# TEST BANK

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## Brain Behavior

An Introduction to Biological Psychology

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4th Edition

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#### Brain and Behavior An Introduction to Biological Psychology,4th Edition Bob Garrett's Test Bank

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#### Chapter 1

#### Multiple Choice (Correct answers delineated with \*)

- 1. The decade of the 1990s was designated as the decade of:
  - a. The brain (\*)
  - b. Behavior
  - c. Mind
  - d. Cognition
- 2. If someone is interested in the relationships between behavior and the body, what area of science do they work in?
  - a. Psychobiology
  - b. Biopsychology
  - c. Physiological psychology
  - d. All of these areas are correct. (\*)
- 3. Neuroscience is the multidisciplinary study of the \_\_\_\_\_ and its role in behavior:
  - a. Brain
  - b. Nervous system (\*)
  - c. Mind
  - d. Human psyche
- 4. The annual costs of brain disorders and addictions in the United States is an estimated:
  - a. 100 trillion dollars
  - b. 500 billion dollars
  - c. 1 trillion dollars (\*)
  - d. 5 trillion dollars
- 5. Psychologists use the term *behavior* to refer to:
  - a. Overt acts
  - b. Learning
  - c. Emotions
  - d. All of the above (\*)
- 6. Which of the following questions would a biopsychologist be *least* likely to study?
  - a. How does the brain's activity result in consciousness? (\*)
  - b. What changes occur in the nervous system when a person learns?
  - c. How do people in different cultures view mental illness?
  - d. What is the physiological explanation for depression?
- 7. If you were able to build a time machine, and wanted to travel back to observe the first psychology laboratory, where would you go?
  - a. To Charles Darwin's office in Germany
  - b. To Charles Darwin's boat in England
  - c. To Wilhelm Wundt's lab in Germany (\*)

- d. to Rene Descartes' apothecary in France
- 8. The mind-brain question:
  - a. Is concerned with the nature of the mind and its relation to the brain (\*)
  - b. Was originally posed by early neuroscientists and remains unsolved today
  - c. Usually involves a choice between the positions of psychology and philosophy
  - d. All of the other alternatives are correct.
- 9. The textbook author views the mind as a:
  - a. Spirit
  - b. Soul
  - c. Collection of things the brain does, such as planning and feeling
  - d. Concept (\*)
- 10. Which of the following statements is *most* consistent with the materialistic monist view of the mind-brain problem?
  - a. Both hemispheres of the brain work together.
  - b. The brain and the mind are both physical. (\*)
  - c. Everything is made of matter and energy.
  - d. The body is made of matter, whereas the mind is not.
- 11. Which of the following statements is *most* consistent with the dualism view of the mindbrain problem?
  - a. Both hemispheres of the brain work together.
  - b. The brain and the mind are both physical.
  - c. Everything is made of matter and energy.
  - d. The body is made of matter, whereas the mind is not. (\*)
- 12. Which mind-brain view is *most* likely to be held by a neuroscientist?
  - a. Idealistic monism
  - b. Dualism
  - c. Interactionism
  - d. Monism (\*)
- 13. If you say you are a dualist, you are saying you believe in:
  - a. The mind and the spirit
  - b. Only the nonmaterial
  - c. A mind that is separate from the brain (\*)
  - d. The body and the brain
- 14. If you say you are a monist, you are saying you believe in:
  - a. Just the mind
  - b. Both the material and the nonmaterial
  - c. The brain and mind are composed of the same substance (\*)
  - d. Just the spiritual

- 15. Some neuroscientists:
  - a. Believe that evolution can't explain all biological processes, such as brain development
  - b. Believe that nonmaterial neuroscience has a better chance of explaining consciousness than material neuroscience (\*)
  - c. Believe that the mind changes the brain, based on the study of psychotherapy altering the brain in patients with OCD
  - d. View the mind as being material
- 16. Which of the following philosophers debated the mind-brain question?
  - a. Aristotle
  - b. Democritus
  - c. Plato
  - d. All of the above (\*)
- 17. A \_\_\_\_\_\_\_ is a proposed mechanism to explain how something, usually more complex than the proposed mechanism, works.
  - a. assumption
  - b. model (\*)
  - c. construct
  - d. hypothesis

