

STUDY GUIDE FOR EXAM 3 (NO SCHEMATICS OR FIGURES ON THIS TEST)

Terms

Pre-motor cortex supplementary motor cortex frontal eye fields supplementary eye fields prefrontal dorsolateral orbitofrontal temporal memory context cues auto-noetic awareness Broca's area Areas 11, 13, and 46 voluntary gaze corollary discharge reafference agrammatism convergent, divergent thinking Thurstone (Chicago) Word Fluency Test Gotman-Milner Design Fluency Test Wisconsin Card Sorting Test Stroop Test	Associative learning infantile amnesia fugue state transient global amnesia Anterograde, retrograde amnesia consolidation theory multiple trace theory reconsolidation theory implicit, explicit memory emotional memory priming depth-of-processing effect study-test modality shift parahippocampal gyrus autobiographic memory "time travel" uncinate fasciculus semantic memory entorhinal cortex perirhinal cortex	parahippocampal cortex perforant pathway fimbria-fornix dentate gyrus Ammon's horn Hebb Recurring-Digits Test Alzheimer's Disease Korsakoff's Syndrome confabulation basal ganglia substantia nigra fear conditioning amygdala PAG synesthesia Kluver-Bucy Syndrome Papez's circuit Somatic Marker Hypothesis aprosodia temporal lobe personality
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Possible Essay Questions

Characterize the differences between left and right temporal lobe damage with respect to amnesic symptoms. Be complete in elaborating these differences.

Numerous structures have been suggested as involved in explicit memory. Describe all of these structures and their connections and comment on the role of each in components of explicit memory. What are the major losses seen in deficits to implicit memory? What structures and connections have been suggested for implicit memory?

What evidence exists to support the idea that short-term memory and long-term memory are separate systems?

Alzheimer's disease has a devastating effect on memory. Describe the course of the disease in terms of different memory losses and relate the losses to the appropriate affected brain sites and neurotransmitters.

You have two clients who going to undergo full hemispherectomies (lucky you!). One will have the left hemisphere removed and the other will have a similar operation for the right hemisphere. As the resident expert in this area, what will you tell each family about what symptoms they can expect to see in their family member post-operatively in terms of memory and emotion?

You have another client with brain damage (You ARE on a roll!), this time from a stroke involving the frontal lobes. You are asked to evaluate the person's emotional status. What procedures will you use?

Is emotion asymmetrically controlled? What evidence supports your statement? (be detailed)

Describe the Wisconsin Card-Sorting Test and the Stroop test. What aspect of cognition appears to be responsible for performance on these tasks?

Name four cognitive skills impaired by dorsolateral frontal cortex damage.

Identify five (or more) characteristics of the temporal lobe personality.

Present evidence that the right hemisphere is differently involved in emotional processes than is the left in humans.