual likely say based on Roger Sperry's work with split-brain patients?
- a. "I saw a blue circle."
  - b. "I didn't see anything."
  - c. "I saw a red square."
  - d. "I saw a blue circle around a red square."

*ANSWER:* c

162. If a right-handed subject whose corpus callosum has been cut were asked to reproduce a drawing, what could we predict?
- a. best performance by the left hand
  - b. best performance by the right hand
  - c. equal performance by the two hands
  - d. an inability to draw with either hand

*ANSWER:* a

163. On average, which of the following tasks is performed most quickly by the right hemisphere?
- a. reading and naming items verbally
  - b. hearing and listening
  - c. processing visual information from the right visual field
  - d. locating and recognizing objects or people

*ANSWER:* d

164. Chase is using a single earphone to listen in on a conversation. Based on the research that investigated hemispheric specialization in intact brains, what could we suggest in order for Chase to recognize the words he hears most quickly?
- a. put the earphone in his right ear
  - b. hum lightly to cancel out the background noise
  - c. close his eyes while he listens to the conversation
  - d. watch the conversation, in addition to listening

*ANSWER:* a

### Chapter 3 - The Biological Bases of Behaviour

165. What is the left hemisphere's specialty in both split-brain people and neurologically intact people?
- a. spatial perception
  - b. motor initiation
  - c. visual recognition
  - d. verbal processing

*ANSWER: d*

166. Which of the following is NOT primarily controlled by the left hemisphere of the brain?
- a. visual-spatial abilities
  - b. the right side of the body
  - c. producing language
  - d. understanding language

*ANSWER: a*

167. Which of the following is LEAST associated with left hemisphere functioning?
- a. reading
  - b. speaking
  - c. writing words
  - d. musical recognition

*ANSWER: d*

168. Nadine had a stroke that was confined to the right side of her brain. What sort of task will be most difficult for Nadine, based on hemispheric lateralization studies?
- a. mathematics and logical reasoning skills
  - b. fine motor coordination, such as for handwriting
  - c. spatial skills, such as fitting together puzzle pieces
  - d. language and communication skills

*ANSWER: c*

169. Which of the following parts of the brain is most likely to play a major role in the work of artists, architects, and engineers, who must rely heavily on visual-spatial skills?
- a. corpus callosum
  - b. left hemisphere
  - c. right hemisphere
  - d. cerebellum

*ANSWER: c*

### Chapter 3 - The Biological Bases of Behaviour

170. Which of the following is associated with brains that have low levels of lateral specialization?

- a. reduced likelihood of mental disorder
- b. low IQ scores
- c. poor hand-eye coordination
- d. creativity

*ANSWER:* b

171. What is the function of the pituitary gland?

- a. It controls the hypothalamus.
- b. It is the master gland of the endocrine system.
- c. It releases testosterone and estrogen in order to affect the gonads.
- d. It integrates information about the status of all organs.

*ANSWER:* b

172. What does the endocrine system do?

- a. It connects the two cerebral hemispheres of the brain.
- b. It secretes hormones.
- c. It manufactures myelin.
- d. It forms the basis of reflexive behaviours.

*ANSWER:* b

173. What is a hormone?

- a. an enzyme produced by the hypothalamus
- b. a chemical stored in the synapse
- c. a neurotransmitter that acts on organs
- d. a chemical secreted into the blood by a gland

*ANSWER:* d

174. Which system is malfunctioning for individuals who have hormonal imbalances?

- a. reticular
- b. endocrine
- c. dopaminergic
- d. limbic

*ANSWER:* b

### Chapter 3 - The Biological Bases of Behaviour

175. How are hormones transported throughout the body?

- a. within the lymph nodes
- b. by the nervous system
- c. through cerebrospinal fluid
- d. by the bloodstream

ANSWER: d

176. Hormones tend to be released in a pulsatile pattern. What does this mean?

- a. They are released at an unpredictable rate.
- b. They are released on demand.
- c. They are released in a steady, invariant rhythm.
- d. They are released in brief bursts at various times.

