**CHUKA** 



#### **UNIVERSITY**

## **UNIVERSITY EXAMINATIONS**

# EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF SCIENCE IN FOOD SCIENCE AND TECHNOLOGY

**ANHE 215: ANIMAL PHYSIOLOGY** 

STREAMS: BSC (FOST)

TIME: 2 HOURS

DAY/DATE: TUESDAY 03/12/2019 2.30 PM – 4.30 PM

#### **INSTRUCTIONS:**

### ANSWER ALL QUESTIONS IN SECTION A AND SECTION B

#### **SECTION A: 30 MARKS**

- 1. Describe the modes of transport of substances in and out of cells. [5 marks]
- 2. Briefly describe components of a homeostatic control system. [5 marks]
- 3. Briefly describe the negative and positive feedback mechanisms. [5 marks]
- 4. Briefly explain what happens following an injury to a blood vessel or tissue.

[5 marks]

- 5. Describe five factors influencing the rate of gaseous exchange. [5 marks]
- 6. Describe the control of blood calcium levels by calcitonin and parathormone.

[5

marks]

#### **SECTION B (40 MARKS)**

- 7. Describe the phases of mitotic division in a somatic cell. [10 marks]
- 8. Discuss the transport and regulatory functions of blood. [10 marks]
- 9. Describe the process of egg formation. [10 marks]

marks]		
		[10
10.	Explain in details, the adaptive mechanisms of a camel in desert environments.	