CHAPTER 1

BIOPSYCHOLOGY AS A NEUROSCIENCE: WHAT IS BIOPSYCHOLOGY, ANYWAY?

MULTIPLE CHOICE QUESTIONS

1) The human brain weighs about
A) 0.3 kilograms (0.7 pounds).
B) 0.8 kilograms (1.8 pounds).
C) 1.0 kilograms (2.2 pounds).
D) 1.3 kilograms (2.9 pounds).
E) 2.3 kilograms (5.1 pounds).
Answer: D
Diff: 2 Page Ref: 2
Topic: Chapter 1 Introduction
Type: (Factual)

2) The human brain is composed of various cells, including about 100 billion that are specialized to receive and transmit electrochemical signals. These specialized cells are called
A) glial cells.
B) axons.
C) neurons.
D) oligodendroglia.
E) sulci.
Answer: C
Diff: 1 Page Ref: 2
Topic: Chapter 1 Introduction
Type: (Factual)

3) The study of the nervous system is called
A) neuroscience.
B) psychology.
C) biopsychology.
D) neurochemistry.
E) neurophysiology.
Answer: A
Diff: 1 Page Ref: 2
Topic: Chapter 1 Introduction
Type: (Factual)

4) Jimmie G., the man frozen in time, had a severe problem with his
A) memory.
B) temperature regulation.
C) IQ.
D) attention.
E) ability to tell time.
Answer: A
Diff: 1 Page Ref: 3

Topic: Chapter 1 Introduction
Type: (Factual)

5) Which of the following is a major theme of your text?
A) thinking creatively about biopsychology
B) clinical implications
C) the evolutionary perspective
D) neuroplasticity
E) all of the above
Answer: E
Diff: 1 Page Ref: 3
Topic: Chapter 1 Introduction
Type: (Factual)

6) Research has now established that the brain is
A) static.
B) immutable.
C) plastic.
D) white.
E) gray.
Answer: C
Diff: 1 Page Ref: 4
Topic: 1.1 What Is Biopsychology?
Type: (Factual)

7) Biopsychology is the scientific study of the
A) biology of behavior.
B) brain.
C) chemistry of the brain.
D) biology of the brain.
E) biology of cognition.
Answer: A
Diff: 1 Page Ref: 4
Topic: 1.1 What Is Biopsychology?
Type: (Factual)

8) Psychobiology, behavioral biology, and behavioral neuroscience are all approximate synonyms for
A) cognitive behavior.
B) behavioral psychology.
C) biopsychology.
D) neurophysiology.
E) neuroscience.
Answer: C
Diff: 2 Page Ref: 4
Topic: 1.1 What Is Biopsychology?
Type: (Factual)

9) Psychology is often defined as the scientific study of
A) psychophysics.
B) behavior.
C) biopsychology.
D) the brain.
E) conditioning.
Answer: B
Diff: 1 Page Ref: 4
Topic: 1.1 What Is Biopsychology?
Type: (Factual)

10) The man who played a key role in the emergence of biopsychology as a discipline by writing "The Organization of Behavior" is
A) Sperry.
B) Hebb.
C) Lashley.
D) Milner.
E) Pinel.
Answer: B
Diff: 2 Page Ref: 4
Topic: 1.1 What Is Biopsychology?
Type: (Factual)

11) According to the textbook, the science of biopsychology as it is practiced today emerged as a discipline in about
A) 1549.
B) 1649.
C) 1749.
D) 1849.
E) 1949.
Answer: E
Diff: 2 Page Ref: 4
Topic: 1.1 What Is Biopsychology?
Type: (Conceptual)
Rationale: Although this question appears to be factual, the choices are so diverse that the student only has to have a general concept of when biopsychology emerged to correctly answer the question.

12) Which of the following is the youngest scientific discipline?
A) physics
B) astrology
C) biology
D) biopsychology
E) chemistry
Answer: D
Diff: 1 Page Ref: 4
Topic: 1.1 What Is Biopsychology?
Type: (Conceptual)
Rationale: To answer this question correctly, the student needs only a general concept of the relative birth dates of the various disciplines. Astrology, of course, is not a science.

