

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



BSC HONS IN PSYCHOLOGY
PLU3311 – COGNITIVE PSYCHOLOGY - LEVEL 3
CONTINUOUS ASSESSMENT TEST – NBT I
DURATION: 1 ½ HOURS



DATE: 07.06.2023

TIME: 9.00-10.30am

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 approach to studying human cognition focuses on psychological experiments to investigate processes such as perception, memory, attention, and learning?
- a Cognitive Neuroscience
 - b Experimental Cognitive Psychology
 - c Cognitive Neuropsychology
 - d Computational Cognitive Psychology
- 1.2 The nervous system consists of two subsystems. What are those subsystems?
- a Central and peripheral
 - b Brain and spinal cord
 - c Voluntary and automatic
 - d Observable behaviours and body sensations
- 1.3 Aristotle believed that the real center of intelligence was
Which of the following can be identified as the correct answer?
- a Brain
 - b Heart
 - c Nervous system
 - d Liver
- 1.4 Which field investigates brain functions by analysing the brain activity of brain-damaged patients?
- a Cognitive Neuroscience
 - b Experimental Cognitive Psychology
 - c Cognitive Neuropsychology
 - d Computational Cognitive Psychology
- 1.5 Which area of the brain is responsible for controlling functions like attention and awareness?
- a Midbrain
 - b Hindbrain
 - c Forebrain
 - d Cerebral cortex

- 1.6 Which method of research in cognitive psychology involves manipulating variables in a controlled setting?
- a Quasi experimental method
 - b Natural observation
 - c Experimental method
 - d Correlational research
- 1.7 Which structure within the limbic system is involved in emotional management and emotional learning?
- a Cerebellum
 - b Amygdala
 - c Hypothalamus
 - d Medulla
- 1.8 Which approach in cognitive psychology attempts to duplicate mental processes through computer simulations?
- a Cognitive Neuroscience
 - b Experimental Cognitive Psychology
 - c Cognitive Neuropsychology
 - d Computational Cognitive Science
- 1.9 What is the region of a neuron that generates new messages known as action potentials?
- a Dendrites
 - b Axon hillock
 - c Terminal bulbs
 - d Myelin sheaths
- 1.10 Which type of long-term memory can be consciously described or reported?
- a Episodic memory
 - b Semantic memory
 - c Procedural memory
 - d Priming memory
- 1.11 the process by which we form meaningful understandings from the stimuli that is detected by our sensory organs. Choose the correct answer.
- a Intelligence
 - b Memory
 - c Perception
 - d Language

- 1.12 Which method of research in cognitive psychology is conducted in real-world settings?
- a Natural observation
 - b Experimental method
 - c Quasi experimental method
 - d Correlational research
- 1.13 Which mechanisms do neurons use to conduct information?
- a Electrical impulses and chemical transmission
 - b Hormones and neurotransmitters
 - c Synaptic transmission and action potentials
 - d Dendritic signals and axonal transmission
- 1.14 Which class of chemicals uses the circulatory system to send messages throughout the body?
- a Neurotransmitters
 - b Hormones
 - c Acetylcholine
 - d Dopamine
- 1.15 Which neurotransmitter is commonly associated with reward pathways and mood management?
- a Acetylcholine
 - b Dopamine
 - c Serotonin
 - d Glutamate
- 1.16 According to the multistore model of memory, what are the three separate stores of memory?
- a Sensory memory, long-term memory, working memory
 - b Sensory memory, short-term memory, long-term memory
 - c Short-term memory, working memory, episodic memory
 - d Working memory, semantic memory, procedural memory
- 1.17 What is the function of the episodic buffer in Baddeley and Hitch's working memory model?
- a Temporary verbal storage
 - b Short-term store for visual and spatial information
 - c Integration of phonological loop, visuospatial sketchpad and the long-term memory
 - d Regulation of data distribution within working memory

- 1.18 The capacity of short-term memory is limited to approximately
Which of the following is the correct answer?
- a 5-7 items
 - b 10-12 items
 - c 15-20 items
 - d 20-30 items
- 1.19 Proactive interference occurs when
Which of the following is the correct answer?
- a Previously learned information interferes with the recall of new information
 - b New information interferes with the recall of previously learned information
 - c Information is rehearsed in short-term memory
 - d Information is transferred to long-term memory
- 1.20 Chunking refers to the process of
Which of the following is the correct answer?
- a Breaking information into smaller units
 - b Combining small units of information into larger meaningful units
 - c Forgetting information over time
 - d Rehearsing information in short-term memory

INDEX NO:

ANSWER SHEET FOR SECTION-1

Q. No.	(a)	(b)	(c)	(d)
1.1				
1.2				
1.3				
1.4				
1.5				
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1.8				
1.9				
1.10				
1.11				
1.12				
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1.14				
1.15				
1.16				
1.17				
1.18				
1.19				
1.20				

INDEX NO:

SECTION 2: SHORT ANSWER QUESTIONS (60 MARKS)

All Questions are compulsory.

2.1 What is the purpose of correlational research in Cognitive Psychology? (5 marks)

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2.2 What is memory? (5 marks)

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2.3 What is the primary function of dendrites in a neuron? (5 marks)

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2.4 What is the difference between the experimental method and the natural observation method? (5 marks)

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2.5 Describe the functions of the frontal cortex. (5 marks)

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2.6 Explain the role of the hypothalamus in the limbic system. (5 marks)

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- 2.7 What is the main purpose of a synapse? (5 marks)
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- 2.8 Name two important neurotransmitters in cognitive functioning and describe their roles shortly. (5 marks)
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- 2.9 What is the function of sensory memory? (5 marks)
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- 2.10 What are the four components of Baddeley and Hitch's working memory model? (5 marks)
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- 2.11 What is the different between short-term memory and long-term memory in terms of capacity and duration? (5 marks)
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- 2.12 What is top-down processing? (5 marks)
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