## BOWEN UNIVERSITY, IWO SECOND SEMESTER EXAMINATION SESSION: 2020/2021

**ENG 407: LANGUAGE AND THE BRAIN** 

Time allowed: 2 hours

Instruction: Answer three questions in all: two questions from section A and all the questions in Section B.

## SECTION A

Answer two questions from this section. Question 1 is compulsory.

1. The consultant neurologist and Head of Neurology Department of the Bowen University Teaching Hospital where you work as a full time neurolinguist has just passed the case note of a patient to you for attention. Your major information on the patient is the conversation below. How would you undertake the assignment? In other words, how would you treat the patient?

E = experimenter

P = patient

E: How are you today, Mrs. Asokket?

P: Yes

E: Have I ever tested you before?

P: No. I mean I haven't.

E: Can you tell me what your name is?

P: No, I don't I...right I'm right now here.

E: What is your address?

P: I could if I can help these this like you know... to make it. We are seeing for him. That is my father.

(30 marks)

- 2. Citing clear and copious examples, discuss the key features of any four of the following:
  - a. Broca's aphasia
  - b. Wernicke's aphasia
  - c. Language lateralisation
  - d. Intelligence quotient
  - e. Word salad

(20 marks)

- 3. What is the place of hemispherectomy and plasticity in language recovery and performance? (20 marks)
- 4. To what extent could the knowledge of brain modularity help to predict academic abilities and human actions? (20 marks)

## SECTION B

Instruction: Answer all the questions in this section.

- 1. There are ........... in the brain. a. 10 billion nerve cells b. 10 billion neuron nerves c. 10 billion cell nerves d. 10 billion hemispheres.
- 2. Language representation and processing reside in the ..... a. cortex b. hemisphere c. brain d. neuron.
- 3. The contralateral brain function refers to the .......... of the hemispheres a. supervisory roles b. swap-fashion roles c. interdependent roles d. creative roles
- 4. The corpus callosum ..... a. establishes the two hemispheres b. allows communication between the hemispheres c. clears the passage between the two hemispheres d. makes peace between the two hemispheres.
- 5. Mr Daniel Koko's chronological age is 45; his mental age is 25. What is his IQ? a 56 b. 54 c 55 d. 57
- 6. Dr Kemi Jooson's IQ is 100; his chronological age is 50. What is her mental age? a. 45 b. 52 c. 50 d. 75
- 7. The right hemisphere helps in all but one of the following: a. pattern-matching tasks b. recognising faces c. spatial orientation d. rhythmic perception e. facial recognition.
- 8. In split-brain patients, object placed in the left hand can be ..... a used but not named b. named but not used. c held but not used d. named and used.
- 9. ..... is delayed in children with right-hemisphere brain lesions. a. Babbling b. Speech c. Tongue-twisting d. Utterance.
- 10. Adult hemispherectomy patients, with the left cerebral hemisphere removed, ... a. cannot speak at all b. can speak to a large extent c. cannot use phrases d. can speak to some extent.
- 11. Adult hemispherectomy patients, with the right cerebral hemisphere removed, ..... a. do not understand stories b. do not understand jokes and metaphors c. have difficulty in understanding stories d. have difficulty in understanding jokes and metaphors.
- 12. ...... helps the brain to reassign functions to different areas. a. functionality b. plasticity c. hemispherectomy d. perceptibility.
- 13. ...... hemispherectomy patients are able to reacquire a linguistic system, albeit delayed. a. Adult b. Youth c. Child d. Male.
- 14. Plasticity of the brain ....... with age. a. increases b. decreases c. is brought down d. raises.
- 15. ...... is a complex structure where words are organised in terms of their phonology, syntax, semantics as well as other non-linguistic aspects a. Lexicon b. Mental lexicon c. Linguistic structure d. The brain.
- 16. The term "mental lexicon" was introduced by ..... a. R.C Oldfield b. P.C. Shirley c. R.C. Ofield d. Noam Chomsky.
- 17. ..... are recorded in both the mental lexicon and a physical dictionary. a. Connotations b. Denotations c. Lexicon d. Synonymy.
- 18. ...... is diagnosed when a child's language does not develop normally. a. Specific language impairment b. Language disorder c. Language disability d. Brain lesion.
- 19. ...... is an area of injury or disease within the brain a. A brain injury b. A brain lesion c. A brain disorder d. Hemispherectomy.
- 20. The Broca's area controls .......... a. pragmatics b. syntax c. semantics d. morphology. (20 marks)

(9th 7/21