13) Biopsychology is a branch or division of
A) neuropsychology.
B) psychophysiology.
C) neuroscience.
D) all of the above
E) both A and B
Answer: C
Diff: 2 Page Ref: 4
Topic: 1.2 Relation between Biopsychology and Other Disciplines
Type: (Factual)

14) What distinguishes biopsychology from the other subdisciplines of neuroscience?
A) its focus on the study of behavior
B) its focus on animal subjects
C) its focus on psychiatric disorders
D) its focus on psychoactive drugs
E) both C and D
Answer: A
Diff: 2 Page Ref: 4
Topic: 1.2 Relation between Biopsychology and Other Disciplines
Type: (Conceptual)
Rationale: All of the options characterize biopsychology, but only A distinguishes it from the other sub-disciplines of neuroscience.

15) Which subdiscipline of neuroscience focuses on the study of brain disorders?
A) ethoexperimental psychology
B) biopsychology
C) developmental neurobiology
D) neuropathology
E) neuroendocrinology
Answer: D
Diff: 2 Page Ref: 4
Topic: 1.2 Relation between Biopsychology and Other Disciplines
Type: (Factual)

16) Structure of the nervous system is to function of the nervous system as
A) biopsychology is to psychology.
B) neuroanatomy is to neurophysiology.
C) neuropathology is to clinical psychology.
D) neuroscience is to biopsychology.
E) biopsychology is to neuroscience.
Answer: B
Diff: 3 Page Ref: 4
Topic: 1.2 Relation between Biopsychology and Other Disciplines
Type: (Factual)

17) Which of the following animals are currently the most common subjects of biopsychological research?
A) monkeys
B) chimpanzees
C) dogs
D) rats and mice
E) cats
Answer: D
Diff: 2 Page Ref: 4
Topic: 1.3 Types of Research in the Biopsychological Approach
Type: (Factual)

18) The main difference between human brains and the brains of their mammalian relatives is that human brains tend to be bigger and
A) whiter.
B) all gray.
C) have more cortex.
D) have two hemispheres.
E) both C and D
Answer: C
Diff: 2 Page Ref: 5
Topic: 1.3 Types of Research in the Biopsychological Approach
Type: (Factual)

19) The comparison of brain-behavior relations in different species is called
A) the comparative approach.
B) ethology.
C) biopsychology.
D) evolutionary biology.
E) none of the above
Answer: A
Diff: 1 Page Ref: 5
Topic: 1.3 Types of Research in the Biopsychological Approach
Type: (Factual)

20) An advantage of biopsychological research on nonhuman animals as opposed to humans is that
A) the brains of nonhumans are simpler.
B) there are fewer ethical constraints in studying nonhumans.
C) research in several species makes it possible to use the comparative approach.
D) all of the above
E) none of the above
Answer: D
Diff: 2 Page Ref: 5
Topic: 1.3 Types of Research in the Biopsychological Approach
Type: (Factual)

21) The advantage of humans over other primates as subjects in biopsychological research is that they
A) are often cheaper.
B) can report their subjective experiences.
C) can follow verbal directions.
D) all of the above
E) none of the above
Answer: D
Diff: 2 Page Ref: 5
Topic: 1.3 Types of Research in the Biopsychological Approach
Type: (Factual)

22) The term "within-subjects design" refers to experiments in which
A) each subject is exposed to each condition of the experiment.
B) a different group of subjects is tested in each condition of the experiment.
C) some groups of subjects receive drug injections.
D) invasive procedures are used, that is, those in which the internal physiology of the subjects is manipulated.
E) either C or D
Answer: A
Diff: 2 Page Ref: 5
Topic: 1.3 Types of Research in the Biopsychological Approach
Type: (Factual)

