

CHUKA



UNIVERSITY

**UNIVERSITY EXAMINATION**

**RESIT/SUPPLEMENTARY / SPECIAL EXAMINATIONS EXAMINATION FOR THE  
AWARD OF DEGREE OF BACHELOR OF**

**BMET 111: HUMAN PHYSIOLOGY**

**STREAMS:**

**TIME: 2 HOURS**

**DAY/DATE: THURSDAY 06/05/2021**

**2.30 P.M - 4.30 P.M.**

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

**Questions**

**Question 1 (Compulsory) (30 marks)**

- a) Briefly describe the role of aldosterone in regulation of body water output. (5 marks)
- b) Explain briefly the mechanism of renal blood pH regulation. (6 marks)
- c) With a relevant example, explain the components of negative feedback mechanism. (5 marks)
- d) Outline any 5 hormones secreted by the hypothalamus. (5 marks)
- e) Explain the hormonal changes that occur during menses phase of menstrual cycle. (4 Marks)
- f) Explain the role of testosterone in male reproductive function. (5 Marks)

**Question 2 (20 marks)**

- a) Describe respiratory regulation of acid-base balance. (10 marks)
- b) Describe the mechanism of hormone response resulting from the binding of a hormone with an intracellular receptor. (10 marks)

**Question 3 (20 marks)**

a) Describe the events during oogenesis that produce haploid sperm cell from diploid cells. (10 Marks)

b) Describe 5 components of the heart conduction system. (10 Marks)

**Question 4 (20 marks)**

a) Describe ABO and RH blood grouping. (10 Marks)

b) Explain the process of lipid digestion and absorption in humans. (10 Marks)

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