18. According to Descartes, the brain controlled behavior by:

- a. Directing spirit fluid through nerves, thereby inflating the muscles (\*)
- b. Tilting the spinal cord like a joystick
- c. Bending energy from an outside light source
- d. Actively directing the pineal gland to inflate and deflate
- 19. According to Descartes, \_\_\_\_\_ was where the mind interacted with the body.
  - a. the ventricles of the brain
  - b. the pineal gland (\*)
  - c. fluid filled nerves and muscles
  - d. the pituitary gland
- 20. Why did Descartes choose the pineal gland as the "seat of the soul"?
  - a. It was in a perfect position to serve this function.
  - b. It was capable of bending at different angles to direct the flow of animal spirits.
  - c. It was attached just below the two cerebral hemispheres.
  - d. All of the above (\*)
- 21. What was the major drawback of Descartes' view of the mind-brain problem?
  - a. It was a theory.
  - b. It was not tested by empirical methods. (\*)
  - c. It was a hydraulic model.
  - d. He knew how the brain worked, but not the body.

- 22. Which individual was a seventeenth-century French philosopher and physiologist?
  - a. Rene Descartes (\*)
  - b. Paul Broca
  - c. Eduard Hitzig
  - d. Gustav Fritsch
- 23. Who first observed that muscles would respond to electrical stimulation?
  - a. Gustav Fritsch
  - b. Paul Broca
  - c. Eduard Hitzig
  - d. Luigi Galvani (\*)
- 24. Who first showed that movement would result from electrical stimulation of the brain?
  - a. Fritsch and Galvani
  - b. Broca and Helmholtz
  - c. Hitzig and Helmholtz
  - d. Fritsch and Hitzig (\*)
- 25. Who first measured the speed of conduction in the nervous system?
  - a. Rene Descartes
  - b. Paul Broca
  - c. Eduard Hitzig
  - d. Hermann von Helmholtz (\*)
- 26. \_\_\_\_ calculated the velocity of the electrical nerve impulse to be about \_\_\_\_.
  - a. Helmholtz, 90 meters/second
  - b. Hitzig, 90 feet/second
  - c. Helmholtz, 90 feet/second (\*)
  - d. Broca, 900 feet/second
- 27. Which of the following statements is *true* about the case of Phineas Gage?
  - a. He did not survive the railroad accident.
  - b. His case supported the equipotentiality view.
  - c. The major damage he experienced was in the frontal lobes. (\*)
  - d. Paul Broca was the scientist that first described Gage's disorder.
- 28. Which of the following conclusions was reached from observations at autopsy on the brain of a man who had an inability to speak?
  - a. Speech is not localized in a particular brain region.
  - b. Speech is inherited.
  - c. Auditory reflexes are found in the dominant hemisphere.
  - d. Speech is localized in the left side of the brain. (\*)
- 29. Who first localized the speech control center in the human brain?
  - a. Broca (\*)
  - b. Gage

- c. Helmholtz
- d. Galvani

30. The proposition that specific brain areas control specific functions refers to:

- a. Functionalism
- b. Specific nerve control
- c. Localization (\*)
- d. Neuroscience
- 31. Whereas phrenology claimed to precisely localize \_\_\_\_\_ in the brain, \_\_\_\_\_ argued that virtually no functions were precisely localized.
  - a. equipotentialities, Gall
  - b. faculties, Lashley (\*)
  - c. faculties, Spurzheim
  - d. motor functions, Lashley
- 32. Today's research tells us that functions or characteristics are:
  - a. Mostly localized
  - b. Mostly distributed
  - c. Both localized and distributed (\*)
  - d. None of the above
- 33. Which of the following statements is *true*?
  - a. Some genes are found in the mitochondria. (\*)
  - b. Every body cell has 23 chromosomes.
  - c. Ova and sperm have paired chromosomes, XX for eggs and XY for sperm.
  - d. The sequences of nucleotides that make up our DNA differ among individuals by about 10%.
- 34. A direct function of genes is:
  - a. Influencing behavior
  - b. Building the brain and nervous system
  - c. Directing the building of proteins (\*)
  - d. Replication
- 35. About what percentage of the genes in any two people are identical?
  - a. Approximately 75%
  - b. 25% or less
  - c. Over 99% (\*)
  - d. Approximately 50%, depending on race
- 36. A \_\_\_\_\_ gene will produce its effect regardless of which gene it is paired with.
  - a. homozygous
  - b. heterozygous
  - c. dominant (\*)
  - d. recessive