23) In a successful experiment, the independent variable affects the
A) confounded variable.
B) dependent variable.
C) correlated variable.
D) all of the above
E) none of the above
Answer: B
Diff: 2 Page Ref: 5
Topic: 1.3 Types of Research in the Biopsychological Approach
Type: (Factual)

24) In a well-designed experiment, there is only one systematic difference between the conditions. This difference is manipulated by the experimenter and is called the
A) between-subject variable.
B) within-subject variable.
C) dependent variable.
D) independent variable.
E) confounded variable.
Answer: D
Diff: 1 Page Ref: 5
Topic: 1.3 Types of Research in the Biopsychological Approach
Type: (Factual)

25) Which of the following makes it difficult to make causal interpretations of experimental results?
A) independent variables
B) dependent variables
C) constant variables
D) confounded variables
E) none of the above
Answer: D
Diff: 2 Page Ref: 6
Topic: 1.3 Types of Research in the Biopsychological Approach
Type: (Factual)

26) The Coolidge effect refers to the fact that
A) rats often gorzalka after sex.
B) a sexually-fatigued animal will often resume sexual activity if its current partner is replaced with a new one.
C) the members of some species do not become sexually fatigued.
D) male animals tend to become sexually fatigued.
E) prolonged copulation is more difficult for males.
Answer: B
Diff: 2 Page Ref: 6
Topic: 1.3 Types of Research in the Biopsychological Approach
Type: (Factual)

27) The experiment of Lester and Gorzalka (1988) is significant because it constitutes the first strong evidence of a Coolidge effect in
A) females.
B) humans.
C) nonhumans.
D) hamsters.
E) rats.
Answer: A
Diff: 2 Page Ref: 6
Topic: 1.3 Types of Research in the Biopsychological Approach
Type: (Factual)

28) The posture of lordosis in a female rodent indicates that she
A) is looking for food.
B) will attack if provoked.
C) is defending a litter of pups.
D) is sexually receptive.
E) is sexually fatigued.
Answer: D
Diff: 2 Page Ref: 6
Topic: 1.3 Types of Research in the Biopsychological Approach
Type: (Factual)

29) In some studies, subjects are not assigned to particular conditions; instead subjects are selected because they are already living under these conditions (e.g., alcohol consumers and alcohol nonconsumers). Such studies are
A) quasiexperiments.
B) case studies.
C) true experiments.
D) randomized experiments.
E) unethical.
Answer: A
Diff: 2 Page Ref: 7
Topic: 1.3 Types of Research in the Biopsychological Approach
Type: (Factual)

30) A major shortcoming of case-study research is that
A) it is always done on sick people.
B) it cannot be applied to laboratory animals.
C) it is too general.
D) the degree to which the results can be generalized is unclear.
E) both A and B
Answer: D
Diff: 2 Page Ref: 7
Topic: 1.3 Types of Research in the Biopsychological Approach
Type: (Factual)

31) Research that is intended to bring about direct benefit to humankind is
A) biopsychological research.
B) pure research.
C) case-study research.
D) applied research.
E) correlational research.
Answer: D
Diff: 1 Page Ref: 7
Topic: 1.3 Types of Research in the Biopsychological Approach
Type: (Applied)
Rationale: This question requires students to understand the meaning of applied research.

32) The corpus callosum is a
A) large medical dictionary.
B) source of hypothalamic hormones.
C) membership directory of the Society for Neuroscience.
D) part of the neocortex.
E) neural pathway that connects the left and right hemispheres.
Answer: E
Diff: 3 Page Ref: 7
Topic: 1.3 Types of Research in the Biopsychological Approach
Type: (Factual)

33) What do Hubel, Sperry, Axelrod, Moniz, Pavlov, and Golgi have in common? They are all
A) biopsychologists.
B) neuroanatomists.
C) neuropsychologists.
D) psychologists.
E) Nobel Prize winners.
Answer: E
Diff: 3 Page Ref: 8
Topic: 1.3 Types of Research in the Biopsychological Approach
Type: (Factual)

