THE OPEN UNIVERSITY OF SRI LANKA
FACULTY OF HEALTH SCIENCES
DEPARTMENT OF PSYCHOLOGY & COUNSELLING
2024/2025 – SEMESTER I —FINAL EXAMINATION

BSC (HONS) IN PSYCHOLOGY
PLU 5310 - NEUROPSYCHOLOGY - LEVEL 5
FINAL EXAMINATION PAPER
DURATION: 03 HOURS

DATE: 15th May 2025 TIME: 1.30 p.m. – 4.30 p.m.

SECTION 2: STRUCTURED ESSAY QUESTIONS (60 MARKS)

Choose 04 out of the 06 questions given below and answer using the provided answer sheets

2.1 The study of the brain and its connection to behavior, perception, and consciousness has long been a central focus in neuroscience and psychology.

a) **How does the brain's structure and chemistry contribute to our experience of consciousness? Explain.** **(5 marks)**

b) **Analyze the phenomenon of blindsight and discuss its implications for our understanding of visual processing, visual awareness, and consciousness.** **(5 marks)**

c) **Discuss the rubber hand phenomenon and its implications for understanding self-perception and body ownership.** **(5 marks)**

2.2 Nuwan, a 55-year-old man, has been living with a stroke for two years. He experiences partial paralysis on the right side of his body and has difficulty with fine motor tasks, such as buttoning his shirt or writing.

a) **Discuss the relationship between the brain's motor cortex and the paralysis that Nuwan is experiencing, particularly in terms of his right-sided weakness. (7 marks)**

b) **How might the brain's neuroplasticity help or hinder Nuwan's recovery and rehabilitation process after a stroke, given his difficulty with motor tasks? Explain** **(8 marks)**

2.3 The early development of Neuropsychology was shaped by key thinkers who proposed competing theories about how the brain influences behavior.

a) **Explain Franz Gall's theory of localization and how it contributed to early neuropsychological thought.** **(5 marks)**

b) **Name two scientists (other than Franz Gall) who contributed to the development of neuropsychology. Discuss their major contributions and the strengths and criticisms of their approaches.** **(10 marks)**

2.4 The study of the physiology of behaviour involves contributions from multiple scientific disciplines. Understanding how various factors influence human behaviour requires methods from neuroanatomy, psychology, physiology, and other fields

a) **Examine the behavioural effects of brain damage, specifically focusing on disinhibition and impulsivity.** **(7 marks)**

b) **What are the challenges of interpreting results from experimental ablation and lesion studies? Explain** **(8 marks)**

2.5 Attention Deficit Hyperactivity Disorder (ADHD) is a common neurodevelopmental disorder that affects both children and adults.

a) **Explain the diagnostic criteria for Attention Deficit Hyperactivity Disorder (ADHD) as outlined in the DSM-5.** **(7 marks)**

b) **Discuss three (3) treatment strategies for ADHD, that contribute to managing the symptoms of ADHD.** **(8 marks)**

2.6 **Females in their 40s experience a noticeable decline in sexual desire, despite having normal levels of sex hormones and maintaining regular sexual fantasies. Upon further evaluation, it is found that their relevant hormone levels are lower than what is typical for their age. Explain how hormones and their function impact sexual behaviour in females, and how imbalances or disruptions in these hormones can lead to sexual dysfunction.** **(15 marks)**

----------END OF QUESTION PAPER----------