



*(Knowledge for Development)*

**KIBABII UNIVERSITY**  
**UNIVERSITY EXAMINATIONS**  
**2020/2021 ACADEMIC YEAR**  
**THIRD YEAR SECOND SEMESTER**  
**MAIN EXAMINATIONS**

**FOR THE DEGREE OF BACHELOR OF EDUCATION SCIENCE**

**COURSE CODE: SBT 321.**

**COURSE TITLE: ANIMAL PHYSIOLOGY**


**DATE: FRIDAY 8<sup>TH</sup> OCTOBER, 2021    TIME: 2:00 -4:00 P.M.**

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**INSTRUCTIONS TO CANDIDATES**

Answer Question one (1) and any other two (2) Questions. Question one is compulsory and carries 30 marks, the other Questions carry 20 marks each.

TIME: 2 Hours

This paper consists of 2 printed pages. Please Turn Over   
KIBU observes ZERO tolerance to examination cheating

### QUESTION ONE

- a) Using a suitable example, explain the concept of positive feedback mechanism. (5 Marks)
- b) Provide the differences between the composition of the Plasma Volume (PV) and Interstitial Fluid (ISF). (5 Marks)
- c) Explain how glucose enters the cell. (5 Marks)
- d) Differentiate between Larvivorous and Sanguivorous animals giving examples in each case. (5 Marks)
- e) State the organs of respiration in the following animal kingdoms: Echinodermata, Annelida, Hemichordata, Mollusca and Porifera. (5 Marks)
- f) Briefly describe the changing hormone levels associated with menopause. (5 Marks)

### QUESTION TWO

- a) Describe the Special Respiratory movements. (10 Marks)
- b) Explain the factors that affect the oxygen disassociation curve. (10 Marks)

### QUESTION THREE

- a) Describe the different ways on how the Heart Beat can be regulated. (10 Marks)
- b) Describe the components of an Electro cardiogram (10 Marks)

### QUESTION FOUR

Write brief notes on Protein Metabolism. (20 Marks)

### QUESTION FIVE

Describe the generation of a nerve impulse in conduction (20 Marks)