

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

**SECOND YEAR EXAMINATION FOR THE AWARD
OF DEGREE OF BACHELOR OF SCIENCE IN ANIMAL HEALTH AND PRODUCTION**

ANHE 215: ANIMAL PHYSIOLOGY

STREAMS: BSC (ANHE)

TIME: 2 HOURS

DAY/DATE: WEDNESDAY 06/12/2017

2.30 P.M. – 4.30 P.M.

INSTRUCTIONS: ANSWER ALL QUESTIONS IN SECTION A AND ANY TWO IN SECTION B

SECTION A (30 MARKS)

1. Define the following terms as used in physiology. [4 marks]
 - (a) Dyspnea
 - (b) Hypertension
2. Briefly discuss the negative feedback mechanism of homeostasis. [6 marks]
3. Briefly discuss the cardiac cycle. [4 marks]
4. Distinguish the functions of the autonomic and central nervous system. [6 marks]
5. Briefly discuss two mechanisms of regulation of body temperature in the cow. [4 marks]
6. List the accessory sex glands in a bull and discuss the function of the accessory sex glands. [6 marks]

SECTION B (40 MARKS)

1.
 - (a) Discuss the functions of the urinary system. [6 marks]
 - (b) Discuss the process of urine formation. [10 marks]
 - (c) List 4 hormones that regulate urine concentration and volume. [4 marks]
2.
 - (a) Briefly discuss the functions of the nucleus. [5 marks]
 - (b) Define carrier molecules as used in cell transport. [3 marks]
 - (c) Discuss the kinds of carrier-mediated transport giving an example of a molecule in each case. [12 marks]

3. (a) Discuss the process of fertilization and give two abnormalities of fertilization. [10 marks]
- (b) Discuss the hypothalamic pituitary gonadal axis as a regulatory mechanism in production of reproduction hormones in the male. [10 marks]
-