



UNIVERSITY OF JOHANNESBURG

JUNE 2021 EXAMINATION

COURSE: BA/BSC PSYCHOLOGY **TIME:** 120 MINS

QUESTION PAPER: Neuropsychology (Hons) **MARKS:** 200

SUBJECT CODE: PSY8X06

EXAMINERS:

1. Dr. P.J. Basson
2. Dr. G. Kruger
3. Dr. N. Joosub
4. Ms T. Maseti (Internal Moderator)

EXTERNAL EXAMINER:

1. Prof Y Ally
Nelson Mandela University

(THIS PAPER CONSISTS OF 3 PAGES)

1. PLEASE ANSWER **TWO** OF THE THREE QUESTIONS – EACH IN A SEPARATE ANSWER SCRIPT.

NAME + SURNAME:	
STUDENT NUMBER:	
VENUE:	
YOUR TEL NO:	

QUESTION 1

“When he was 40 years old, H.H., a successful corporate lawyer with a wife and two school-age children, was finding his job increasingly stressful. His wife was taken off guard when he suddenly announced that he was quitting his law firm. He complained of being so stressed that he simply could not remember the cases on which he was and felt that he could not continue as a lawyer. He had no plan about how he would support his family but, curiously, he seemed unconcerned about it. A couple of weeks later H.H. shaved his hair off, donned a flowing robe and left his family to join a fringe religious group. His wife of 15 years was stunned by his sudden change in behaviour: up to this point H.H. had been an atheist. H.H.’s wife was notified two weeks later that he had collapsed with a seizure while handing out flowers and peace pamphlets in a large US airport. He was taken to a hospital in a confused state, and a neurological examination revealed a left-temporal-lobe tumour. Fortunately the tumour was operable and was removed. H.H. was aphasic after his surgery, but this condition cleared in a matter of weeks. He was left with enduring word-finding difficulties, problematic only when he was tired. He continued to complain of verbal memory problems, however. H.H.’s wife said that his personality remained different from what it had been, largely because he remained religious. Eventually H.H. successfully returned to his law firm, although with a reduced caseload compared with that of his pre-tumour days” (Kolb & Whishaw, 2015, p. 400).

Provide a detailed discussion of the temporal lobes. In your answer mention the localization and basic anatomy of the temporal lobes. Give a functional exposition and discuss the effects of brain damage to these areas. Refer to the case of H.H., give a philosophical perspective to your answer and refer to other case studies and to measuring instruments.

[100]

OR

QUESTION 2

Briefly discuss the three theories that represent the dominant lines of thinking in cognitive neuroscience regarding emotion. Using your discussion on these theories as a background, critically discuss the concepts of cognitive asymmetry in emotional processing and social cognition and where applicable supply relevant examples to support your answer.

[100]

OR

QUESTION 3

A 70 year old man is brought to the clinic by his son, who explains that his father has been getting gradually and progressively more forgetful over the past few years. The patient has also forgotten recent important events, such as the passing of his beloved dog. Recently, he has experienced episodes of getting lost while walking home from the grocery store, which is a few blocks away from his home. The patient explains that he can still remember the “good old times”, and still enjoys going to the community rec center to play backgammon with his friends. His son notes that he now manages his father’s finances, and is also in charge of coordinating his health care. The patient is only able to recall 2 out of 5 objects on the short term memory recall test. His past medical history is unremarkable: he has no history of head trauma, does not take any medications, and denies using alcohol or illicit drugs.

1. From your understanding of intellectual decline identify the patients likely diagnosis and from the brief history above motivate/substantiate your answer including providing the areas of brain functioning effected. (20)
2. Describe to your patient’s son the following:
 - a. The possible known or researched causes of the disorder. (10)
 - b. The pathological changes one can expect to see in the brain. (20)
 - c. The progressive neurobehavioural and psychosocial deficits anticipated. (30)
 - d. Implications regarding the course and management of the disease. (20)

[100]

TOTAL [200]

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