

Ollscoil na hÉireann, Gaillimh

NATIONAL UNIVERSITY OF IRELAND, GALWAY

Second Arts Psychology, Second Arts Psychological Studies
and Visiting Students,
Semester 2 Examination, 2004-2005

PS403 Biological Psychology (5.0 ECTS)

Professor Ray Fuller
Dr. Brian Hughes
Ms. Anne Marie Keane

Time Allowed: 2 hours

*Candidates are asked to answer **one** question from Section A. Candidates are also required to answer **all** the multiple-choice questions in Section B, using the separate booklet provided for this section.*

Section A

*Candidates are asked to answer **one** question from Section A.*

1. Sleep is not a passive winding down process in response to tiredness, but a series of different arousal states that are actively produced by the brain. Amplify with reference to specific research studies.
2. Consider current evidence for the neurobiological and endocrinological bases of circadian rhythms with reference to the sleep-wake cycle.
3. Although research indicates an important genetic influence in the development of schizophrenia, we still do not know how many genes are involved, how they exert their influence or how they interact with environmental factors. Discuss.
4. While the dopamine hypothesis of schizophrenia has been central to treatment and research, problems with this hypothesis have led researchers to recently suggest some alternative explanations. Consider this statement with reference to specific research studies.

5. 'It is probably best to regard the evidence from individuals who have had split-brain surgery as just one strand of a comprehensive research quest to establish the true nature of the different psychological specialisms of the cerebral hemispheres' (Stirling, 2002). Discuss.