



# MERU UNIVERSITY OF SCIENCE AND TECHNOLOGY

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## University Examinations 2020/2021

FIRST YEAR, SECOND SEMESTER, SPECIAL/SUPPLEMENTARY EXAMINATION FOR  
THE DEGREE OF BACHELOR OF SCIENCE IN ANIMAL HEALTH PRODUCTION

### AAP 3154: GROSS ANATOMY II

DATE: AUGUST 2023

TIME: 2 HOURS

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INSTRUCTIONS: Answer question *one* and any other *two* questions

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#### QUESTION ONE (30 MARKS)

- Outline the bony and muscular anatomical structures that make the mammalian thoracic cavity (5 marks)
- Describe the arterial supply and venous drainage of the bovine udder (5 marks)
- Describe the nerves that originate from the lumbosacral plexus (5 marks)
- Differentiate between the mammalian and the Avian air conducting and gaseous exchange parts of the respiratory system (5 marks)
- With the help of a diagram, describe the structure of the hoof of a donkey (5 marks)
- Describe the anatomical position, structure and the parts of the bovine uterus (5 marks)

#### QUESTION TWO (20 MARKS)

- Describe the Avian male reproductive system highlighting the differences with the mammalian system (8 marks)
- With aid of a well labelled diagram, describe the differences between the right and the left sides of the trachea, bronchi and bronchioles of the Porcine lung (7 marks)
- Outline the bony anatomical structures that form the thoracic cavity (5 marks)

**QUESTION THREE (20 MARKS)**

- a) Outline the paired branches of the abdominal aorta and the areas they supply (5 marks)
- b) Describe the positioning and the parts of the simple stomach of a pig (5 marks)
- c) Differentiate between gross anatomical structure of the medulla and the cortex region of the bovine, camel and pig kidneys (10 marks)

**QUESTION FOUR (20 MARKS)**

- a) List two superficial and three deep lymph nodes in the bovine and the areas they drain (10 marks)
- b) Describe organs in the pelvic and abdominal cavity that are palpable through ectal palpation (5 marks)
- c) Outline the nerves originating from medulla oblongata of the brainstem (5 marks)