BIO 370 : Brain and Behavior

Midterm Quiz

April 26, 2000
1-12. Match the following with the lettered items on figures 1-4.

1. Key structure involved in encoding episodic memories
2. Regulates procedural memory
3. Region involved in storing semantic memory
4. Region involved in working memory
5. Key structure involved in emotional memory processing
6. The only direct sensory input into the amygdala
7. Stria terminalis connecting the amygdala with the septal nuclei
8. Pathway connecting the amygdala to the autonomic nervous system
9. Gateway to the hippocampus involved early in Alzheimer's disease
10. Main outflow track from the hippocampus
11. Amnesia develops following necrosis in this structure due to thiamine deficiency in alcoholism
12. Memory loss develops with strokes in this area of the "limbic thalamus"
Figure 3
Hypothalamus Sagittal Section
Anterior  Posterior

For Question 28

For Question 29
13. What is not bright on CT?
   a. acute blood  b. bone  c. metal  d. water  e. contrast

14. OCD is categorized as a ______ disorder
   a. mood  b. thought  c. anxiety  d. organic  e. basal ganglia

15. Which brain region is hyperactive on PET scanning in OCD?
   a. amygdala  b. hippocampus  c. mammillary bodies  d. orbitofrontal cortex

16-20. Match the following with dysfunction in the following brain areas
16. Orbitofrontal cortex
   a. executive dysfunction
17. Dorsolateral prefrontal cortex
   b. Parkinsonism, chorea
18. Anterior cingulate area
   c. disinhibition
19. Putamen
   d. apathy
20. Amygdala
   e. easy startle responses

True or False
21. Patients with anorexia nervosa have high leptin levels
22. Factors contributing to the control of meal size include taste and smell
23. Long-term control of feeding behavior depends on the amount of body fat
24. The lateral hypothalamic syndrome includes hyperphagia and obesity
25. Huntington patients can learn new procedural memories but don’t know that they know them

26. The most striking feature of amnesic patients’ memory impairment is
   a. A loss of knowledge about the world
   b. An inability to acquire new skills
   c. An inability to learn new information
   d. An inability to retain information for short periods of time

27. Alzheimer and amnesic patients differ primarily in their
   a. ability to acquire and retain new skills
   b. ability to acquire and retain new verbal information
   c. short-term memory span
   d. knowledge of concepts and facts

28. Write the name of the structure at the arrowhead in the figure

29. The best description of the appearance of the lesion in the left hemisphere in this contrast enhanced CT scan is
   a. Diffusely-enhancing circular mass surrounded by a large area of high density
   b. Well-circumscribed ring-enhancing lesion surrounded by a large area of high signal
   c. Well-circumscribed ring-enhancing lesion surrounded by a large area of low signal
   d. Large lesion with patches of high and low signal mixed throughout
BioMed 370 Quiz Answer Sheet

Name: [redacted]

1. C
2. B
3. D
4. A
5. G
6. F
7. H
8. I
9. K
10. E
11. L
12. J
13. D
14. C
15. D
16. C
17. A
18. D
19. B
20. E
21. F
22. T
23. T
24. F
25. F
26. C
27. D
28. [redacted]
29. C
30. [redacted]
31. [redacted]
32. [redacted]
33. [redacted]
34. [redacted]
35. [redacted]
36. [redacted]
37. [redacted]
38. [redacted]
39. [redacted]
40. [redacted]
41. [redacted]
42. [redacted]
43. [redacted]
44. [redacted]
45. [redacted]
46. [redacted]
47. [redacted]
48. [redacted]
49. [redacted]
50. [redacted]