



PAN AFRICA CHRISTIAN UNIVERSITY
END OF SEMESTER EXAMINATION FOR THE DEGREE OF
BACHELOR OF ARTS IN COUNSELING

JANUARY-APRIL 2017

CAMPUS: ROYSAMBU

DEPARTMENT: PSYCHOLOGY

COURSE CODE: COU2221

COURSE TITLE: Brain & Behaviour

EXAM DATE: FRIDAY 7th APRIL 2017

TIME: 5.30PM – 8.30PM

INSTRUCTIONS

- Read all questions carefully before attempting.
- Write your **student number** on the answer booklet provided.
- Answer **question ONE** and **ANY TWO** from **Section B**

SECTION A: ATTEMPT ALL QUESTIONS

- 1.a. Briefly explain how depressants and stimulants act on the nervous system (4 Marks)
- b. List four brain disorders that arise from damage in the cortical (4 Marks)
- c. Name the part of brain that connects the two hemispheres (1 mark)
- d. Identify the 4 parts of the brain hemisphere (4 Marks)
- e. Pheromones are air borne chemicals released by an animal that has physiological or behavioral effects on other animals. Name the two functions of these hormones (2 Marks)
- f. Distinguish between the electrical and chemical activities of the brain (4 Marks)
- g. Which part of the brain invokes mathematical ability and visual- spatial Processing when it is enlarged (1 Mark)
- h. Define the autism (2 Marks)
- i. Identify the parts of the brain that plays a major role in the biology of fear (2 Marks)
- j. Using an example differentiate between the sexual drive and other drives (2 marks)
- k. Distinguish between the hormones androgen and estrogen (2 marks)
- l. Identify 2 instances when anti-depressants can increase the risk of suicide (2 Marks)

SECTION B: CHOOSE ANY TWO QUESTIONS

- 2. a).Research indicates that addiction and withdrawal takes place in different parts of the brain and that they are independent of each other. In reference to this statement, discuss the neural basis of addiction using the reward pathway of the brain (10 Marks)
- b) Discuss the behavior of an individual with damage on the temporal lobe (5Marks)
- 3. a) List the 5 main types of neurons (5 Marks)
- b) You are a member of a church that associates all forms of mental illness with demonic attack. You have been requested to give a talk during a church counselors' retreat on the subject of psychological disorders. Describe to your audience the different categories that schizophrenia symptoms fall under (2 Marks)
- c.) Discuss the dopamine theory of schizophrenia. (8 Marks)
- 4. a) Using a diagram clearly illustrate the nervous system and its functions (9 Marks)
- b) Distinguish between the female and male stress response (6 Marks)