ANSWER: d

177. Which brain region controls the endocrine system?

- a. cerebellum
- b. hypothalamus
- c. thalamus
- d. medulla

ANSWER: b

178. What is the so-called “master gland” of the endocrine system?

- a. gonad
- b. pituitary
- c. adrenal
- d. hypothalamus

ANSWER: b

179. Which of the following does NOT belong with the other three?

- a. gonad
- b. adrenal
- c. pituitary
- d. thalamus

ANSWER: d

### Chapter 3 - The Biological Bases of Behaviour

180. Which of the following hormones is associated with bonding and trust?

- a. gonadotropin
- b. oxytocin
- c. estrogen
- d. insulin

*ANSWER: b*

181. Which gland secretes hormones associated with the development of secondary sex characteristics?

- a. pineal
- b. pancreas
- c. thyroid
- d. gonad

*ANSWER: d*

182. Some individuals reach puberty before others. Which glands would be important to examine if you wished to explore the role of the endocrine system in producing these differences?

- a. parathyroid
- b. pancreas
- c. thyroid
- d. gonads

*ANSWER: d*

183. What do we call the interdisciplinary field that studies the influence of inherited traits on complex behaviour?

- a. cross-cultural anthropology
- b. behavioural genetics
- c. physiological psychology
- d. ethology

*ANSWER: b*

184. Which of the following is true of genes but not chromosomes?

- a. They contain gonadotropins.
- b. They contain DNA.
- c. They are found in zygotes.
- d. There are thousands of them in each sperm or egg.

*ANSWER: d*

### Chapter 3 - The Biological Bases of Behaviour

185. What is the genetic complement of all cells in the human body, except sex cells?

- a. 23 chromosomes
- b. 46 chromosomes
- c. 23 recessive genes and 23 dominant genes
- d. 46 pairs of chromosomes

ANSWER: b

186. How many chromosomes does a zygote contain?

- a. 1 pair
- b. 2 pairs
- c. 23 pairs
- d. 46 pairs

ANSWER: c

187. How many possible combinations of chromosomes are possible when you combine one person's sperm with another person's egg?

- a. 529, or  $23^2$
- b. 2,116, or  $46^2$
- c. 8 million, or  $2^{23}$
- d. 70 trillion, or  $2^{46}$

ANSWER: b

188. What do we call a pairing of genes with one dominant and one recessive gene?

- a. homozygous
- b. phenotypic
- c. heterozygous
- d. polygenic

ANSWER: c

189. What do we call the member of a gene pair that is more influential in terms of expressing a trait?

- a. phenotypic
- b. expressive
- c. recessive
- d. dominant

ANSWER: d

### Chapter 3 - The Biological Bases of Behaviour

190. Assume that developing a sixth toe is a recessive trait that is controlled by a single pair of genes. If a child has six toes, but both the child's parents have normal feet, what can you conclude?
- The child is heterozygous for the trait in question.
  - Both parents are heterozygous for the trait in question.
  - Both parents are homozygous for the trait in question.
  - The child is adopted.

*ANSWER:* b

191. What is the term for the specific pattern of genes that an individual inherits at conception?
- phenotype
  - zygote
  - polygenic inheritance
  - genotype

*ANSWER:* d

192. What is a person's genotype?
- their biological or chromosomal sex
  - the maternal contribution to their genetic makeup
  - their genetic makeup
  - their observable characteristics and traits

*ANSWER:* c

193. Which of the following is determined at conception and is essentially fixed forever?
- phenotype
  - somatotype
  - genotype
  - zygote

*ANSWER:* c

194. Shane and Blane are monozygotic twins. However, people seldom get the two brothers mixed up because Blane is almost two inches shorter than Shane. What can you conclude based on this evidence?
- Because the brothers display different phenotypes, they must also have different underlying genotypes.
  - Even though both brothers share the same genotype, they display different phenotypes.
  - Even though both brothers display the same phenotype, they have different genotypes.
  - Blane is heterozygous for the "tallness" trait, and Shane is homozygous for the "tallness" trait.

