

Ollscoil na hÉireann, Gaillimh

NATIONAL UNIVERSITY OF IRELAND, GALWAY

**Second Arts, Third Arts and Visiting Students
Second Semester Examination, 1999 - 2000**

Psychology, Paper 2

PS310 Physiological Psychology II (Unit value 3.0)

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Professor Jack E. James
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Time allowed: Three hours

Please answer **three** questions.

1. Write an account of the functions of the cerebrum in humans. Support your answer with findings from research on hemispheric specialisation.
2. Consider evidence for the notion that long-term potentiation is the kind of synaptic plasticity that underlies certain forms of learning and memory.
3. 'Even though the Wernicke-Geschwind model of language continues to be useful clinically, recent neuropsychological and imaging studies indicate that the model may be oversimplified in several important ways'. Discuss.
4. Compare and contrast the neural and biochemical mechanisms underlying sensitisation and classical conditioning of the gill-withdrawal reflex response in *Aplysia californica*.
5. 'Although widespread brain areas co-operate in learning and memory, the individual structures form systems that support and enable rather specific memory processes' (Gazzaniga, 1998). Discuss.