

Name \_\_\_\_\_

ID Number \_\_\_\_\_

1. Which method is used to trace neural connections and tissue samples:

- a. correlational
- b. longitudinal
- c. histological
- d. behavioral
- e. somatic

2. Who believed thinking was in the heart

- a. Helmholtz
- b. Mendel
- c. Flourens
- d. Broca
- e. Galen

3. Psychobiologists are the brain people of:

- a. neuroscience
- b. psychology
- c. sociology
- d. chemistry
- e. physics

4. The research goal of finding simple explanations emphasizes:

- a. generalization
- b. augmentation
- c. summation
- d. reduction
- e. insight

5. Which approach changes behavior and then observes the brain

- a. correlational
- b. longitudinal
- c. histological
- d. behavioral
- e. somatic

6. Which method studies the same processes in different species:

- a. comparative-evolutionary
- b. cross-sectional
- c. developmental
- d. longitudinal
- e. behavioral

7. Mendel found that:

- a. heredity can be studied experimentally
- b. traits are inherited in certain ratios
- c. genes are dominant or recessive
- d. factors are inherited intact
- e. all of the above

8. Who believed that the heart expands & contracts because it is intelligent:

- a. Helmholtz
- b. Mendel
- c. Flourens
- d. Broca
- e. Galen

9. Phase 2 of drug metabolism is the forming of:

- a. bimodal sensitivities
- b. oxidation reactions
- c. conjugations
- d. distributions
- e. reiterations

10. Which is caused by a dominant trait:

- a. Huntington's disease
- b. Tay-Sachs disease
- c. Sickle cell anemia
- d. Cystic Fibrosis
- e. all of the above

11. To study people with same genetics and the same environment, you'd study:

- a. adopted neighbors
- b. fraternal twins
- c. identical twins
- d. siblings
- e. strangers

12. The dominant gene for acetylators (drug metabolism) produces:

- a. moderate acetylators
- b. fast acetylators
- c. slow acetylators
- d. non-acetylators
- e. para-acetylators

13. Mendel found that each offspring receives \_\_\_\_\_ of its hereditary factors from one parent:

- a. 25%
- b. 50%
- c. 60%
- d. 75%
- e. 100%

14. Which is a type of dendritic spine:
- mushroom
  - squash
  - onion
  - apple
  - all of the above
15. Which are the smallest glial cells:
- Schwann cells
  - astrocytes
  - microglia
  - dendrites
  - dexters
16. Which give physical support to PNS neurons
- Schwann cells
  - satellite cells
  - pillar cells
  - scaffolding
  - all of the above
17. A dendrite is:
- thicker than an axon
  - shorter than an axon
  - attached to the soma
  - rougher than an axon
  - all of the above
18. Neurons generally can't be replaced when they die, except in the:
- hippocampus
  - spinal cord
  - amygdala
  - pituitary
  - pons
19. During development, you create
- as many as 5,000 neurons each second
  - twice as many neurons as necessary
  - only sensory neurons until birth
  - myelinated neurons first
  - all of the above
20. Which vary in length (.1 mm to 1 meter)
- oligodendrocytes
  - Schwann cells
  - dendrites
  - glial cells
  - axons
21. Endoplasmic reticulum is a:
- central processor of emotion
  - neuronal membrane
  - mythical creature
  - system of tubes
  - interneuron
22. A neuron cannot fire at all during the:
- cable connection isolation
  - relative notational velocity
  - absolute refractory period
  - relative refractory period
  - general excitatory period
23. How fast is a resting potential:
- 20 mph
  - 40 mph
  - 100 mph
  - 200 mph
  - trick question; it doesn't move
24. An ion can be:
- positively charged
  - neutrally charged
  - semi-permeable
  - voltage-gated
  - all of the above
25. The voltage of a neuron is a comparison of the difference between:
- confidence and competence
  - performance and potential
  - inside and outside the cell
  - focus and flow
  - ions and electrons
26. Myelinated axons have:
- saltatory conduction
  - wireless conduction
  - phone conduction
  - cable conduction
  - radio conduction
27. Which has a localized impact on a neuron's membrane:
- metabotropic effects
  - ionotropic effects
  - g-protein effects
  - lateral inhibition
  - Zeigarnik effects

