## THE OPEN UNIVERSITY OF SRI LANKA FACULTY OF HEALTH SCIENCES DEPARTMENT OF PSYCHOLOGY & COUNSELLING 2022/2023 – SEMESTER I—FINAL EXAMINATION



BSC (HONS) IN PSYCHOLOGY

PLU5310: NEUROPSYCHOLOGY - LEVEL 5

FINAL EXAMINATION PAPER

**DURATION: 03 HOURS** 

DATE: 15.03.2023

TIME: 9.30 a.m.- 12.30 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 Neural plasticity or neuroplasticity or brain plasticity is one of the most researched areas in Neuropsychology.
  - a) Define the Neuroplasticity and briefly explain the different scales that can be observed the Neuroplasticity. (5 marks)
  - b) Identify 05 benefits of neuroplasticity. (5 marks)
  - c) Describe with examples, 05 habits that facilitate the neuroplasticity. (5 marks)
- 2.2 Neuropsychologists have emphasized that sleep is an active process rather than a passive process where nothing happens, as it helps the consolidation of learning, memories and forgetting.
  - a) Describe the sleep cycle. (7 marks)
  - b) Elaborate the physiological and biochemical processes in sleep and the effects of sleep deprivation. (8 marks)
- 2.3 Neuropsychologists measure human brain and its function in order to understand human behaviour and thinking patterns.
  - Define Traumatic Brain Injury (TBI) and list the three types of TBI (05 marks).
  - b) Explain two invasive methods apply in examining brain structures and functions with examples. (05 marks)
  - c) Elaborate two ethical issues in neuropsychological research using examples (05 marks).

- 2.4 Worldwide prevalence of neurocognitive disorders is rising due to an increase in longevity. Early detection and diagnosis are important for early interventions and appropriate management of Neurodegenerative disorders (Pais et al., 2020).
  - a) Define what are Neurodegenerative disorders and give three examples. (5 marks)
  - b) Discuss the causes, symptoms, and potential treatments for the brain degeneration caused by Alzheimer's disease (10 marks)
- 2.5 Attention Deficit Hyperactivity Disorder (ADHD) is one of the commonest neurodevelopmental disorders among children.
  - a) What are the symptoms of ADHD according to DSM V- TR? (5 marks)
  - b) Explain the causes of ADHD and how it affects the brain. (10 marks)
- 2.6 Write an essay evaluating the neural control of sexual behaviour among men and women. (15 marks)

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