**Chapter 14**

Multiple Choice

1. What is the difference between intelligence and motivation?

\*A) Intelligence is akin to prediction and motivation to judgment

B) Intelligence is genetic and motivation is learned

C) Intelligence is not required for survival, but motivation is required

D) Intelligence does not involve maintaining homeostasis, but motivation does involve maintaining homeostasis

 (Reference Page 442)

2. Response to social situation, affiliation, and parental attachment are all:

A) Functions of the hypothalamus

B) Internal drives

\*C) External drives

D) Associated with the hippocampus

 (Reference Page 442)

3. External drives are associated with which brain structure?

A) Thalamus

B) Amygdala

\*C) Hypothalamus

D) Hippocampus

 (Reference Page 442)

4. The hypothalamus is involved with which homeostatic system:

A) Autonomic

B) Neuroendocrine

C) Motivational

\*D) All of the above

 (Reference Page 443)

5. This is the peptide released during eating to stimulate further eating.

A) Cholecystokinin

\*B) Ghrelin

C) Leptin

D) Insulin

 (Reference Page 444)

6. Cholecystokinin is involved in suppressing:

A) Thirst

B) Sexual drive

C) Aggression

\*D) Hunger

 (Reference Page 444)

7. Activity in the accessory basal nucleus, as shown in studies using electrical stimulation, is correlated with:

\*A) Defensive behavior

B) Mate selection

C) Maternal instincts

D) Fear or attack behaviors

 (Reference Page 446)

8. Which brain structure is strongly associated with forming responses to outside stimuli?

A) The hypothalamus

B) The thalamus

\*C) The amygdala

D) The hippocampus (Reference Page 446)

9. The nigrostriatal pathway originates with the dopamine-containing neurons of the:

A) Ventral segmental area (VTA)

B) Dorsolateral prefrontal cortex (DLPFC)

C) Anterior amygdala

\*D) Substantia nigra pars compacta (Reference Page 447)

10. Stimulus evaluation and emotional regulation are associated with which pathway?

A) Nigrostriatal

B) Mesocortical

\*C) Mesolimbic

D) All of the above (Reference Page 447)

11. How do we know when a stimulus is a punishment?

\*A) It reduces the frequency of a behavior

B) It increases the frequency of a behavior

C) The stimulus is aversive

D) A person or animal will work to obtain it (Reference Page 448)

12. What is an example of a primary reward?

A) Money

\*B) Water

C) A car

D) An A+ on a test (Reference Page 448)

13. The temporal difference learning model incorporates both the magnitude and the \_\_\_\_\_\_\_\_\_\_\_ of expected rewards.

A) Amount

B) Frequency

\*C) Timing

D) Location (Reference Page 450)

14. What non-invasive evidence do we have for the presence of opioid-like substances and opioid receptors in the human brain?

\*A) Opioids have a strong effect on humans

B) Opioids are rarely addictive

C) Opioids produce only positive effects

D) Opioids are present in the bloodstream (Reference Page 451)

15. Which type of opioid receptor is associated with analgesia, and may possibly produce antidepressant effects?

\*A) Delta-opioid receptors

B) Kappa-opioid receptors

C) Mu-opioid receptors

D) Nociceptin receptors (Reference Page 452)

16. Which opioid systems are involved with enhancing rewarding stimuli?

A) Delta-opioid and kappa-opioid

B) Kappa-opioid and mu-opioid

\*C) Mu-opioid and delta-opioid

D) None of the above (Reference Page 453)

17. What is the term for the never-ending race to new rewards in which humans seem to find themselves stuck?

A) Positive psychology

B) Incentive sensitization

C) Satiety

\*D) The hedonic treadmill (Reference Page 458-459)

18. When does withdrawal occur?

A) When the addictive substance is increased dramatically in amount over a short period of time

B) When the addictive substance amounts are lowered in small increments over a long period of time

\*C) When the addictive substance is suddenly removed

D) When the brain discontinues building kappa-opioid receptor sites (Reference Page 460)

18. In the 1954 study by Olds and Milner, rats chose to press a lever that stimulated the \_\_\_\_\_ rather than eat or drink.

\*A) nucleus accumbens

B) amygdala

C) hippocampus

D) hypothalamus (Reference Page 461)

20. What medication can be used to treat Parkinson's disease, with possible negative side-effects such as compulsive gambling and hypersexuality?

A) Methadone

\*B) Dopamine-enhancers

C) Opioid replacements

D) Ibogaine (Reference Page 463)

21. What does the opioid antagonist naltrexone do?

\*A) Makes alcohol seem less pleasurable and reduces cravings

B) Causes severe nausea and vomiting after ingesting alcohol

C) Reduces the cravings and pleasure of smoking

D) Acts directly on nicotine receptors and activates them only mildly, therefore avoiding withdrawal (Reference Page 464)

22. One reason disulfiram fails to work is:

A) The unpleasant effects are not severe

B) Patients may be immune

\*C) Patients may stop taking it

D) The unpleasant effects are short-lasting (Reference Page 464)

23. Which medication enhances quit rates among smokers by acting directly on nicotine receptors and activating them only mildly, therefore avoiding withdrawal?

A) Naltrexone

\*B) Varenicline

C) Disulfiram

D) Bupropion (Reference Page 465)

24. Which possible treatment for addictive substances is found in an African plant and has both psychoactive and antiaddictive properties?

A) Methadone

B) Methamphetamine

\*C) Ibogaine

D) Naltrexone (Reference Page 466)

25. What is the goal behind motivational interviewing?

A) To find out why the individual developed an addiction

B) To determine the likelihood of relapse

C) To determine suitable candidates for deep brain stimulation

\*D) To help an addict find the motivation to change within themselves (Reference Page 468)