*ANSWER:* b

### Chapter 3 - The Biological Bases of Behaviour

195. If a trait is described as polygenic, what does that mean?

- a. It is controlled by a single gene.
- b. It is controlled by a single chromosome.
- c. It is controlled by more than one pair of genes.
- d. It is controlled by genes on all 46 chromosomes.

*ANSWER: c*

196. Skin colour is determined by three to five gene pairs. Based on this information, what type of trait is skin colour?

- a. a monogenic trait
- b. a polygenic trait
- c. a homozygous trait
- d. a heterozygous trait

*ANSWER: b*

197. Why are all human studies about the interaction of genes and environment correlational?

- a. to assess the effects of modern child-rearing methods
- b. to demonstrate the empirical nature of psychological research
- c. to meet ethical standards in research
- d. to disentangle the effects of genetics and experience on behavioural traits

*ANSWER: c*

198. Which two individuals would we expect to have the GREATEST degree of phenotypic similarity?

- a. mother and daughter
- b. monozygotic twins
- c. dizygotic twins
- d. father and son

*ANSWER: b*

### Chapter 3 - The Biological Bases of Behaviour

199. Four sisters were all raised in the same household by parents who are very creative and artistic. Anna and Betty are the biological children of their parents, while Cassie and Deanna were adopted as infants into the family. Like their parents, Anna and Betty are artistically inclined and enjoy working on creative projects. Cassie and Deanna are not particularly interested in artistic endeavours even though they've received a lot of exposure to art and a lot of encouragement for creative work. Which of the following conclusions would be reasonable if this pattern occurred in a variety of similar families?
- Environmental factors have more influence than genetic factors in artistic interest.
  - Both genetic and environmental factors contribute equally to artistic interest.
  - Genetic factors have more influence than environmental factors in artistic interest.
  - Neither genetic nor environmental factors contribute to artistic interest.

*ANSWER: c*

200. Which of the following supports the hypothesis that intelligence is influenced by environmental factors?
- Twins reared apart have similar intelligence scores.
  - Monozygotic twins are more similar than dizygotic twins on intelligence measures.
  - Identical twins do not have identical intelligence scores.
  - The correlations between dizygotic twins' intelligence scores are around 0.60.

*ANSWER: c*

201. Londra and Sondra are identical twins who have been raised together in the same home. Londra has developed a psychological disorder, but Sondra does not appear to have the same disorder. What does this suggest about the disorder if this pattern holds for other identical twins?
- Genetic factors have more influence than environmental factors in this disorder.
  - Both genetic and environmental factors contribute equally to this disorder.
  - Neither genetic nor environmental factors contribute to this disorder.
  - Environmental factors have more influence than genetic factors in this disorder.

*ANSWER: d*

202. Phong and Phan are identical twins who have been raised apart in separate adoptive homes. However, both brothers have developed the same psychological disorder. What does this evidence suggest?
- Genetic factors have more influence than environmental factors in this disorder.
  - Environmental factors have more influence than genetic factors in this disorder.
  - Neither genetic nor environmental factors contribute to this disorder.
  - Both genetic and environmental factors contribute equally to this disorder.

*ANSWER: a*

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203. Mary and Celine are identical twins who have been raised apart in separate adoptive homes. Mary has developed a psychological disorder, but Celine does not appear to have the same disorder. What does this evidence suggest?

- a. Environmental factors have more influence than genetic factors in this disorder.
- b. Both genetic and environmental factors contribute equally to this disorder.
- c. Genetic factors do not influence this disorder.
- d. Genetic factors have more influence than environmental factors in this disorder.

*ANSWER:* a

204. What can we conclude about the heritability of intelligence, based on adoption studies?

- a. Genotype determines intelligence.
- b. Adoption studies do not provide enough evidence to assess the relative contributions of genes and experience on intelligence.
- c. Family environment is the strongest influence on intelligence.
- d. Both genes and environment contribute to intelligence.

*ANSWER:* d

205. Which of the following comparison groups has a significant similarity with adopted children, based on research on adopted children and intelligence?

