



PAN AFRICA CHRISTIAN UNIVERSITY
SCHOOL OF HUMANITIES AND SOCIAL SCIENCES
END OF SEMESTER EXAMINATION FOR THE DEGREE OF
BACHELOR OF ARTS IN COUNSELING PSYCHOLOGY
JANUARY – APRIL 2018 SEMESTER

CAMPUS: ROYSAMBU

DEPARTMENT: PSYCHOLOGY

COURSE CODE: COU3423

COURSE TITLE: BRAIN AND BEHAVIOUR

EXAM DATE: TUESDAY 17TH APRIL 2018

TIME: 5:30PM-7:30PM

INSTRUCTIONS

- This examination script consists of **Five (5)** questions.
- Read all questions carefully before attempting.
- Write your **student number** on the answer booklet provided.
- Answer **Question ONE** and any other **TWO** questions
- Question **ONE** carries **40** marks
- Question 2-5 carry **15** marks each

QUESTION ONE: COMPULSORY

- 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 **(8 Marks)**
- b) Discuss the behavior of an individual with damage on the temporal lobe **(6 Marks)**
- c) Name the part of brain that connects the two hemispheres **(2 mark)**
- d) Identify the 4 parts of the brain hemisphere **(4 Marks)**
- e) Distinguish between the refractory period of a neuron and the refractory period in the sexual cycle **(4 Marks)**
- f) Describe any three parts of a neuron an their functions **(6 Marks)**
- g) Identify the parts of the brain that plays a major role in the biology of fear **(2 Marks)**
- h) Using an example differentiate between the sexual drive and other drives **(4 mark)**
- i) Distinguish between the hormones androgen and estrogen **(2 marks)**
- j) Identify 2 instances when anti-depressants can increase the risk of suicide **(2 Marks)**

QUESTION TWO

- a) Describe the neuron communication process **(8 marks)**
- b) State any one importance of identifying a genes function in the body **(2 Marks)**
- c) Name any five neurotransmitters **(5 Marks)**

QUESTION THREE

- a) List any three types of neurons **(3Marks)**
- 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 **(4 Marks)**
- c.) Discuss the dopamine theory of schizophrenia. **(8 Marks)**

QUESTION FOUR

- 3a) Using a diagram clearly illustrate the nervous system and its functions **(9 Marks)**
- b) Distinguish between the female and male stress response **(6 Marks)**

QUESTION FIVE

- 4a) Discuss the monoamine hypothesis of depression **(9 marks)**
- b) Explain the role of the somaticnervous system **(3 Marks)**
- c) Describe the cerebrum **(3 Marks)**