34) Which of the following is not regarded as one of the major divisions of biopsychology?
A) physiological psychology
B) clinical psychology
C) neuropsychology
D) psychophysiology
E) psychopharmacology
Answer: B
Diff: 2 Page Ref: 8-9
Topic: 1.4 What Are the Divisions of Biopsychology?
Type: (Factual)

35) The division of biopsychology that studies the neural mechanisms of behavior through the direct manipulation of the brains of laboratory animals in controlled experiments is
A) physiological psychology.
B) psychophysiology.
C) neuropsychology.
D) cognitive neuroscience.
E) both A and B
Answer: A
Diff: 3 Page Ref: 9
Topic: 1.4 What Are the Divisions of Biopsychology?
Type: (Factual)

36) The research of a biopsychologist working for a drug company would likely be
A) largely pure.
B) completely pure.
C) psychopharmacological.
D) applied.
E) both C and D
Answer: E
Diff: 3 Page Ref: 9
Topic: 1.4 What Are the Divisions of Biopsychology?
Type: (Conceptual)
Rationale: The answer is not in the text; the student must infer the correct answer from concepts of applied research and psychopharmacology.

37) Which subdivision of biopsychology is most likely to be identified with an experiment in which the effects of Prozac on the ability of mice to learn a maze is studied?
A) experimental psychology
B) psychopharmacology
C) psychophysiology
D) physiological psychology
E) neuropsychology
Answer: B
Diff: 2 Page Ref: 9
Topic: 1.4 What Are the Divisions of Biopsychology?
Type: (Conceptual)
Rationale: The answer is not in the text; the student must infer the correct answer from a concept of psychopharmacology.

38) Which subdiscipline of biopsychology is most likely to be identified with the assessment of the memory deficits of patients with damage to the frontal portions of the neocortex?
A) neuropsychology
B) physiological psychology
C) psychopharmacology
D) experimental psychology
E) psychophysiology
Answer: A
Diff: 2 Page Ref: 9
Topic: 1.4 What Are the Divisions of Biopsychology?
Type: (Factual)

39) The cerebral cortex is the outermost layer of the
A) brain.
B) cerebellum.
C) great cerebral commissure.
D) cerebral hemispheres.
E) all of the above
Answer: D
Diff: 1 Page Ref: 9
Topic: 1.4 What Are the Divisions of Biopsychology?
Type: (Factual)

40) Which subdiscipline of biopsychology is identified with the measurement of scalp EEG activity and ANS activity in humans?
A) psychophysiology
B) experimental psychology
C) physiological psychology
D) neuropsychology
E) psychopharmacology
Answer: A
Diff: 2 Page Ref: 9
Topic: 1.4 What Are the Divisions of Biopsychology?
Type: (Factual)

41) In psychophysiology, the usual measure of brain activity is the
A) EKG.
B) ANS.
C) EEG.
D) electroencephalogram.
E) both C and D
Answer: E
Diff: 2 Page Ref: 9
Topic: 1.4 What Are the Divisions of Biopsychology?
Type: (Conceptual)
Rationale: The student must understand that C and D are equivalent to identify the correct answer.

42) Many schizophrenics have
A) regular EEG waves.
B) irregular heartbeats.
C) difficulty in the smooth visual tracking of
regularly moving objects.
D) both A and B
E) none of the above
Answer: C
Diff: 2 Page Ref: 10
Topic: 1.4 What Are the Divisions of Biopsychology?
Type: (Factual)

43) A term that refers to higher intellectual processes such as thought, memory, and attention is
A) "cognition."
B) "motivation."
C) "emotions."
D) "prosody."
E) "IQ."
Answer: A
Diff: 1 Page Ref: 10
Topic: 1.4 What Are the Divisions of Biopsychology?
Type: (Factual)

44) The major method of cognitive neuroscience is
A) single cell recording.
B) the electrocardiogram.
C) the ethological approach.
D) the electrooculogram.
E) none of the above
Answer: E
Diff: 3 Page Ref: 10
Topic: 1.4 What Are the Divisions of Biopsychology?
Type: (Factual)
Rationale: The correct answer is functional brain imaging, which is not one of the choices.