- a. their biological parents
- b. both sets of parents
- c. their adoptive parents
- d. neither set of parents

*ANSWER:* b

206. Donavon was adopted at birth by Mr. and Mrs. Erndt. Although neither of his biological parents had much musical ability, Donavon has become an excellent pianist, just like Mr. Erndt. What would this evidence suggest if this pattern held up across multiple adoption studies?

- a. Genetic factors have more influence than environmental factors in musical talent.
- b. Environmental factors have more influence than genetic factors in musical talent.
- c. Neither genetic nor environmental factors contribute to musical talent.
- d. Both genetic and environmental factors contribute equally to musical talent.

*ANSWER:* b

### Chapter 3 - The Biological Bases of Behaviour

207. If you are working on the Human Genome Project, which of the following types of traits are you most likely to be able to map?
- a. behavioural traits, like aggression
  - b. physical traits that are highly polygenic
  - c. dichotomous traits that are either present or absent
  - d. polygenic traits with high worldwide variance

ANSWER: c

208. What do we know about the heritability of schizophrenia?
- a. Schizophrenia is primarily social in origin, rather than biological.
  - b. Schizophrenia is inherited through the male line, which is why we don't see heritability from mothers to children.
  - c. Schizophrenia is essentially a personality variant, which is highly heritable.
  - d. Schizophrenia likely results from an inherited vulnerability that interacts with experience.

ANSWER: d

209. Dean is conducting a study in which he exposes rats to different amounts of noise to cause different amounts of stress. He then evaluates whether the offspring of those rats have different reactions to stress. What sort of study is Dean conducting?
- a. epigenetic study
  - b. behaviour genetic study
  - c. genetic mapping study
  - d. polygenic study

ANSWER: a

210. Which of the following statements about Charles Darwin and the theory of evolution is NOT accurate?
- a. He suggested that variations in hereditary traits might affect organisms' ability to obtain resources.
  - b. He identified natural selection as the mechanism that orchestrates the process of evolution.
  - c. He was the first person to describe the process of evolution.
  - d. He noted that some of the characteristics of organisms are passed down from one generation to the next.

ANSWER: c

### Chapter 3 - The Biological Bases of Behaviour

211. Imagine that you and Charles Darwin are looking at a newborn litter of kittens, and the kittens are all a bit different from one another. As you observe the kittens, you ask Mr. Darwin which of the kittens will be most “fit” in terms of natural selection. What would Mr. Darwin be most likely to say in response to your question?
- a. “The one who has the most kittens of its own.”
  - b. “Because they are related and carry the same genes, they all have equal fitness.”
  - c. “The one that is the strongest and the most aggressive.”
  - d. “The one that requires the smallest amount of resources.”

*ANSWER:* a

212. If our planet were a place where each individual has the opportunity to acquire all necessary resources, and each individual produces exactly one offspring in his or her lifetime, what impact would this have on the process of evolution by natural selection?
- a. It would not occur, because there would be no opportunity for some traits to be passed on more often than other traits.
  - b. It would not change, because there would still be some individuals who were better than others.
  - c. It would not occur because there would be no differences between individuals.
  - d. It would have no impact on natural selection, but it would lead to an increase in mutations.

*ANSWER:* a

213. Which of the following is the key factor in evolutionary change, according to Darwin’s theory of evolution?
- a. interaction of heredity and the environment
  - b. genetic transmission of learned behaviour
  - c. relative success of aggressive predators
  - d. variations in reproductive success

*ANSWER:* d

214. What do we call the process by which genes that lead to a survival or reproductive advantage become more frequent in the next generation?
- a. natural selection
  - b. polygenic transmission
  - c. epigenetics
  - d. genetic dominance

*ANSWER:* a

### Chapter 3 - The Biological Bases of Behaviour

215. Which of the following aspects of evolution is mainly based on chance alone?

- a. natural selection
- b. adaptations
- c. gene flow
- d. genetic drift

*ANSWER: d*

216. If an individual is born with a genetic mutation, what will happen to that mutation in an evolutionary sense?

- a. The individual will die, so the mutation cannot be passed on to subsequent generations.
- b. If the mutation is beneficial, then it will be selected for and become more common.
- c. It is an isolated genetic anomaly, so it cannot be spread to others in the population.
- d. Mutations are part of the phenotype, not the genotype, so they won't affect fitness.