28. Re-absorption of a neurotransmitter from a synapse is called:

- a. scrubbing
- b. sweeping
- c. reuptake
- d. blocking
- e. recycling

29. Which activates 2<sup>nd</sup> messenger system:

- a. metabotropic effects
- b. ionotropic effects
- c. g-protein effects
- d. lateral inhibition
- e. Zeigarnik effects

30. Neurotransmitters are released from:

- a. terminal buttons
- b. transporters
- c. thresholds
- d. Betz cell
- e. glial cell

31. Neurotransmitters are released when a depolarization opens:

- a. carbonated channels
- b. calcium channels
- c. pepper channels
- d. glial channels
- e. iron channels

32. Which process cleans neurotransmitter from synapses:

- a. inactivation
- b. conjunctions
- c. agonists
- d. protagonists
- e. pragnanz

33. GABA

- a. increases with use of barbiturates
- b. increases with use of alcohol
- c. has an inhibitory effect
- d. regulates muscles tone
- e. all of the above

34. In the brain, which neurotransmitter is used in 90% of the synapses:

- a. dopamine
- b. serotonin
- c. epinephrine
- d. glutamate
- e. GABA

35. When small amounts of dopamine are released independently of neuronal activity, it's called

- a. automatic transmission
- b. manual transmission
- c. phasic transmission
- d. lateral transmission
- e. tonic transmission

36. Which helps lower aggression and impulsivity:

- a. acetylcholine
- b. epinephrine
- c. dopamine
- d. serotonin
- e. benzene

37. Adrenaline is also called:

- a. noradrenaline
- b. dopamine
- c. epinephrine
- d. serotonin
- e. benzene

38. Epinephrine and norepinephrine are derived from:

- a. acetylcholine
- b. dopamine
- c. serotonin
- d. benzene
- e. GABA

39. L-Dopa is used to treat Parkinson's disease because it:

- a. energizes glucose deactivation
- b. crosses the blood-brain barrier
- c. acts as a dorsal transporter
- d. inhibits dopamine release
- e. all of the above

40. Which is mostly stored in the intestines:

- a. noradrenaline
- b. acetylcholine
- c. dopamine
- d. serotonin
- e. purines

41. All total, how many types of neurotransmitters are there:

- a. 1
- b. 5
- c. 20-50
- d. 300+
- e. 6000+

42. During pregnancy, the placenta is the major source of:

- a. progesterone
- b. testosterone
- c. adrenaline
- d. ACT
- e. LH

43. Which is suppressed by high levels of estrogen:

- a. testosterone
- b. adrenaline
- c. GnRH
- d. ACT
- e. SAT

44. RU-486 is a progesterone:

- a. synthesizer
- b. antagonist
- c. stimulator
- d. agonist
- e. dexter

45. Hormones are produced by the hypothalamus and:

- a. spinal cord
- b. pituitary
- c. kidneys
- d. heart
- e. all of the above

46. Methamphetamine:

- a. takes 1 hr for plasma concentration to peak
- b. passes through the placenta
- c. withdrawal is dangerous
- d. relapse is not common
- e. all of the above

47. Having withdrawal symptoms when you stop taking a drug is caused by:

- a. depot binding
- b. sensitization
- c. withdrawal
- d. tolerance
- e. solubility

48. Which is similar in structure to dopamine:

- a. amphetamines
- b. acetylcholine
- c. endorphins
- d. alcohol
- e. sugar

49. At toxic levels, nicotine causes:

- a. thickening of blood-brain barrier
- b. respiratory paralysis
- c. particle diffusion
- d. hypoglycemia
- e. all of the above

50. Which is a stimulant:

- a. amphetamine
- b. xanthine
- c. nicotine
- d. cocaine
- e. all of the above