

UGANDA MARTYRS UNIVERSITY

BACHELOR OF AGRICULTURE

END OF SEMESTER EXAMINATION 2022/2023

ARE 1101: ANATOMY AND PHYSIOLOGY OF DOMESTIC ANIMALS

Date: Wednesday 14th December 2022 Time: 09:30am to 12:30am

Instructions:

- i. Answer any FOUR Questions
 - ii. Each question is 25 marks
 - iii. Do not write anything on a question paper
 - iv. Time: Three hours
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QUESTION ONE

- a) State and explain three basic structures of a living cell. **(6marks)**
- b) What is the role of a cell in the body of living organisms? **(14marks)**
- c) State five differences between Prokaryotic and Eukaryotic cells. **(5marks)**

QUESTION TWO

- a) State four classifications of body tissues and the body parts where they are found. **(12marks)**
- b) Explain TWO general functions of each of the 4 types of tissues. **(8 marks)**
- c) How are tissues different from organs? **(5 marks)**

QUESTION THREE

- a) Giving examples of bones involved, differentiate between appendicular and axial skeletal **(5 marks)**
- b) State and explain FIVE functions of the skeletal system in domesticated animals **(20 marks)**

QUESTION FOUR

- a) Differentiate between **structural** and **reactive** proteins giving examples in each case. **(7marks)**
- b) Describe the chemical composition of Cell **(15marks)**
- c) The percentages for the different types of body fluids vary from one animal to another. Explain the factors affecting these percentage variations **(3marks)**

QUESTION FIVE

In organ systems, each system is equally balanced with its responsibility, and none can survive without the other systems. Choose two organ systems and describe in detail how functions they perform make them relate to each other **(25 marks)**

QUESTION SIX

Describe the processes involved in mitotic cell division in animal **(25marks)**

QUESTION SEVEN

- a). List two glands of the skin and explain how each functions **(6 marks)**
- b). Name four skin appendages **(4 marks)**
- c). Describe the structures and functions of the THREE layers of skin, namely the epidermis, dermis and hypodermis/subcutaneous layer **(15 marks)**

END

MERRY CHRISTMAS