

THE OPEN UNIVERSITY OF SRI LANKA
FACULTY OF HEALTH SCIENCES
DEPARTMENT OF PSYCHOLOGY & COUNSELLING
ACADEMIC YEAR 2022/2023– SEMESTER I



BSC HONS IN PSYCHOLOGY
PLU4304 – BRAIN & BEHAVIOUR - LEVEL 4
CONTINUOUS ASSESSMENT TEST – NBT I
DURATION: 01 ½ HOURS

DATE: 15th December 2022

TIME: 02.00pm – 3.30pm

INDEX NO:

IMPORTANT INSTRUCTIONS/ INFORMATION TO CANDIDATES

- This question paper consists of **08 pages** with **TWO sections**

Section 1: 20 Multiple Choice Questions - (40 Marks)

Section 2: 12 Short Answer Questions - (60 Marks)

- Write your INDEX NO in the space provided.
- **Multiple Choice Questions (Section 1):** Indicate answers in the **ANSWER SHEET** provided by placing a cross (X) in **INK** in the relevant cage (answers in pencil will **NOT** be marked)
- **Short Answer Questions (Section 2):** Write the answer within the space provided.
- Do **NOT** remove any page/part of this question paper from the examination hall.
- Do **NOT** keep unauthorized materials, including mobile phones and other electronic equipment, with you during the examination

SECTION 1: Multiple Choice Questions (20 Questions – 40 Marks)

- 1.1. Which one of these doesn't act as a neurotransmitter?
- a) Epinephrine
 - b) Aldosterone
 - c) Acetylcholine
 - d) Noradrenaline
- 1.2. Which one of these brain functions is represented by the homunculus functional model?
- a) Emotions
 - b) Vision
 - c) Balance
 - d) Movement
- 1.3. Which philosopher believed that the psyche is responsible for life and its departure from the body brings about death and the brain merely served a cooling function?
- a) Herophilus
 - b) Plato
 - c) Aristotle
 - d) Descartes
- 1.4. What is the grey matter in the brain and the spinal cord consist of?
- a) Neuron axons
 - b) Neuron dendrites
 - c) Neuron synapses
 - d) Neuron somas
- 1.5. Which one of these is a brain recording method?
- a) EEG
 - b) CAT
 - c) MRI
 - d) PET
- 1.6. Which one of these methods is used to investigate the cellular structures of the nervous system?
- a) Autopsy
 - b) Histology
 - c) Brain imaging
 - d) Lesion studies
- 1.7. Which one of these instruments can detect the function of the brain?
- a) SEM
 - b) CAT
 - c) MRI
 - d) PET

1.8. Which one of these can stimulate the brain?

- a) EEG
- b) TMS
- c) MRI
- d) PET

1.9. Who introduced method of introspection?

- a) Wilhelm Wundt
- b) Edward Titchener
- c) William James
- d) Albert Bandura

1.10. In which part of the neuron should neurotransmitters be present to carry out its function?

- a) Axon
- b) Axon Hillock
- c) Presynaptic terminal
- d) Nodes of Ranvier

1.11. Atropine blocks the action of, which one of these neurotransmitters?

- a) Acetylcholine
- b) Serotonin
- c) Dopamine
- d) GABA

1.12. Which neurotransmitter is responsible for pleasure?

- a) Norepinephrine
- b) Dopamine
- c) Serotonin
- d) GABA

1.13. Which neurotransmitter is part of the fight or flight response?

- a) Norepinephrine
- b) Dopamine
- c) Serotonin
- d) GABA

1.14. Which hormone is responsible for maintaining the circadian rhythms?

- a) Adrenaline
- b) Cortisol
- c) Ghrelin
- d) Melatonin

1.15. Which hormone controls arousal in humans?

- a) Growth hormone
- b) Oxytocin
- c) Noradrenaline
- d) Melatonin

1.16. Which of these is not a hormone belonging to the adenohypophysis?

- a) FSH
- b) TSH
- c) ADH
- d) GH

1.17. Which of these is not a sex hormone?

- a) Thyroxine
- b) Progesterone
- c) Testosterone
- d) Estrogen

1.18. Which hormone is considered the social hormone?

- a) Adrenaline
- b) Thyroxin
- c) Oxytocin
- d) Progesterone

1.19. Which medication is used as a mood stabilizer?

- a) Diazepam
- b) Risperidone
- c) Venlafaxine
- d) Lithium

1.20. Antipsychotics are commonly used in which one of the following disorder?

- a) Depression
- b) Schizophrenia
- c) OCD
- d) Stress

INDEX NO:

ANSWER SHEET FOR SECTION-1

Q. No.	(a)	(b)	(c)	(d)
1.1				
1.2				
1.3				
1.4				
1.5				
1.6				
1.7				
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1.9				
1.10				
1.11				
1.12				
1.13				
1.14				
1.15				
1.16				
1.17				
1.18				
1.19				
1.20				

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SECTION 2: SHORT ANSWER QUESTIONS (60 MARKS)

2.1 Draw and label the synapse.

2.2 Name the key neurotransmitter responsible for each of these functions?

Appetite –

Learning –

Fight or Flight –

2.3 Name a typical and atypical antipsychotic?

Typical:

Atypical:

2.4 What are the two types of pain medication/analgesic drugs and name two metals that can act as Neurotoxins?

Two types of Analgesics	Two neurotoxic metals

2.5 What are the four types of brain imaging methods?

2.6 What are the two main types of behavior?

2.7 Name two acetylcholine receptor and agonist and antagonist for each receptor?

Receptor	Agonist	Antagonist
1.		
2.		

2.8 Name two areas that belong to the main three divisions of the brain.

Forebrain _____

Midbrain _____

Hindbrain _____

2.9 What is histology?

2.10 What are the four methods of synaptic regulation?

2.11 Which brain imaging methods use radiation?

2.12 Name three functions of oxytocin.

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