



UNIVERSITY OF SWAZILAND
Faculty of Health Sciences
Department of Environmental Health Science

DEGREE IN WATER RESOURCES AND ENVIRONMENTAL
HEALTH MANAGEMENT

RESIT EXAMINATION PAPER 2017

TITLE OF PAPER : **MEAT HYGIENE**

COURSE CODE : EHS 228

DURATION : 2 HOURS

MARKS : 100

INSTRUCTIONS :

- : READ THE QUESTIONS & INSTRUCTIONS CAREFULLY
- : ANSWER **ALL** QUESTIONS
- : EACH QUESTION **CARRIES 25** MARKS.
- : WRITE NEATLY & CLEARLY
- : NO PAPER SHOULD BE BROUGHT INTO OR OUT OF THE EXAMINATION ROOM.
- : BEGIN EACH QUESTION ON A SEPARATE SHEET OF PAPER.

DO NOT OPEN THIS QUESTION PAPER UNTIL PERMISSION IS GRANTED BY
THE INVIGILATOR.

Question 1

- a) What are haemal lymph nodes? [5]
- b) How do you ensure that before slaughter an animal has adequate glycogen reserves? [5]
- c) Why is sufficient glycogen in the muscles of an animal before slaughter important? [5]
- d) Explain the factors that influence the onset of rigor mortis in meat. [5]
- e) How would you estimate the age of cattle by using the teeth? [5]

[25 Marks]

Question 2

- a) Give at least two draining areas for each of the following lymph nodes in cattle.

- i. Parotid
- ii. Mediastinals
- iii. Portals
- iv. Mesenteric
- v. Popliteal
- vi. Renal
- vii. Prescapular
- viii. Supramammary
- ix. Superficial inguinal
- x. Submaxillary

[20]

- b) In food animal's species, the fats consistency, and colour are different for different animals. Using appropriate examples, explain why that is so. [5]

Question 3

- a) Cattle meat is said to be red and poultry meat white. What is responsible for this difference? [5]
- b) Why is it necessary to stun food animals prior to their slaughter? [5]
- c) Why is the fat of pigs softer than that of sheep or goat? [5]
- d) Name and locate the salivary glands in cattle. [5]
- e) Explain why cattle are seen chewing when resting during the day. [5]

[25 Marks]

Question 4

- a) Abattoirs are considered to be very important in meat hygiene. Explain why? [15]
- b) Describe the measures that are required to ensure that meat after slaughter is kept safe and does not spoil quickly. [10]

[25 Marks]