45) The major method of cognitive neuroscience is
A) functional brain imaging.
B) structural brain imaging.
C) autonomic nervous system recording.
D) the ethological approach.
E) the intelligence test.
Answer: A
Diff: 2 Page Ref: 10
Topic: 1.4 What Are the Divisions of Biopsychology?
Type: (Factual)

46) Common participants in the conduct of cognitive neuroscientific research are
A) cognitive psychologists.
B) computer experts.
C) biopsychologists.
D) mathematicians.
E) all of the above
Answer: E
Diff: 2 Page Ref: 11
Topic: 1.4 What Are the Divisions of Biopsychology?
Type: (Factual)

47) According to the text, the division of biopsychology that deals generally with the biology of behavior, rather than specifically with the neural mechanisms of behavior, is
A) physiological psychology.
B) psychobiology.
C) neural biology.
D) comparative psychology.
E) none of the above
Answer: D
Diff: 3 Page Ref: 11
Topic: 1.4 What Are the Divisions of Biopsychology?
Type: (Factual)

48) Some comparative psychologists study behavior in the laboratory, whereas others conduct
A) ethological research.
B) case studies.
C) experiments.
D) applied research.
E) converging operations.
Answer: A
Diff: 3 Page Ref: 11
Topic: 1.4 What Are the Divisions of Biopsychology?
Type: (Factual)

49) Scientific progress is most likely when different approaches are focused on a single problem, particularly when the strengths of one approach compensate for the weaknesses of the others. This is called
A) converging operations.
B) comparative analysis.
C) critical thinking.
D) scientific inference.
E) functional imaging.
Answer: A
Diff: 2 Page Ref: 12
Topic: 1.5 How Do Biopsychologists Work Together?
Type: (Factual)

50) The primary symptom of Korsakoff's syndrome is
A) severe memory loss.
B) epilepsy.
C) insomnia.
D) dehydration.
E) obesity.
Answer: A
Diff: 1 Page Ref: 12
Topic: 1.5 How Do Biopsychologists Work Together?
Type: (Factual)

51) Experimental evidence suggests that the brain damage commonly observed in people who consume a lot of alcohol is caused by
A) the direct toxic effects of alcohol on the brain.
B) thiamine deficiency.
C) vitamin B_1 deficiency.
D) all of the above
E) both A and B
Answer: D
Diff: 3 Page Ref: 12
Topic: 1.5 How Do Biopsychologists Work Together?
Type: (Factual)
Rationale: If the student understands that B and C are identical, only D is a reasonable answer.

52) Scientists in many fields study the unobservable
A) with electron microscopes.
B) with microelectrodes.
C) by scientific inference.
D) by direct observation.
E) by direct measurement.
Answer: C
Diff: 2 Page Ref: 13
Topic: 1.6 How Do Biopsychologists Study the Unobservable?
Type: (Factual)
Rationale: C is by far the best answer because A and C are not used in many fields.

53) Scientists study past ice ages, evolution, neural inhibition, gravity, evaporation, and thinking by
A) neuroscience.
B) scientific inference.
C) generalization.
D) operational sets.
E) direct observation.
Answer: B
Diff: 1 Page Ref: 13
Topic: 1.6 How Do Biopsychologists Study the Unobservable?
Type: (Factual)

54) If an object is moving to the left at a constant speed and you are rotating your eyes to the left at twice the speed, you will see the object moving
A) to the right at the same speed.
B) to the right at twice the speed.
C) to the right at half the speed.
D) to the left.
E) back and forth.
Answer: D
Diff: 3 Page Ref: 13
Topic: 1.6 How Do Biopsychologists Study the Unobservable?
Type: (Conceptual)
Rationale: The student could answer correctly from rote memory or from a concept of the relation between eye movement and the visual perception of motion. The participant would see the object as it actually moves (i.e. to the left), independent of eye movement.

