

UNIVERSITY OF LONDON
NEUROSCIENCE MSc EXAMINATION

**For Internal Students of the
INSTITUTE OF PSYCHIATRY
King's College London**

8th March 2010 10:00 am - 12:30 pm

Further Neuroscience

PAPER B1

Answer FOUR questions only

1. Discuss how functional neuroimaging (i.e. fMRI and EEG) can be used to study consciousness. Make specific reference to studies of domain specific modules.
2. Do psychotherapies have biological effects? Discuss with examples supported by published findings.
3. How is autism diagnosed? Discuss some of the evidence implicating autism as a disorder of neuronal development.
4. How has the study of the rare autosomal dominant early onset form of Alzheimer's disease contributed to our understanding of disease mechanisms in the much more common late-onset form of the disorder?
5. What evidence is there to suggest that epigenetic factors may be involved in the aetiology of psychiatric disorders?
6. Discuss the role of the neurotransmitter dopamine in the establishment and maintenance of drug addiction.
7. What can PET tell us about brain disorders? Give examples with reference to published findings.
8. Discuss, using examples, how immunosuppression or immunodeficiency can cause the reactivation of latent viral and parasitic disease within the CNS.