*ANSWER: b*

217. What occurs when gene frequencies in a population shift because some individuals leave the population and others enter it?

- a. genetic drift
- b. mutation
- c. natural selection
- d. gene flow

*ANSWER: d*

218. Which of the following is most likely to contribute to the emergence of new species?

- a. minimal gene flow between populations
- b. genetic drift within a single generation
- c. increases in gene flow between populations
- d. multiple mutations within a population

*ANSWER: a*

219. What do we call an inherited characteristic that solves a survival problem?

- a. dominant gene
- b. genetic mutation
- c. adaptation
- d. fitness

*ANSWER: c*

### Chapter 3 - The Biological Bases of Behaviour

220. Humans' taste preferences for fatty substances would have conferred a survival advantage for our ancestors, but in our modern environment, where we have an overabundance of food, that preference can end up causing obesity and illness. What would an evolutionary psychologist say about this trend?
- It tends to occur when recessive genes mutate into dominant traits.
  - It is an example of an adaptation that has become a liability.
  - It is a consequence of genetic drift across several generations.
  - It represents the paradox of inclusive fitness.

*ANSWER:* b

221. Why is it more difficult to study the evolution of behaviour compared to studying the evolution of physical traits?
- Behaviours may occur infrequently and may not last very long.
  - Natural selection generally does not operate on behaviours.
  - Behaviours are more susceptible to genetic drift.
  - Behaviours tend to evolve more slowly.

*ANSWER:* a

222. What makes a behaviour adaptive, according to evolutionary theory?
- It decreases the amount of genetic drift in the population.
  - It increases the likelihood of favourable mutations.
  - It aids the survival or reproduction of an organism and its offspring.
  - It increases the probability of natural selection.

*ANSWER:* c

223. Which of the following statements most accurately reflects the roles of heredity and environment in shaping our behaviour?
- Heredity plays an indirect role by influencing the physiology that interacts with the environment.
  - Heredity affects most physical behaviour, and environment affects most psychological behaviour.
  - Genes exert their influence on behaviour with little impact from environmental factors.
  - Genetic factors have surprisingly little influence on behaviour.

*ANSWER:* a

### Chapter 3 - The Biological Bases of Behaviour

224. In your text, we saw that schizophrenia may be a function of abnormalities in neurotransmitter activity, structural defects in the brain, and genetic vulnerability. Which of the following unifying themes of your text do these findings support?
- Behaviour is determined by multiple causes.
  - Psychology is empirical.
  - Psychology evolves in a sociohistorical context.
  - Behaviour is shaped by our cultural heritage.

*ANSWER:* a

225. Much of what we know about left brain/right brain differences would not be known without systematic research and analysis. The current interest in the right brain/left brain phenomenon highlights the importance of approaching topics such as this from which point of view?
- conjectural
  - empirical
  - anecdotal
  - subjective

*ANSWER:* b

226. Kim is good at reading maps and enjoys listening to music. What would some researchers suggest about Kim, according to the Personal Application, Evaluating the Concept of “Two Minds in One”?
- She is “left-brained.”
  - She is “mid-brained.”
  - She is “hemispheric.”
  - She is “right-brained.”

*ANSWER:* d

227. In the Personal Application, Evaluating the Concept of “Two Minds in One,” what was the conclusion regarding left-brain and right-brain thinking?
- Right-brain people benefit most from learning to do more left-brain activities.
  - There is strong evidence to support modification of school curriculum to support both types of thinking.
  - Career choice is strongly correlated with which side of the brain is most dominant.
  - The link between hemispheric lateralization and ability is speculative and unsupported.

*ANSWER:* d

### Chapter 3 - The Biological Bases of Behaviour

228. Which of the following features do all of the studies highlighting the possible importance of early experience in animals have in common?
- The researchers used very small samples.
  - They used species that cannot be logically compared to humans.
  - They used relatively crude measures of brain growth.
  - They used extreme conditions to make their comparisons.