55) The visual system bases its perception of motion on a comparison between movement of the image on the
A) retina and the neural commands sent from the brain to the eye muscles.
B) cornea and its movement on the retina.
C) retina and contractions of the eye muscles.
D) retina and movement of the eyes.
E) two retinas.
Answer: A
Diff: 3 Page Ref: 14
Topic: 1.6 How Do Biopsychologists Study the Unobservable?
Type: (Factual)

56) A volunteer with curarized eye muscles, who viewed a stationary target, saw the target move
A) in the direction opposite to the direction in which his eyes drifted.
B) in the direction opposite to the direction in which he attempted to move his eyes.
C) in the same direction as he attempted to move his eyes.
D) rapidly back and forth.
E) rapidly up and down.
Answer: C
Diff: 3 Page Ref: 13-14
Topic: 1.6 How Do Biopsychologists Study the Unobservable?
Type: (Conceptual)

Rationale: The student could answer correctly from rote memory or from a concept of the relation between eye movement and the visual perception of motion. A and B can be ruled out because "curarized eyes" do not move.

57) The principle that precedence should be given to the simplest interpretation of a behavior when more than one interpretation is possible is called
A) the principle of precedence.
B) the principle of simplicity.
C) Delgado's canon.
D) the principle of convergence.
E) Morgan's canon.
Answer: E
Diff: 2 Page Ref: 15
Topic: 1.7 Critical Thinking about Biopsychological Claims
Type: (Factual)

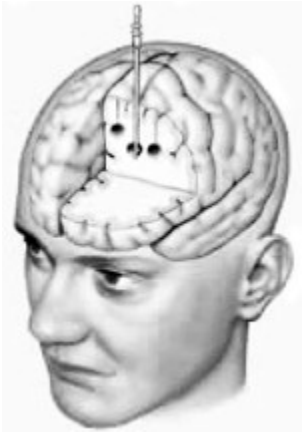
58) Morgan's canon is
A) a weapon used by Morgan.
B) a surgical instrument used by Moniz.
C) a method used to tame bulls.
D) a brain operation.
E) none of the above
Answer: E
Diff: 2 Page Ref: 15
Topic: 1.7 Critical Thinking about Biopsychological Claims
Type: (Factual)
Rationale: Morgan's canon is the scientific principle that precedence should be given to simple explanations.

59) The first prefrontal lobotomy performed on a human was
A) performed by Lima.
B) based on the study of Becky.
C) performed with a leucotome.
D) all of the above
E) none of the above
Answer: D
Diff: 3 Page Ref: 15
Topic: 1.7 Critical Thinking about Biopsychological Claims
Type: (Factual)

60) Which part of the brain is illustrated (the shaded area) in the accompanying drawing?

A) prefrontal cortex
B) occipital cortex
C) corpus callosum
D) caudate
E) hypothalamus
Answer: A
Diff: 1 Page Ref: 16
Topic: 1.7 Critical Thinking about Biopsychological Claims
Type: (Factual)
Rationale: Only A is clearly visible in this diagram.

61) Which prefrontal lobotomy procedure is illustrated by this drawing?
A) the procedure later used by Freeman in Canada
B) the procedure introduced by Moniz and Lima
C) the improved prefrontal lobotomy procedure developed in Sweden
D) the transorbital prefrontal lobotomy
E) both B and C
Answer: B
Diff: 2 Page Ref: 16
Topic: 1.7 Critical Thinking about Biopsychological Claims
Type: (Factual)



62) In 1949, Egas Moniz was awarded the Nobel Prize for
A) demonstrating that the two cerebral hemispheres have different functions.
B) writing "The Organization of Behavior."
C) research on the visual system.
D) studies of hormone production by the brain.
E) none of the above
Answer: E
Diff: 2 Page Ref: 16
Topic: 1.7 Critical Thinking about Biopsychological Claims
Type: (Factual)
Rationale: He received the Nobel Prize for introducing frontal lobotomy as a treatment for mental illness.

