Chapter 17: Learning and Memory

Multiple Choice

1. Episodic memory concerns
   a. general knowledge.
   b. nondeclarative information.
   c. semantic information.
   d. autobiographical information.

2. The ability of elderly people to retrieve certain memories (but not others) seems particularly related to the
   a. presence of memory cues.
   b. absence of delays between learning and recall.
   c. presence of rewards.
   d. specificity of the items to be retrieved from memory.

3. The main cause of Korsakoff’s syndrome is
   a. lack of thiamine.
   b. encephalitis.
   c. syphilis.
   d. concussion.

4. A major site of damage in Korsakoff’s disease is the
   a. ventromedial hypothalamus.
   b. hippocampus.
   c. amygdala.
   d. mammillary bodies.

5. H.M.’s operation involved removal not only of the hippocampus but also of the
   a. dorsomedial thalamus.
   b. amygdala.
   c. mammillary bodies.
   d. temporal stem.

6. Declarative memory is said to deal with
   a. “how.”
   b. “why.”
   c. “where.”
   d. “what.”
7. Evidence indicates that working memory for spatial location is related especially to the functioning of the
   a. amygdala.
   b. caudate nucleus.
   c. hippocampus.
   d. extrastriate visual cortex.

   a. short-term
   b. semantic
   c. permanent
   d. episodic

9. Edward Tolman is associated with the concept of
   a. instrumental learning.
   b. cognitive maps.
   c. cell assemblies.
   d. iconic memory.

10. The duration for short-term memory agreed upon by biological and cognitive psychologists
    a. is about 30 seconds.
    b. extends up to one day.
    c. lasts from minutes to hours.
    d. None of the above

11. It has been proposed that PTSD can be reduced or eliminated by administering drugs to
    a. accelerate forgetting.
    b. block the effects of emotional stress on memory.
    c. inhibit behavioral sensitization.
    d. reduce frontal lobe activity.

12. Studies of brain-lesioned individuals, as well as imaging studies, indicate that the learning of
    sensorimotor skills, perceptual skills, and cognitive skills are all affected by lesions that include
    the
    a. basal ganglia.
    b. motor cortex.
    c. hippocampus.
    d. amygdala.

13. Evidence indicates that working memory for object recognition is related especially to the
    a. amygdala.
    b. caudate nucleus.
    c. hippocampus.
    d. extrastriate visual cortex.
14. Entorhinal neurons that fire selectively when an animal crosses the intersection points of an abstract map of the local environment are _______ cells.
   a. place
   b. border
   c. grid
   d. intersection

15. Confabulation is a symptom of
   b. amnesia caused by ischemia.
   c. Korsakoff’s disease.
   d. Huntington’s disease.

16. Which kinds of memory tasks usually show decrements with aging?
   a. Easy tasks that do not require conscious recollection
   b. Tasks that rely primarily on internal cues or generation
   c. Tasks with easily organized structures
   d. None of the above

17. Imaging studies indicate that the _______ play(s) an important role in learning sensorimotor skills.
   a. temporal lobes
   b. dorsomedial thalamus
   c. amygdala
   d. motor cortex

18. The basal ganglia are directly involved in
   a. skill learning.
   b. taste aversion learning.
   c. visual object recognition.
   d. fear conditioning.

19. The amygdala is directly involved in
   a. spatial location learning.
   b. fear conditioning.
   c. eye-lid conditioning.
   d. skill learning.

20. When placed in an enriched environment, mice show increases in release of _______ in the hippocampus.
   a. nerve growth factor
   b. CaM kinase
   c. CREB
   d. ampakines
21. In humans, the overall weight of the brain begins to decline around age
a. 18.
b. 30.
c. 45.
d. 65.

22. There has been rapid progress in research on the neural basis of memory due to
a. the combined use of behavioral and somatic interventions in experiments.
b. techniques with increased spatial resolution.
c. techniques with increased temporal resolution.
d. All of the above

23. Adult mice living in enriched conditions produce new neurons in the
a. cortex.
b. amygdala.
c. hypothalamus.
d. hippocampus.

24. The concept of cell assemblies is associated with
a. Charles Sherrington.
b. D. O. Hebb.
c. John Eccles.
d. Mark Rosenzweig.

25. Emotional modulation of memory formation has been shown in research with the
a. amygdala.
b. caudate nucleus.
c. hippocampal formation.
d. septum.