

NATIONAL UNIVERSITY OF LESOTHO
FACULTY OF AGRICULTURE
DEPARTMENT OF ANIMAL SCIENCE
SECOND SEMESTER EXAMINATIONS 2022/2023
ANS2505: ANATOMY AND PHYSIOLOGY OF FARM ANIMALS

Date: JUNE 2023

MARKS: 100

TIME: 3 HOURS

INSTRUCTIONS: Answer **ALL** questions

Question 1

Differentiate between the following;

- i) Transverse and frontal plane **(4 marks)**
- ii) Microscopic and Gross anatomy **(4 marks)**
- iii) Osmosis and passive absorption **(4 marks)**
- iv) Osteoclasts and osteoblasts **(4 marks)**
- v) Dendrites and axons **(4 marks)**

Question 2

Write **SHORT NOTES** on the following;

- i) The formation of the pelvic girdle bone **(5 marks)**
- ii) The mechanism of gaseous exchange in the capillary bed in terms of blood circulation in the animal body? **(5 marks)**
- iii) The physiology of reproductive system in female animals. **(6 marks)**
- iv) Which points are critical in order to maintain a stable rumen in animals? **(6 marks)**

Question 3

- i) Explain the following terminologies i) Protoplasm and Osteology **(4 marks)**
- ii) Which bones constitute the thoracic limb? **(6 marks)**
- iii) State the functions of the cervix and scrotum in cattle. **(8 marks)**

Question 4

Briefly discuss the process of protein digestion in ruminants. **(20 marks)**

Question 5

Discuss blood circulation in animals, stating all the arteries and veins involved for body tissues to function properly. **(20 marks)**