

CHUKA



UNIVERSITY

**UNIVERSITY EXAMINATIONS**

**EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF SCIENCE IN  
BMET 111: HUMAN PHYSIOLOGY**

**STREAMS:**

**TIME: 2 HOURS**

**DAY/DATE: TUESDAY 30/03/2021**

**8.30 A.M – 10.30 A.M**

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**INSTRUCTIONS:**

**Answer question one and any other two questions**

**QUESTION ONE**

- (a) Explain the mechanism of blood pH regulation by respiratory system. [6 marks]
- (b) Describe the feedback mechanism involved in regulation of human body temperature. [5 marks]
- (c) Highlight the roles of any 5 hormones secreted by the hypothalamus. [5 marks]
- (d) Explain the role of ADH in regulation of body water output. [5 marks]
- (e) Outline any 4 brush boarder enzymes. [4 marks]
- (f) Explain the role of testosterone in male reproductive function. [5 marks]

**QUESTION TWO (20 MARKS)**

- (a) Describe 5 components of the heart conduction system. [10 marks]
- (b) Describe the mechanism of hormone response resulting from the binding of a hormone with an extracellular receptor. [10 marks]

**QUESTION THREE (20 MARKS)**

- (a) Elucidate the events during oogenesis that produce haploid oocyte from diploid cells. [10 marks]
- (b) Describe the renal regulation of acid base balance. [10 marks]

**QUESTION FOUR (20 MARKS)**

- (a) Describe ABO and RH blood groupings. [10 marks]
- (b) Explain the process of lipids digestion and absorption in humans. [10 marks]
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