



PAN AFRICA CHRISTIAN UNIVERSITY

SCHOOL OF HUMANITIES AND SOCIAL SCIENCES

**END OF SEMESTER EXAMINATION FOR THE DEGREE OF
BACHELOR OF ARTS IN COUNSELLING PSYCHOLOGY**

JANUARY-APRIL 2019 SEMESTER

CAMPUS: ROYSAMBU

DEPARTMENT: PSYCHOLOGY

COURSE CODE: COU3423

COURSE TITLE: BRAIN AND BEHAVIOUR

EXAM DATE: THURSDAY 11TH APRIL 2019

TIME: 9.00AM-12.00PM

INSTRUCTIONS

- Read the instructions and questions carefully before you write the answers.
- Write your **STUDENT NUMBER** in the Answer Booklet given
- This paper consists of **five questions**.
- Answer Question **ONE** and any other **THREE** questions
- *Write clearly and legibly.*
- *ALL PAC University's examination rules and regulations apply*

QUESTION ONE: COMPULSORY

- a) Describe any two autonomic reactions that occur during the period of sexual arousal and preparation (4 Marks)
- b) Name two parts of the brain engaged with drug addiction (2 Marks)
- c) Name the three parts the brain is divided into 3 parts name them (3 marks)
- d) Differentiate between the refractory period of a neuron and the refractory period in the sexual cycle (6 marks)
- e) Name any two disorders that result from the cortical damage (4 marks)
- f) Name the four parts of the cerebral hemisphere (4 marks)
- g) Identify the part of the nervous system that takes over and calms the body after a crisis occurs (2 mark)
- h) Identify the part of the brain which is activated during the emotion of anger and rage (2 mark)
- i) State any one emotional problem that may arise from having damage in the hemisphere (2 Marks)
- j) Identify the parts of the brain which are active when rats copulate and its stimulation causes the release of dopamine in the MPOA (4 Marks)
- k) Distinguish between the hormones androgen and estrogen (2 Marks)
- l) Explain how polarization of a cell occurs (4 Marks)
- m) Discuss the behavior of an individual with damage on the temporal lobe (5 Marks)

QUESTION TWO

- a). Describe the relationship between dopamine and the reward system of the brains on the neural basis of addiction (5 Marks)
- b) Describe any 4 functions of the temporal lobe (4 Marks)
- c) Distinguish between the female and male stress response (6 Marks)

QUESTION THREE

- a) Describe the process of neuron communication (5 Marks)
- b) You are a member of a church that associates all forms of depression with demonic attack. You have been requested to give a talk during a church counselors' retreat on the subject of psychological disorders. Discuss the two theories of depression (10 Marks)

QUESTION FOUR

- a) Using a diagram clearly illustrate the nervous system and its functions (11 Marks)
- b) Repeated and prolonged stress with too much of phase 3 time leads to various signs of physical deterioration and premature aging of the brain. Describe these effects on the brain (4 marks)

QUESTION FIVE

Using relevant examples. Describe the following brain parts; clearly stating their functions (Each carries 5 Marks)

- a. The Cerebellum
- b. Limbic system
- c. Thalamus