



**UNIVERSITY OF SWAZILAND**  
**Faculty of Health Sciences**

**DIPLOMA IN ENVIRONMENTAL HEALTH**

**SUPPLEMENTARY EXAMINATION PAPER 2007/2008**

<b>TITLE OF PAPER</b>	<b>:</b>	<b>MEAT HYGIENE</b>
<b>COURSE CODE</b>	<b>:</b>	<b>EHS 103</b>
<b>DURATION</b>	<b>:</b>	<b>2 HOURS</b>
<b>MARKS</b>	<b>:</b>	<b>100</b>
<b>INSTRUCTIONS</b>	<b>:</b>	<b>READ THE QUESTIONS &amp; INSTRUCTIONS CAREFULLY</b>
	<b>:</b>	<b>ANSWER ANY FOUR (4) QUESTIONS</b>
	<b>:</b>	<b>EACH QUESTION CARRIES 25 MARKS</b>
	<b>:</b>	<b>WRITE NEATLY &amp; CLEARLY</b>
	<b>:</b>	<b>NO PAPER SHOULD BE BROUGHT INTO NOR OUT OF THE EXAMINATION ROOM</b>
	<b>:</b>	<b>BEGIN EACH QUESTION ON A SEPARATE SHEET OF PAPER</b>

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

### Question 1

- a) Explain protein digestion in cattle (5)
  - b) What are haemal lymph nodes? (5)
  - c) Why the glycogen reserves in the muscles should be sufficient and of good quality? (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 bones? (5)
- [25 Marks]**

### Question 2

Locate the positions and at least one drainage area of the following lymph nodes in cattle.

- Parotid
- Mediastinals
- Portals
- Mesenteric
- Popliteal
- Renal
- Prescapular
- Supramammary
- Superficial inguinal
- Submaxillary

**[25 Marks]**

### 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) Describe the function of the spleen in goats (5)
- e) Describe the post-mortem changes in meat after slaughter (5)

**[25 Marks]**

### Question 4

- a) Compare the fat consistency and color for the following animals;
  - Sheep (2)
  - Pig (2)
  - Cattle (2)
  - Deer (2)
  - Whale (2)
  - Goat (2)
- b) Briefly outline cattle liver functions (5)
- c) How would you differentiate sheep and cattle lungs? (5)
- d) Name and locate the salivary glands in cattle. (3)

**[25 Marks]**