*ANSWER:* d

229. Dr. Sandra Witelson found that Einstein's brain was similar in terms of size and weight to most other brains, but that it had certain exceptionalities, including a wider parietal region and a distinct sylvian fissure. Which of the following is a reasonable statement about Einstein's brain given what we know about the role of environment for brain plasticity?
- Einstein was born with brain anomalies that led to his mathematical genius, and those anomalies were clearly visible in the autopsy. His experience would not change the actual structure of the brain.
  - It must be due to the effects of practice that Einstein was so mathematically brilliant, given that he had brain damage in an area that is particularly important for mathematical reasoning.
  - Einstein may have been born with a predisposition toward mathematical genius, or his brain may have been changed as a result of so much practice, but his genius is likely to have been the result of some combination of genetics and experience.
  - There is no relationship between the structure of the brain and intelligence, because learning changes the function of the brain rather than the structure.

*ANSWER:* c

230. Which of the following is a valid hypothesis, considering both the Hebbian Learning Rule and evidence that there is a decline in the number of synapses in the human brain after about age 1?
- Because we use only 10 percent of our brain at any given time, the decline in synapses after age 1 has no impact on functioning.
  - We create new connections in infancy, and unless all the necessary connections are made before we are a year old, we will have difficulty learning for the rest of our lives because we start losing brain cells so early.
  - Although the number of synapses decreases throughout the life span, the number of neurons does not decrease, and having a large number of neurons is more important than having a large number of synapses.
  - Although creating new connections between neurons is important, it is also important to get rid of unnecessary or outdated connections in order to enhance the efficiency of processing within our brains.

*ANSWER:* d

### Chapter 3 - The Biological Bases of Behaviour

231. Drug 8K43 is a stimulant drug that acts by blocking the reuptake of dopamine in the nervous system. This means that dopamine stays in the synapse longer and continues to stimulate the postsynaptic neuron. Based on this information, what can we infer about the effects of dopamine on the postsynaptic neuron?
- It produces excitatory postsynaptic potentials.
  - It blocks the receptor channels in the postsynaptic neuron.
  - It cancels out excitatory potentials generated by other neurons.
  - It reduces inhibitory postsynaptic potentials.

*ANSWER:* a

232. Which of the following does NOT belong with the others?
- stereotaxic instrument
  - computerized tomography scan
  - electroencephalograph
  - reticular activating system

*ANSWER:* d

233. Which of the following does NOT belong with the others?
- hemispheric lateralization
  - positron emission tomography
  - magnetic resonance imaging
  - electroencephalography

*ANSWER:* a

#### **Trevor**

Trevor is going for a run. He starts thinking about all the things that he needs to do throughout his day, and he decides that after he showers he will study for his midterm for a little while before he goes to work for the evening. As Trevor rounds the corner near home, he sees something move near his feet and then feels a sharp pain in his right leg. At this point, Trevor's heart rate increases substantially, as he spins away from the dog that just bit him. As the dog's owner apologizes and puts the dog back on its leash, Trevor's heart rate slows down and he then makes his way home.

234. As Trevor's heart rate is coming back down after the dog bite, he is feeling less fear. Which division of the nervous system is responsible for the physiological changes associated with calming back down?
- peripheral
  - sympathetic
  - somatic
  - parasympathetic

*ANSWER:* d

### Chapter 3 - The Biological Bases of Behaviour

235. As Trevor is running, what area of his brain is sending signals to his muscles so that they will move?
- a. motor cortex in the parietal lobes
  - b. somatosensory cortex in the parietal lobes
  - c. motor cortex in the frontal lobes
  - d. somatosensory cortex in the frontal lobes

*ANSWER:* c

236. When Trevor feels the pain in his right leg, what area of the brain responds to this sensation?
- a. left parietal lobe
  - b. right temporal lobe
  - c. left frontal lobe
  - d. right prefrontal cortex

*ANSWER:* a

237. As Trevor plans out his day, which area of his brain is processing these higher-level thoughts?
- a. limbic system
  - b. prefrontal cortex
  - c. medial temporal lobes
  - d. Wernicke's area

*ANSWER:* b

238. What would an evolutionary psychologist say about Trevor's physiological responses to the frightening experience of being bitten?
- a. Fight or flight responses are adaptations that evolved through natural selection.
  - b. The increase in heart rate is caused by an overactive hypothalamus.
  - c. Such responses put Trevor at risk for developing an anxiety disorder.
  - d. Fight or flight responses are a maladaptive consequence of exposure to danger.