63) This drawing illustrates
A) Lima's original prefrontal lobotomy.
B) Moniz's original prefrontal lobotomy.
C) a transorbital prefrontal lobotomy.
D) both A and B
E) both B and C
Answer: C
Diff: 1 Page Ref: 17
Topic: 1.7 Critical Thinking about Biopsychological Claims
Type: (Factual)

64) In the U.S. alone, more than _____ psychiatric patients have received a prefrontal lobotomy.
A) 40
B) 400
C) 4,000
D) 40,000
E) 400,000
Answer: D
Diff: 2 Page Ref: 17
Topic: 1.7 Critical Thinking about Biopsychological Claims
Type: (Factual)

FILL-IN-THE-BLANK QUESTIONS

1) According to the text, _____ played a key role in the emergence of the field of biopsychology by writing a book published in 1949.
Answer: Hebb
Diff: 2 Page Ref: 4
Topic: 1.1 What Is Biopsychology?
Type: Factual

2) The study of nervous system disorders is called _____.
Answer: neuropathology
Diff: 3 Page Ref: 4
Topic: 1.2 Relation between Biopsychology and Other Disciplines
Type: Factual

3) A _____ -subjects design is an experimental design that involves testing a different group of subjects under each condition of the experiment.
Answer: between
Diff: 2 Page Ref: 5
Topic: 1.3 Types of Research in the Biopsychological Approach

Type: Factual

4) The _____ effect refers to the fact that a copulating male that becomes incapable of continuing to copulate with one sex partner can often recommence copulating with a new sex partner.
Answer: Coolidge
Diff: 2 Page Ref: 6
Topic: 1.3 Types of Research in the Biopsychological Approach
Type: Factual

5) _____ research is research intended to bring about a direct benefit to humankind.
Answer: Applied
Diff: 1 Page Ref: 7
Topic: 1.3 Types of Research in the Biopsychological Approach
Type: Applied

6) The largest neural pathway that connects the left and right halves of the brain is called the _____.
Answer: corpus callosum
Diff: 3 Page Ref: 7
Topic: 1.3 Types of Research in the Biopsychological Approach
Type: Factual

7) Biopsychologists who use drugs to manipulate the brains and behavior of their subjects are called _____.
Answer: psychopharmacologists
Diff: 2 Page Ref: 9
Topic: 1.4 What Are the Divisions of Biopsychology?
Type: Factual

8) _____ are the biopsychologists who focus on the study of human patients with brain damage.
Answer: Neuropsychologists
Diff: 2 Page Ref: 9
Topic: 1.4 What Are the Divisions of Biopsychology?
Type: Factual

9) The EEG, or _____ , is commonly recorded from the scalp.
Answer: electroencephalogram
Diff: 1 Page Ref: 9
Topic: 1.4 What Are the Divisions of Biopsychology?
Type: Factual

10) Many psychophysiological measures are indicators of the activity of the _____ nervous system, which regulates the body's inner environment.
Answer: autonomic
Diff: 3 Page Ref: 9
Topic: 1.4 What Are the Divisions of Biopsychology?
Type: Factual

11) The division of biopsychology that makes the greatest use of functional brain imaging is _____.
Answer: cognitive neuroscience

Diff: 2 Page Ref: 10
Topic: 1.4 What Are the Divisions of Biopsychology?
Type: Factual

12) There is more to biopsychology than the study of the neural mechanisms of behavior. The division of biopsychology that best illustrates this point is _____.
Answer: comparative psychology
Diff: 3 Page Ref: 11
Topic: 1.4 What Are the Divisions of Biopsychology?
Type: Factual

13) Korsakoff's syndrome is most prevalent in chronic _____.
Answer: alcoholics
Diff: 2 Page Ref: 12
Topic: 1.5 How Do Biopsychologists Work Together?
Type: Factual

14) Korsakoff's syndrome is often associated with a _____ deficiency.
Answer: thiamine
Diff: 2 Page Ref: 12
Topic: 1.5 How Do Biopsychologists Work Together?
Type: Factual

