

Psychology 2360 Assignment #2
Chapters 5, 6, 7

Name: **Key**

Student #:

INSTRUCTIONS FOR THE MULTIPLE CHOICE ITEMS

There are 20 multiple choice items on this assignment; each correct answer is worth 1 point, for a total of 20 points. Items have been selected from the textbook and lectures. Read the multiple-choice questions carefully and select the BEST-lettered choice. Circle the letter corresponding to your choice AND fill in the correct spot on the bubble sheet with a pencil. If you change an answer, be sure to erase the incorrect answer well. If you do not know an answer - GUESS. If you use a pen on the bubble sheets, your score will be zero.

INSTRUCTIONS FOR THE SHORT ANSWER QUESTIONS

There are 10 short answer questions on this assignment; 5 are worth 2 points and 5 are worth 1 point, for a total of 35 points. Items have been selected from the textbook and lectures. Read each question carefully. These are short answer questions – do not write TOO MUCH. If you write something ‘wrong’ you will lose points. Use only the space provided.

Bonus questions:

Multiple Choice – one point each.

These answers are at the end.

1. The active zone on type I synapses is _____ when compared with the active zone on type II synapses.
 - A) smaller
 - B) larger
 - C) the same size
 - D) of varying size

2. The structure of synapses is best viewed with a(n):
 - A) electron microscope.
 - B) light microscope.
 - C) confocal microscope.
 - D) nissle-stained microscopic procedure.

3. Transmitters are usually released in the blood via:
 - A) axodendritic synapses.
 - B) axosomatic synapses.
 - C) axosecretory synapses.
 - D) axoaxonic synapses.

4. In the nervous system peptides play a role in:
 - A) regulating feeding and drinking behavior.
 - B) hormonal functions.
 - C) pain and pleasure regulation.
 - D) all of the above.
 - E) both a and b.

5. Ionotropic receptors consist of:
 - A) a binding site.
 - B) a pore.
 - C) G proteins.
 - D) all of the above.
 - E) both a and b.

6. Dopamine has been related to:
 - A) depression.
 - B) schizophrenia.
 - C) Alzheimer's disease.
 - D) mania.

7. Repeated stimulation may cause:
 - A) sensitization.
 - B) habituation.
 - C) associative behaviors.
 - D) both b and c.
 - E) all of the above.

8. A primitive brain can be seen in a human embryo by the _____ week of life.
 - A) first
 - B) second
 - C) third
 - D) fourth

9. The frontal lobes are fully developed:
 - A) at birth.
 - B) around the age of 5.
 - C) around the age of 10.
 - D) around the age of 16.

10. The number of synaptic contacts in the human cerebral cortex is estimated to be:
- A) 10^{10} .
 - B) 10^{12} .
 - C) 10^{14} .
 - D) 10^{16} .
11. Another name for Little's disease is:
- A) Down's syndrome.
 - B) kwashiorkor syndrome.
 - C) cerebral palsy.
 - D) phenylketonuria.
12. The typical 12-year-old has:
- A) a 20,000- to 30,000-word vocabulary.
 - B) a 30,000- to 40,000-word vocabulary.
 - C) a 40,000- to 50,000-word vocabulary.
 - D) a more than 50,000-word vocabulary.
13. Jocelyn Bachevalier trained infant male and female monkeys on both the concurrent discrimination task and the object reversal task. She found that the female monkeys were:
- A) superior to the males on the object reversal task and equal on the concurrent discrimination task.
 - B) superior to the males on the concurrent discrimination task and equal on the object reversal task.
 - C) better on the concurrent task and the males were better on the object reversal task.
 - D) better on the object reversal task and the males were better on the concurrent task.
14. Abnormal brain development that results in behavioral effects:
- A) is immediately evident.
 - B) may not be evident until adolescence.
 - C) may not be evident until the brain starts to lose neurons in the third decade.
 - D) cannot be detected until autopsy.
15. In 1987 there was an outbreak of illness following the consumption of mussels. The contaminant found was:
- A) domoic acid.
 - B) red tide.
 - C) kanic acid.
 - D) sulfuric acid.

16. Which of the following will pass through the blood–brain barrier easily?
- A) weak-base drugs
 - B) drugs bound to proteins
 - C) hydrophilic drugs
 - D) water-soluble drugs
17. Black widow spider venom affects its victim by:
- A) promoting the release of acetylcholine.
 - B) inhibiting the release of acetylcholine.
 - C) blocking the postsynaptic acetylcholine receptors.
 - D) activating the postsynaptic acetylcholine receptors.
18. Dyskinesia can be a side effect of:
- A) antipsychotic drugs.
 - B) antianxiety drugs.
 - C) antidepressives.
 - D) narcotic analgesics.
19. Sensitization usually occurs:
- A) as a result of cellular tolerance.
 - B) as a result of metabolic tolerance.
 - C) in a new environment.
 - D) in a familiar environment.
20. Which of the following is the correct sequence for drug addiction?
- A) incentive salience, pleasure, associative learning
 - B) associative learning, pleasure, incentive salience
 - C) pleasure, associative learning, incentive salience
 - D) incentive salience, associative learning, pleasure

21. What is dyskinesia? 2 points

A movement disorder. (1 pt)
This may result from drugs. (1pt)
Seen in patients with Cerebral Palsy (1pt)

22. What is a second messenger? 1 point

Activated by a neurotransmitter (1/2)
A chemical that carries a message to initiate a biochemical process inside the cell. (1pt)

23. Define long-term potentiation. 2points

In response to stimulation at a synapse, changed amplitude of an excitatory postsynaptic potential that lasts for hours to days and plays a part in associative learning. (2pts)
Instantiation of Hebb's synapse (1 pt)

24. What is a neural tube? 1point

Structure seen in early development that becomes that brain and spinal cord.

25. List Piaget's four stages of development. 2points

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Stage 1 – sensorimotor

Stage 2 – preoperational

Stage 3 – concrete operations

Stage 4 – formal operations.

26. What is the chemoaffinity hypothesis? 1 point

Proposal that neurons or their axons and dendrites are drawn towards a chemical that is signaling the correct pathway to travel

27. Define cross-tolerance. 1 point

Response to a novel drug is reduced because of tolerance already developed in response to a related drug.

28. What is the difference between substance abuse and substance dependence? 2 points

Abuse – use of a drug for the psychological and behavioural changes it produces aside from the therapeutic effects

Dependence – the continued use to avoid things like withdrawal

29. What is alcohol myopia? 1 point

Nearsighted behaviour displayed under the influence of alcohol (1 pt)

or

Local and immediate cues are prominent, but remote ones or consequences are ignored (1pt)

30. how are schizophrenic brains different from normal brains? 2 points

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Disorganized pyramidal cells.

Lighter in weight

Enlarged ventricles

Smaller frontal lobes

Thinner parahippocampal gyri

Need all 5 for 2 points.

4 – 1.5

3 – 1

2 - .5

1 – 0

Answer Key

1. B
2. A
3. C
4. D
5. E
6. B
7. E
- 8.
- 9.
- 10.
11. C
12. D
13. C
14. C
15. D
16. C
17. B
- 18.
- 19.
- 20.
21. A
22. D
23. A
24. A
25. C
26. C
- 27.
- 28.
- 29.