



TECHNICAL UNIVERSITY OF MOMBASA
Faculty of Applied & Health Sciences

DEPARTMENT OF ENVIRONMENT AND HEALTH SCIENCES

DIPLOMA IN ENVIRONMENTAL AND HEALTH SCIENCES

(DEHS 014M)

APH 2103: ANATOMY & PHYSIOLOGY OF FOOD ANIMALS

SPECIAL/SUPPLEMENTARY EXAMINATIONS

SERIES: FEBRUARY 2015

TIME: 2 HOURS

INSTRUCTIONS:

- This paper consists of **FIVE** questions.
- Answer question **ONE (Compulsory)** in Section **A** and any other **TWO** questions in **B**.
This paper consists of Two printed pages.

SECTION A (Compulsory) 30 Marks

QUESTION 1

- a) Define the following terms as used in anatomy and physiology of food animals:
- i) Anatomy (1 mark)
 - ii) Physiology (1 mark)
 - iii) Heifer (1 mark)
 - iv) Rum (1 mark)
 - v) Bull (1 mark)
- b) Compare the carcass of a goat to that of a sheep. (5 marks)
- c) You have been posted to an area where cases of dog meat have been reported as a Public Health Officer how would you differentiate between the carcass of a dog to that of a goat. (5 marks)
- d) Compare the liver of a horse to that of a bovine. (5 marks)
- e) Lymph nodes are named according to the location, name **FIVE** lymph nodes found in a bovine carcass. (5 marks)
- f) Compare the carcass of a cat to that of a rabbit. (5 marks)

SECTION B (Answer any TWO questions)

QUESTION 2

- a) List the **FIVE** regions that are found in the vertebral column of food animals. (5 marks)
- b) Briefly explain **FIVE** factors to be considered when siting a slaughter house. (10 marks)

QUESTION 3

- a) Differentiate the tongue of an ox to that of a horse. (5 marks)
- b) You have been called in a court of law in Kenya to give an expert opinion over a case where a butcher is accused of slaughtering a stolen bull, the butcher is wishing that he slaughter a cow sold to him by a person he knows you as an expert in meat inspection (comparative anatomy of food animals). What do you have to say to this honourable court. (10 marks)

QUESTION 4

Briefly explain the various methods on how a meat inspector can estimate the age of a food animal. (15 marks)

QUESTION 5

- a) Compare the weight of an ox to that of a pig. **(5 marks)**
- b) Compare the livers of the following food animals:
- i) Ox liver **(2 marks)**
 - ii) Pig liver **(2 marks)**
 - iii) Horse liver **(2 marks)**
- c) Compare the lungs of the following food animals:
- i) Ox lung. **(3 marks)**
 - ii) Pig lung **(3 marks)**