

**MODEL CORRECTION OF FIRST SEMESTER EXAM (2021/2022)****Level:** Master II**Module:** Cognitive Psychology**Teacher:** Ouahid ATIK ZID**Date:** Thursday, January 20th, 2022**Time:** 11.30 – 12.30**Duration:** 1h**Submitted to Administration:** Monday, January 26<sup>th</sup>, 2022**Signature:****1) Are the following statements true (T) or false (F)? (5 marks)**

- a- Cognitive psychology concerns itself with the study of damaged human brains.
- b- Cognitive psychologists believe that mental processes can and should be studied scientifically.
- c- Attention decreases the clearness of the stimulus.
- d- Alternating attention is referred to as multi-tasking.
- e- Perception is a sub-conscious process.
- f- Sensation precedes (comes before) perception.
- g- The Multi-Store Model is an approach to human behaviour.
- h- The iconic memory is part of the short-term memory.
- i- All encoded information can be retrieved successfully.
- j- Elaborative rehearsal helps us retain information in STM.

a	b	c	d	e	f	g	h	i	j
F	T	F	F	F	T	F	F	F	F

**2) Read the following definitions carefully, then write the terms defined. (5 marks)**

<b>1- mnemonics</b>	<b>a-</b> memory devices for better storage and retrieval of information.
<b>2- cognitive neuropsychology</b>	<b>b-</b> an approach to investigate brain-damaged patients as a way to understand normal human cognition.
<b>3- transduction</b>	<b>c-</b> to convert the physical energy of a stimulus into an electrical energy which the brain can understand.
<b>4- sustained attention</b>	<b>d-</b> the ability to focus on one specific task for a continuous amount of time without being distracted.
<b>5- top-down processing</b>	<b>e-</b> the process of using stored knowledge to guide the interpretation of sensory stimulus.

**3) Provide brief, clear answers to the following questions. (10 marks)**

**a- What is the relationship between orienting reflexes and attention?**

The orienting reflex (response) is an organism's (like the human body) immediate response to a change or novel stimulus which makes the organism more sensitive to the stimulation. This feature is present at birth in the form of innate reflexes such as crying or sucking. Our orienting reflexes help us determine which events in our environment need to get our attention. The more the stimulus is novel and interesting, the more the intensity of the orienting reflex is affected resulting in much focus of attention. These orienting reflexes continue to benefit us throughout life as they help us determine which stimuli we should attend to in order to respond more effectively to our environment.

**b- Top-down processing is called schema-driven processing. Why?**

Top-down processing is called schema-driven processing because the perceiver depends on his previous knowledge (schemas) and prior expectations to make sense of (interpret) the stimuli received via sensory, that is, cognition directs perception. Within this high-level type of processing, the flow of information progresses from the top as it starts with the existing knowledge stored in the brain, then is sent down the nervous system for comparison with the incoming stimulus.

**c- Why is the short-term memory referred to as the conscious memory?**

The short-term memory is referred to as the conscious memory because it relates to the memories which are being held in our conscious awareness and are currently receiving our attention, that is, the memories we are thinking about at any given moment in time. It is created by our paying attention to an external stimulus, an internal thought, or both.

**d- Teachers use many strategies to help learners retain information in LTM. Explain one of them.**

Teachers can use many strategies to help learners retain information in LTM such as instructional strategies, positive transfer, and dual code theory (only one strategy is to be mentioned and explained). In dual code strategy, for instance, teachers can help their learners get engaged in two processes such as visual learning and verbal learning. This theory is built on the premise that coding a stimulus in two different ways—visual (imagery) and verbal (associations)—enables learners form mental representations and increases the chances of remembering.

**e- What is meant by acoustic encoding and which memory is involved with it? Give an example.**

Acoustic encoding is the processing and encoding of sounds, words and other auditory input for storage and later retrieval. This happens by means of the phonological loop which allows the input received from echoic memory to be sub-vocally rehearsed in the short-term memory in order to facilitate remembering. Putting a sound (melody) to words is an example of acoustic encoding.