15) The general method that scientists use to study unobservable objects and events is called _____.
Answer: scientific inference
Diff: 2 Page Ref: 13
Topic: 1.5 How Do Biopsychologists Work Together?
Type: Factual

16) Delgado's claim of a caudate taming center should have been dismissed immediately because it violated _____.
Answer: Morgan's canon
Diff: 3 Page Ref: 15
Topic: 1.7 Critical Thinking about Biopsychological Claims
Type: Factual

17) _____ won a Nobel Prize for the development of the prefrontal lobotomy as a treatment for mental illness.
Answer: Moniz
Diff: 3 Page Ref: 15
Topic: 1.7 Critical Thinking about Biopsychological Claims
Type: Factual

18) Transorbital lobotomies were conducted through the orbits, or _____.
Answer: eye sockets
Diff: 2 Page Ref: 16
Topic: 1.7 Critical Thinking about Biopsychological Claims
Type: Factual

ESSAY AND OTHER MULTIPLE-MARK QUESTIONS

1) Discuss biopsychology's (behavioral neuroscience's) special role in neuroscientific research, and describe four other disciplines of neuroscience.
Answer:
20% for explaining that the study of behavior is biopsychology's special role
80% for naming and defining four other disciplines of neuroscience
Diff: 1 Page Ref: 4
Topic: 1.2 Relation between Biopsychology and Other Disciplines
Type: (Factual)

2) Discuss the advantages and disadvantages of humans as subjects in biopsychological research.
Answer:
50% for the advantages: they have human brains; they are often less expensive; they can communicate verbally
50% for the disadvantages: their brains and behavior are particularly complex; there are strict ethical constraints; research that focuses totally on humans lacks a comparative perspective
Diff: 2 Page Ref: 5
Topic: 1.3 Types of Research in the Biopsychological Approach
Type: (Conceptual)

3) Compare experimental and quasiexperimental research.
Answer:
50% for defining and discussing both experiments and quasiexperiments
50% for contrasting experiments and quasiexperiments, emphasizing the fact that only experiments permit the study of causation
Diff: 3 Page Ref: 5-7
Topic: 1.3 Types of Research in the Biopsychological Approach
Type: (Conceptual)

4) Compare physiological psychology and neuropsychology, and discuss how these two approaches to biopsychological research complement one another.
Answer:
50% for describing physiological psychology and neuropsychology
50% for explaining how these two fields compensate for each other's weaknesses; students should discuss the concept of converging operations, and their answer could be strengthened by providing examples (e.g., research on memory or on Korsakoff's syndrome)
Diff: 3 Page Ref: 8-9, 12-13
Topic: 1.4 What Are the Divisions of Biopsychology?
Type: (Conceptual)

5) If you were to become a biopsychologist, in which division of biopsychology would you like to specialize and why?
Answer:
50% for knowledge of the division that a student selects
50% for effectively arguing that the choice is best for that student
Diff: 2 Page Ref: 1-17
Topic: 1.4 What Are the Divisions of Biopsychology?
Type: (Conceptual)

6) Discuss the concept of converging operations, explain its critical role in biopsychological research, and give a specific example.
Answer:
40% for defining and discussing converging operations and how they work in biopsychology
60% for providing a specific example of converging operations in biopsychology (e.g., research on Korsakoff's syndrome)
Diff: 3 Page Ref: 12-13
Topic: 1.5 How Do Biopsychologists Work Together?
Type: (Conceptual)

7) It is important to think critically about biopsychological claims. Discuss and provide an example.
Answer:
40% for describing the difficulties of interpreting biopsychological claims and discussing the importance of critical evaluation
60% for providing an example of misinterpretation in biopsychological research (e.g., prefrontal lobotomy or the caudate taming center) to argue for the importance of critical evaluation
Diff: 1 Page Ref: 1-17
Topic: 1.7 Critical Thinking about Biopsychological Claims
Type: (Conceptual)