*ANSWER:* a

### Chapter 3 - The Biological Bases of Behaviour

239. Choose a specific neurotransmitter or class of neurotransmitters and discuss its impact on behaviour.

*ANSWER:* Acetylcholine: The only neurotransmitter between motor neurons and voluntary muscles, therefore mediates all voluntary movement. Also contributes to attention, arousal, and memory. Alzheimer's disease is associated with an insufficient supply of this neurotransmitter.

Monoamines (dopamine, serotonin, norepinephrine): Dopamine—mediates voluntary movement. A deficiency is associated with Parkinson's disease; overactivity is associated with schizophrenia. Serotonin—regulates sleeping and waking. Norepinephrine—also regulates arousal. A deficiency is associated with depression.

GABA: Has inhibitory effects only. Too little GABA is associated with anxiety

Endorphins: Resemble opiate drugs in structure and effects contribute to pain relief and perhaps to some pleasurable emotions.

· Glutamate: Amino acid with both excitatory and inhibitory effects. Implicated in learning and memory.

240. Compare and contrast the nervous system and the endocrine system.

*ANSWER:* Both are internal communication systems; both use chemical messengers. The nervous system utilizes neurotransmitters, which travel short distances at high speeds from neuron to neuron; the endocrine system uses hormones, which are slow acting and travel long distances through the blood stream. Some chemicals can be both a neurotransmitter and a hormone (like norepinephrine, for example).

241. Compare and contrast lesioning and electrical stimulation of the brain.

*ANSWER:* Both are methods of studying brain function; both involve the introduction of electric current into a specific brain structure via an implanted electrode. Lesioning uses a fairly strong electric current to destroy brain tissue, thus eliminating the relevant behaviour or function from the subject's repertoire. Since lesioning produces permanent brain damage, it is employed with animal subjects only. Electrical stimulation of the brain introduces a weak current to artificially stimulate a brain structure and produce a behavioural response. It does not permanently damage the brain and so, under certain medical circumstances, may be used with humans; however, the technique is more frequently applied to animals.

### Chapter 3 - The Biological Bases of Behaviour

242. Assume that trait X is primarily an inherited characteristic. Imagine that trait X is investigated using family studies, twin studies, and adoption studies. Briefly describe each of these three methods and indicate what information each would be expected to yield regarding trait X.

*ANSWER:*

- Family studies: There should be more phenotypic similarity on trait X among relatives who share a greater percentage of genes. For example, there should be more similarity on trait X between identical twins than among siblings, who in turn should exhibit more similarity than cousins.
- Twin studies: Identical twins should exhibit more similarity on trait X than fraternal twins.
- Adoption studies: Children adopted in early infancy should more closely resemble their biological parents on trait X than they do their adoptive parents.

243. Imagine the following scenario: Administrators at the local high school have been impressed by recent media reports of cerebral hemispheric specialization, and are considering curricular reform to achieve a better balance between “left-brained” and “right-brained” activities. You have been hired to advise them on this issue. What would your recommendation be, and why?

*ANSWER:* Although there is some evidence that the cerebral hemispheres are specialized to a degree, there is no basis for saying that people have two independent streams of consciousness or that each hemisphere has its own cognitive style. There is little basis for labelling some people as “left-brained” and others as “right-brained,” or for relating these differences to distinctive task preferences, personalities, or vocations. All information reaches both hemispheres, since they communicate via the corpus callosum. Thus, cerebral specialization is not a sound basis for educational reform.