
CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

**EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF SCIENCE IN
BMET**

BMET 111: HUMAN PHYSIOLOGY

STREAMS: BSC (BMET)

TIME: 2 HOURS

DAY/DATE: TUESDAY 09/04/2019

8.30 A.M. – 10.30 A.M.

INSTRUCTIONS:

- Answer Question One and any TWO questions in section B
- Do not write on the question paper

QUESTION ONE: 30 MARKS

- Explain integration of neural and endocrine system in controlling food digestion. (4 marks)
- Explain the role of microbial flora in the large intestine. (4 Marks)
- Describe mechanism of renal ammoniogenesis and ammonia excretion. (5 Marks)
- Explain how plasma membrane is involved in process of homeostasis. (3 Marks)
- Discuss phases of the cardiac Action potential and their application in electrocardiogram analysis. (9 marks)
- Viagra is used to treat erectile dysfunction. Briefly, describe its mode of action and explain why continued use may cause blindness. (5 Marks)

QUESTION TWO: 20 MARKS

- Discuss multiple roles of integumentary system in homeostasis. (10 Marks)
- Explain the functions of Human Chorionic Somatomammotropin during pregnancy.

(10 Marks)

QUESTION THREE: 20 MARKS

- (a) Using specific examples, explain the meaning of the following;
- i Positive feedback mechanism (6 Marks)
 - ii Respiratory acidosis (4 Marks)
 - iii Fibrinolysis (4 Marks)
- (b) Describe the functions of six brush-border enzymes in the digestive system. (6 Marks)

QUESTION FOUR: 20 MARKS

- (a) Describe five factors/pathways that interrupt body homeostasis. (10 Marks)
- (b) Discuss neurophysiology of thermoregulation. (10 marks)
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